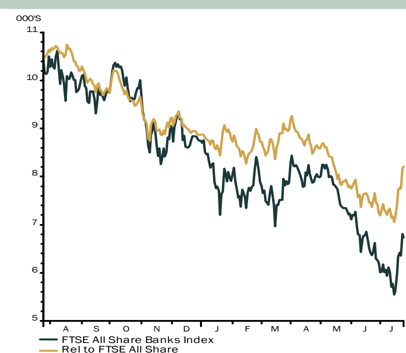
Pan-European Equities: Banks Sector

Sector Wgt: Underperform

28 July 2008

Sector relative to the FTSE All Share Index



Performance	1mn	3mn	12mn
Absolute	+1%	-16%	-36%
Rel. to FT AS	+7%	-5%	-22%

Price as of 25 July 2008.
Source: Thomson Datastream.

.

Bruce Packard, CFA

Phone: +44 (0)20 7190 0811
email: bruce.packard@palii.com

European Equities:
+44 (0)20 7190 0900

UK Banks

The N word

Nationalisation, we believe, is on the agenda for UK banks. We have looked at the Nordic banking crises of the early 1990s for potential lessons that might be applied to UK banks. A worrying measure is that UK indebtedness (loans/GDP 150%) is currently much higher than in the Nordic countries during the Nordic banking crises (less than 100%).

- Norway saw the first bank failure occur in 1988, but loan losses peaked three years later in 1991, at 4.6% of total commercial bank assets. This resulted in the failure of three of the four largest banks.
- Neither retail deposit holders nor interbank lenders lost money, despite high fiscal costs (11% of GDP in the case of Finland).
- Nordic bank shareholders suffered different fates depending on country. Two large banks in Norway saw their existing equity written down to zero, but in Finland, where the fiscal cost of the crisis was higher (as a percentage of GDP), shareholders saw dilution, but were not written down to zero.
- Near term, we expect the UK Tripartite Authorities to look at other measures to help support the banks (capital raisings, Special Liquidity Scheme, short selling disclosure requirements and calling on the IASB to change “unrealised loss recognition” have already occurred).
- No changes have been made to our existing recommendations or targets on UK banks, as at the moment it is hard to analyse how effective pulling the other levers will be. Nationalisation, if it does occur, could still be several years away. We do however already value BB/ on a Sell, TP 0p.

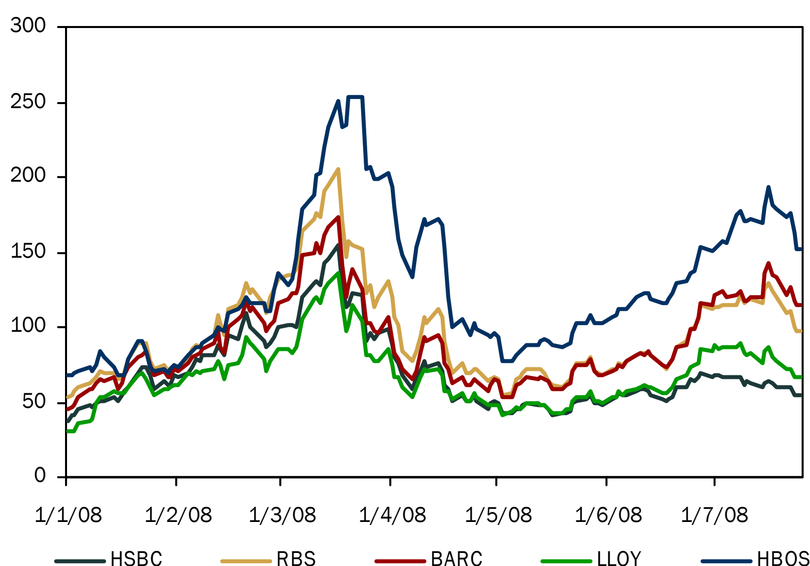
Reducing the impact of a failing bank

Over 90% of households in the UK have some form of deposit account. The size of the protected deposit market is £950bn according to the FSA (or 75% of UK GDP). On 22 July the Tripartite Authorities (the Treasury, the FSA and the Bank of England) published *Financial Stability and Depositor Protection: Special resolution regime & Further Consultation*, which among other objectives, intended to look at reducing the impact if a bank gets into difficulties. We believe this is prudent, as previous banking crises have shown that the better prepared the regulators are, the better placed they are to resolve the situation.

The document looks at what to do if a bank failure cannot be resolved by normal market actions (for instance a takeover). The Authorities intend to introduce a 'Special Resolution Regime' (SRR) which the document sets out (see Appendix).

Despite the fact that UK banks have raised over £20bn of equity in the last three months, the debt markets (as reflected in 5-year senior CDS spreads) appear to believe that this was not enough, with the cost of CDS protection rising since May. In this case, we believe investors should at least be prepared for "the worst case scenario", even if it is not inevitable at this point.

CDS spreads (5-year senior) major UK banks



Source: Bloomberg.

We decided to look at banking crises in other countries for ideas on what happens next. We are fortunate to have a Japanese desk at Pali, however, they have suggested to us that parallels with Japanese banking crisis are not especially relevant. Instead our Japan colleagues pointed us towards the Nordic banking crises of the early 1990s. Here, too, an exceptionally long boom was then followed by a banking crisis and deep recession.

The author wishes to make clear he is not an expert on Nordic banking, that there is a wealth of available academic research (see Appendix II for main sources) and that he is merely taking what is available elsewhere (particularly from the IMF and the Norwegian Central Bank) and attempting to make it available to an audience which might not otherwise be aware of the research.

Bullet point summary of the Nordic banking crises

- The crises happened after deregulation and a rapid boom.
- No depositors lost money.
- No money market or interbank lenders lost money.
- Three out of the four largest Norwegian banks (which had 50% share of bank lending) failed (Fokus and CBK shareholders were wiped out completely).
- Less severe losses were seen by shareholders in Finland and Sweden.
- There was a rapid economic recovery after the crises.
- There was a low (possibly 0) cost to taxpayers, except in Finland.

Nordic banking crises

	Lowest Real GDP (%)	Fiscal Cost (% of GDP)	Output loss (% of GDP)	Peak Loan/GDP
Finland	-6.3	11.2	21	68
Norway	-1.7	8		90
Sweden	-1.1	4	11	58

Source: World Bank, IMF.

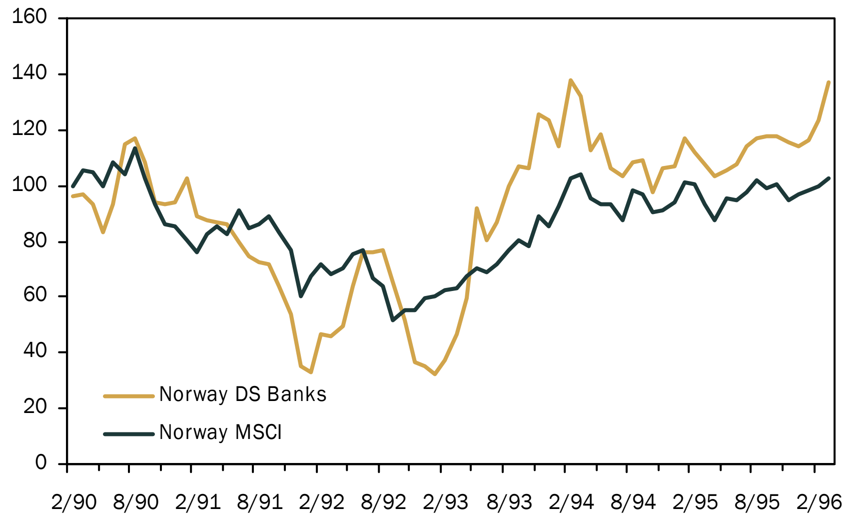
Each Nordic country, except for Iceland (!), suffered large-scale drops in asset values after several years of speculation. Denmark is not included in the table above, because there were no major bank failures there, despite Danish banks seeing similar levels of loan losses to rest of the Nordic banks. A Basel research paper (see Appendix II for sources) suggests that the key difference was a much stricter capital requirement regime in Denmark. Hence, the Danish banks had a relatively large capital buffer to absorb losses compared to Norway, where this was not the case.

Though fiscal costs are estimated by the World Bank at 8% and 4% of GDP in Norway and Sweden, respectively, ultimately the governments (and taxpayers) were able to earn back returns once the system had stabilised. Even in Finland (fiscal cost 11% of GDP), deposit holders did not lose money and though the crisis was worse in terms of fiscal cost, equity shareholders fared better than in Norway.

For context, 11% of UK GDP would be roughly £150bn. However, the loan/GDP ratio peaked at under 100% in the Nordic region, which compares to a current UK loan/GDP ratio of around 150% (over 100% for UK households, alone). So if we take the fiscal costs seen in Finland, and compare them to UK bank lending as opposed to GDP, our £150bn fiscal cost estimate could double to £300bn (or £10K for every person working in the UK).

Although three of the largest four banks failed in Norway, the Datastream Banks Index, itself, only fell 60% from 1990 levels (the base date of the index) compared to the UK Banks Index (ex STAN and HSBC), which is down 44% in the last 12 months, unadjusted for rights issues. Unfortunately, the DS Norwegian Banks Index appears to hide a survivor bias, as the 'Index' only seems to have one constituent, DnB (which itself had a 34% government stake).

Norwegian banks vs Norwegian MSCI



Source: Thomson Datastream.

Nordic banking v Japan

Geographically and culturally, the Nordic region is much closer to the UK. Richard Nakamura (*The Big Cleanse: Japanese Response to the Financial Crisis of 1990s Seen from a Nordic Perspective*) makes other distinctions, which suggest to us more similarities with the UK system.

- Like the UK, the Nordic countries were net debtors, whereas in contrast, Japan was a net creditor nation. Being open economies with trade deficits, the Nordic governments realised that early support for banks was necessary in order to avoid runs. Japan was different, being export driven, and had accumulated vast amounts of reserves during the years of economic growth which may have made the government and banks over confident. The authorities in the Nordic countries therefore acted much more quickly than they did in Japan.
- The role of the Bank of Japan was not formally independent: ever since WWII its role had been “to further the economic interests of the country”. This made banking decisions far more politically driven than in the Nordic region, where the central banks were independent. We believe a politically independent central bank (like the Bank of England) is key to optimal crisis resolution.
- Liberalisation and deregulation had already occurred to a large extent before the crises in the Nordic region. This was not the case with Japan, which initiated financial deregulation as a reaction to the crisis.
- Use of public funds was unanimously backed by the Swedish parliament, though there was some political opposition in Finland, and the support process concluded successfully. By contrast, in Japan, the Jusen crisis in mid-1990s made providing further public money to support the system politically unpalatable.
- Nordic accounting and book keeping standards had been high, and external auditing was seen as a natural part of corporate governance. Japan did not have rules of this kind before the late-1990s, which is surprising but true for the world’s second largest economy.

Through the rest of our analysis we will focus on the Nordic region as a whole, although some of the papers refer to particular countries. However, while we take specific examples from each country, we believe trends across the region were similar enough for this to be valid. We have also drawn some parallels with the current situation in the UK, although a fuller discussion of the similarities and differences follows after the description of the crises in the Nordic region.

Causes of the Nordic banking crises

Source: *The Nordic Banking Crises: Pitfalls in Financial Liberalisation?* Burkhard Drees and Ceyla Pazarbasioglu, IMF Working Paper 1995.

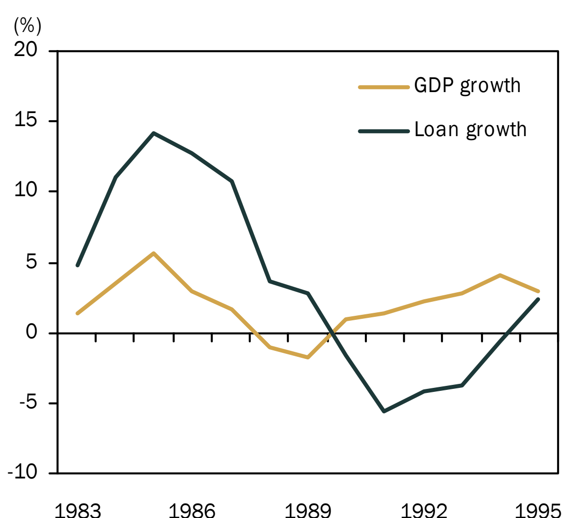
The cycle followed a similar pattern in Norway, Sweden and Finland, with the initial stimulus coming from deregulation (politicians in both Sweden and Finland were worried that concentration in the banking industry had led to a lack of competition). Many lenders looked to increase market share by actively looking for new borrowers and increasing loans to existing borrowers.

This led to rising domestic demand and increased private consumption as employment and incomes rose, amplified by easier access to credit after deregulation, and wealth effects due to higher asset prices. In Norway, lending to corporates and households grew at an inflation adjusted rate of 12%, roughly three times the real GDP growth rate, and the household savings ratio became negative in both Norway and Sweden.

High marginal tax rates also played their part, as interest expenses were tax deductible. High inflation and high taxes meant negative post-tax interest rates, creating little incentive to save and meaning that the real cost of capital was low during most of the 1980s. Between 1984 and 1987, Norwegian house prices grew 24% (adjusted for inflation). The IMF comments that one might have expected a tightening of the generous tax deductibility of interest payments, and yet this did not happen, mainly due to political reasons. In the UK, interest expense on Buy to Let loans is tax deductible.

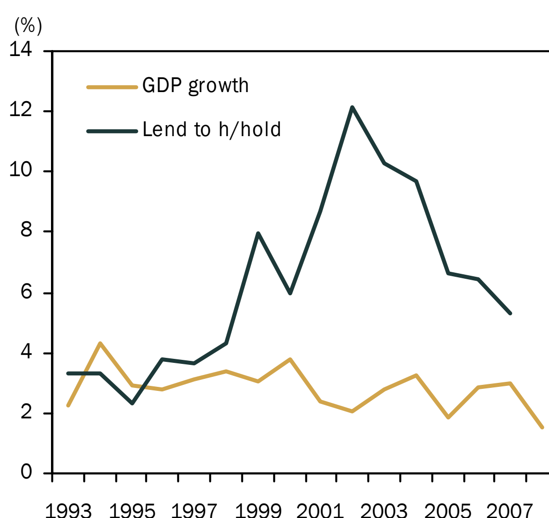
The Norwegian banking crisis was experienced earlier than in the other two countries and, ironically, was caused by a fall in the oil price (from $27 a barrel to $14.50 a barrel) in 1986. But by the late 1980s, it had become apparent that high levels of personal indebtedness in all three countries were not sustainable. Property and share prices fell, and households began cutting back on consumption, while businesses decreased investment.

Norway: Real GDP and real loan growth



Source: Lessons from Norwegian banking crises.

UK: Real GDP and real loan growth



Source: HBOS Economic Factbook.

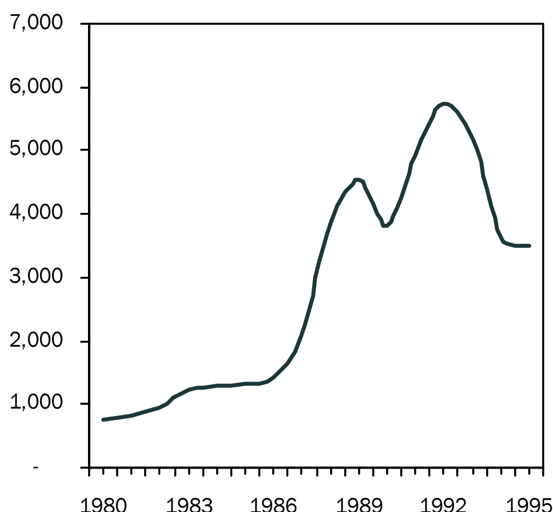
We believe that the graphs above, showing GDP and loan growth, make an interesting point about timing and amplitude. Though GDP and loan growth

peaked at around the same point in 1985, loan growth was three times higher and fell much more rapidly, reaching its trough below the rate at which GDP was falling two years later.

Also, loan growth well ahead of deposit expansion meant that banks had relied on international funding, and the domestic value of foreign liabilities increased as the currency depreciated. This was particularly significant for Finland and Sweden, as half of borrowing was in the form of foreign currency debt and SMEs struggled to gain access to funding. Bankruptcy rates reached record levels in each country, with even profitable firms facing bankruptcy since they were unable to ease liquidity and cash flow problems through new borrowing. This, in turn, led to rises in bank non-performing loans, repayment difficulties and falling collateral values, which translated into losses for the financial sector.

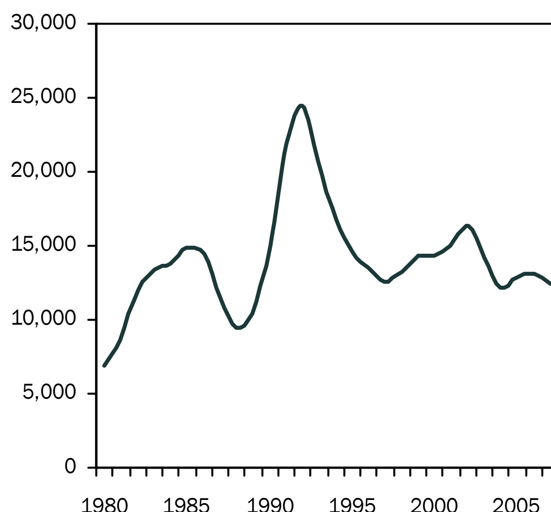
Bankruptcies:

Norwegian corporate bankruptcies



Source: Lessons from the Norwegian banking crises.

UK Company insolvencies



Source: Thomson Datastream.

In Norway, the first bank failure (since the 1930s) occurred in 1988, but loan losses peaked three years later in 1991. From a UK perspective, Northern Rock's use of the Lender of Last Resort facility in H2 07 did not mark the end of the crisis, but is more likely to be remembered as the beginning, in our view.

In the late 1980s, it was Norwegian finance companies, rather than the banks themselves, which deteriorated first, as losses (mainly from property investments) exceeded 5% of loans. However, with one year lag, it became clear that the Norwegian banking sector would suffer due to its involvement with the finance companies which had been driven out of business by losses.

In the first phase of the Norwegian crisis, as in Japan, the corporate sector accounted for 80% of the losses (and within this, half of the losses were concentrated in trade, hotels and restaurants.) In the current crisis it is individuals with mortgages, who face the most severe problems. Thus the situation in previous crises was economic, while in the US and Europe, we see more of a social problem, in our view.

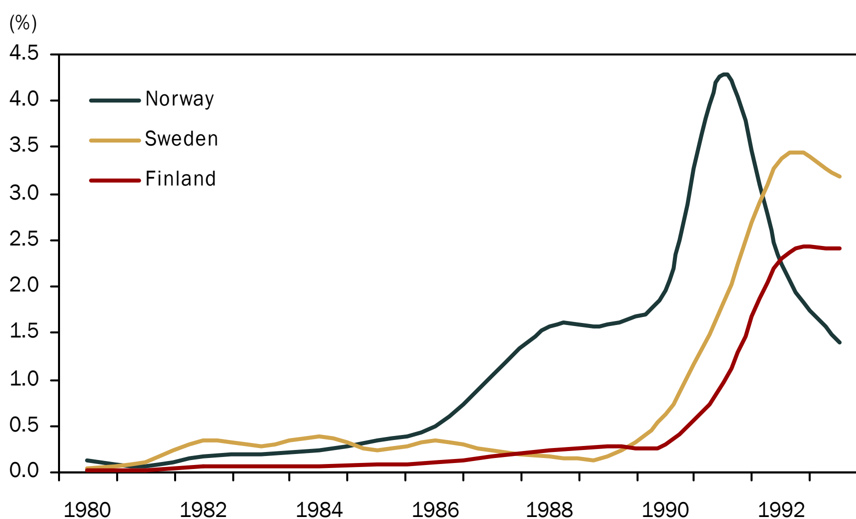
Before the second stage of the crisis, the public did not see any systemic threat to the Norwegian banking system according to the IMF authors.

The second stage of the crises

In the second phase, loan losses unexpectedly surged in 1991, to peak at 6% of Norwegian GDP, as some of the larger banks encountered financial difficulties. Losses were split roughly one-quarter households, three-quarters enterprises. As the contagion spread in the early 1990s, long-established companies in the trade, hotel and restaurants, and real estate sectors began to default. Norwegian house prices fell by a third (adjusted for inflation) for the four years from 1988 to 1992.

Chart below illustrates how inadequate a ‘Through the Cycle’ provisioning methodology is. By way of example, a risk manager at a Finnish commercial bank might have looked back over the previous ten years and would have calculated a ‘Through the Cycle’ charge of 12bp. Yet the past was a poor guide to future losses, as the actual loss ratios in 1991-93 turned out to be 96bp, 230bp and 242bp. Losses seen at Finnish savings banks peaked at c700bp.

Loan losses as % of total assets (Commercial Banks)



Source: IMF.

Analysis of bank balance sheets and financial ratios reveals that some common trends emerged, with banks with high loans to deposit ratios (ie those which had funded through the money markets and foreign borrowing) more likely to be deemed insolvent.

Financial comparisons of solvent and insolvent banks (% of total assets)

	Norway	Finland	Sweden
Insolvent banks in 1991			
Loans (%)	90	52	78
Deposits (%)	54	20	49
L/D (x)	1.67	2.60	1.59
Other banks in 1991			
Loans (%)	68	52	47
Deposits (%)	61	33	38
L/D (x)	1.12	1.58	1.24

Source: IMF.

In the table above, official insolvency is defined by the IMF as a case where capital is judged inadequate by the regulators and the institution is closed, merged out of existence, taken over by the government or sold through a purchase and assumption agreement.

Finnish and Norwegian banks, particularly, entered the second phase of the crises with already eroded capital positions, and failed institutions in all three countries had lower capital to asset ratios. At the beginning of the 1990s, revaluation reserves amounted to as much as 80-90% of Finnish banks' capital base. The Norwegian banks had not adopted the 1988 Basel Accord (BIS I), so that not only had lending regulations been loosened, but capital regulation had also been loosened. Perpetual subordinated debt was allowed to count as equity capital in Norway, and in 1990 this accounted for 74% of the equity capital of commercial banks, although it was decided that Norwegian banks should fully implement BIS I by end-1992. By mid-year 1992, 15% of the Norwegian commercial banks' funding was from abroad, which meant that Norway could not abandon the Basel framework as it might have caused a run on these banks from their foreign creditors, according to the Basel paper (*Bank Failures in Mature Economies*, Basel WP No. 13, April 2004).

Norwegian shareholders wiped out

Attempts to find private investors willing to put equity into two large failed Norwegian banks (CBK and Fokus) were unsuccessful. As a result, the Government Bank Insurance Fund (GBIF) infused new equity capital directly into the two banks.

The Basel paper says that these infusions were made on the condition that the old shareholders' shares were written down to zero, in accordance with the banks' losses. These decisions had to be made by the banks' general meetings of shareholders, and at both banks, the shareholders refused to write down the shares as required by GBIF. In order to avoid a stalemate in such a situation, one month earlier, the Norwegian Parliament had made an amendment to the Commercial Bank Act. This amendment made it possible for the government, by a Royal Decree, to write down the share capital of a bank against losses in the audited interim accounts, if the shareholders' general meeting did not do so. Thus in December of 1991 the Norwegian government wiped out the old shares of the two banks, and new capital was injected by the GBIF.

Support measures

We detail below the support measures given to banks. The IMF reports that in a liquidity crisis, an injection of short-term liquidity from the central bank is adequate, but that the Nordic banking crises saw widespread solvency problems, and therefore more active measures were required from the authorities.

Purchase and assumption arrangements

This is a method of selling a troubled bank, where either the whole bank (including non-performing loans) or the 'clean bank' is sold to a new owner. The objective is to keep as many assets as possible under private ownership to enhance the recovery incentive. To fill the gap, the government provides a so-called "assistance payment" to the acquiring bank. The government sometimes receives warrants that are convertible into shares, with the result that it would share in the upside if the rescue works. The authorities can also provide "capital loss coverage", in effect guaranteeing NPLs that remain on the bank's balance sheet.

In the 'clean bank' version of a purchase and assumption arrangement, all liabilities (including customer deposits) are transferred to the new owner, but NPLs are not. Instead, these are lifted into a 'bad bank' under government control, which is put into run-off.

Open bank assistance

Governments can provide direct support in the form of net worth certificates, promissory notes, cash or other forms of capital, or guaranteeing the debt. This form of bank support is controversial because it may imply subsidising the bank's current shareholders. For instance, it is particularly difficult to price the value of government guarantees and this can lead to a distortion of competition in the banking system, something that the European Union voiced concern over with the UK government's guarantees of Northern Rock.

Deposit guarantees

In September 1992, the Swedish government was forced to give a general guarantee for all deposits in the entire banking sector. However, this was accompanied by new laws to clarify the circumstances under which support could be given, and the creation of the Bank Support Authority (BSA), according to the Basel paper.

Among other things, the BSA was given the right to buy the shares of a problem bank against its shareholders' will, if the shareholders had not accepted support on terms that were deemed to be fair by a special panel of lawyers. The law stated that the price at which the BSA was allowed to buy the shares should reflect the value of the company that would prevail if it had not received any support from the state. This is similar to the valuation approach which the UK government has set for compensating Northern Rock shareholders, which is not a coincidence, in our view.

Preference shares injections

Both the Japanese and Nordic banking crises saw preference share injections to support banks. Fearing a credit crunch, the Finnish government offered a FIM89bn (US$1.8bn) capital injection to deposit-taking banks proportional to their RWA. This preferred capital carried non-cumulative interest slightly above market rates and was counted as Tier 1. However, if interest was not paid for

three years, or if the bank's equity ratio fell below minimum required, the preference shares converted into voting stock (ie massively diluting the original equity holders).

All Finnish banks took up the offer, and in contrast to Norway, shareholders of supported banks were not written down to zero. However, the private shareholders did suffer some losses, due to the fact that the government, being the majority shareholder, bought out the private minority holdings at a nominal price.

In Norway, the Government Bank Insurance Fund (GBIF) was granted a specific amount of capital, and mandated to lend it to two bank guarantee funds, which would then invest equity/preference share capital into the second and fourth largest banks (CBK and Fokus). The capital injections were provided on the following conditions:

- The two banks were required to reduce their operating costs.
- The Boards of Directors were replaced at both banks.
- The original share capital was written down according to the losses.
- The government got a majority of the Board members in the commercial banks' guarantee fund.
- The loans were to be paid back with interest from the guarantee fund.

However, a couple of months later, in autumn 1991, it became evident that CBK and Fokus had equity well below the required level. New measures were announced but as private investors could not be found to put in more capital, new equity was put in by the government on the condition that existing shareholders were written down to zero.

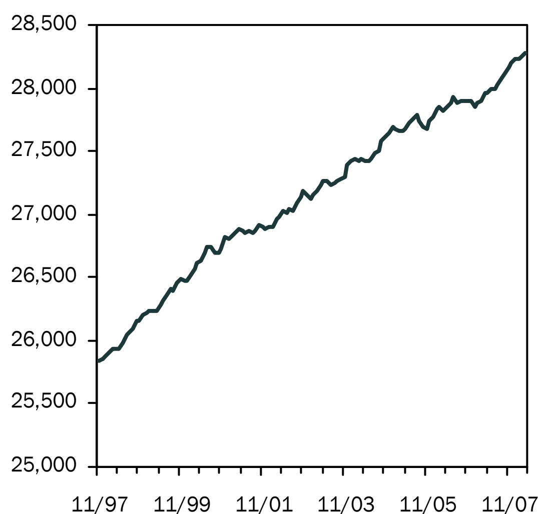
Similarities with the UK

- Long economic boom.
- Very low savings ratio.
- Reliance on interbank and overseas funding.
- Competition and falling lending margins at a time of strong loan growth.

With over 60 quarters of consecutive GDP growth in the UK and the highest number of people in employment since records began (in 1971), according to the latest Office of National Statistics release, the UK, like the Nordic regions, has undoubtedly enjoyed a sustained boom. Yet the UK household savings ratio has plunged to its lowest level for 49 years, with households saving just 1.1% of their income in Q1 08 (the previous quarter was 3.0%).

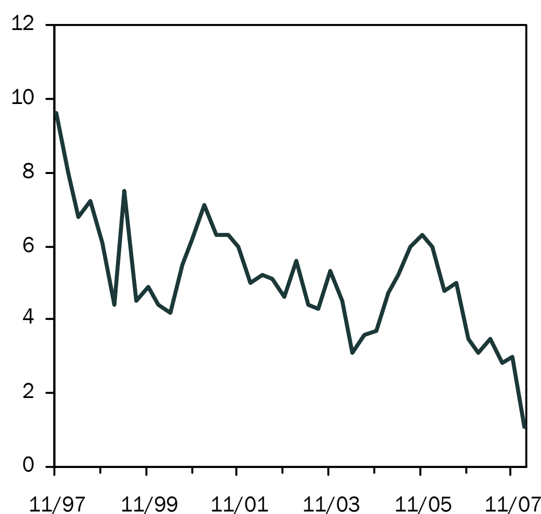
UK macro trends over the last ten years:

Numbers in employment (000s)



Source: Office of National Statistics.

Household savings ratio (%)



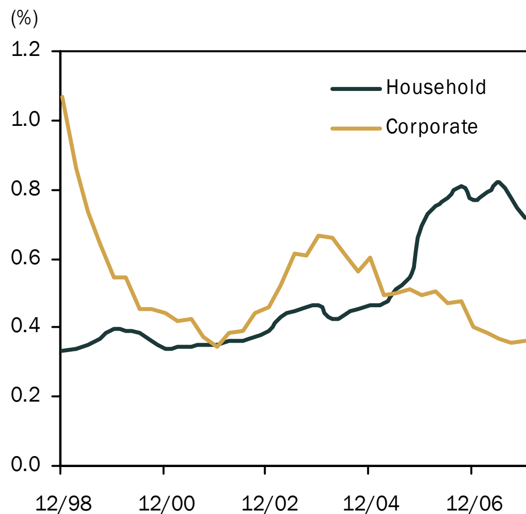
Source: Office of National Statistics.

Net Interest Margins (NIM) came under pressure after deregulation in the Nordic countries due to the effects of competition, and also because growth could not be financed from existing deposits, so banks had to rely on attracting wholesale funding. We find a similar situation in the UK banking sector. Interestingly, when unsecured credit quality began to deteriorate from 2005, banks were barely able to reprice up their group Net Interest Margins in the UK to reflect the rising risks.

On the interest expense side of NIM, the Bank of England's April Financial Stability Review noted that the funding gap (the shortfall between customer deposits and customer lending) for major UK banks had grown to £625bn by end-2007. With interbank rates currently 79bp above the Bank of England rate, this reflects the reluctance of foreign banks to fund UK bank assets, we believe.

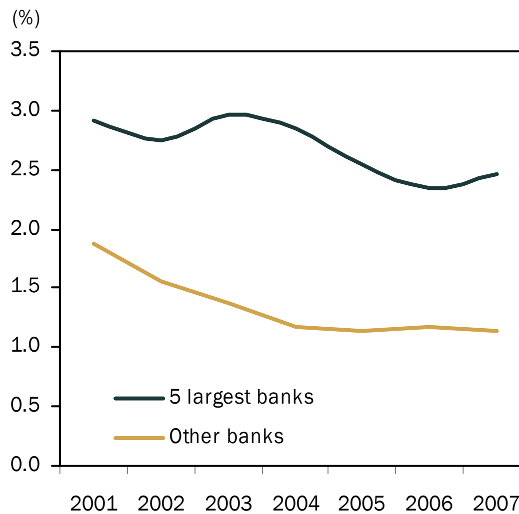
UK credit quality and net interest margin trends:

Major bank write offs



Source: Bank of England FSR 04/08.

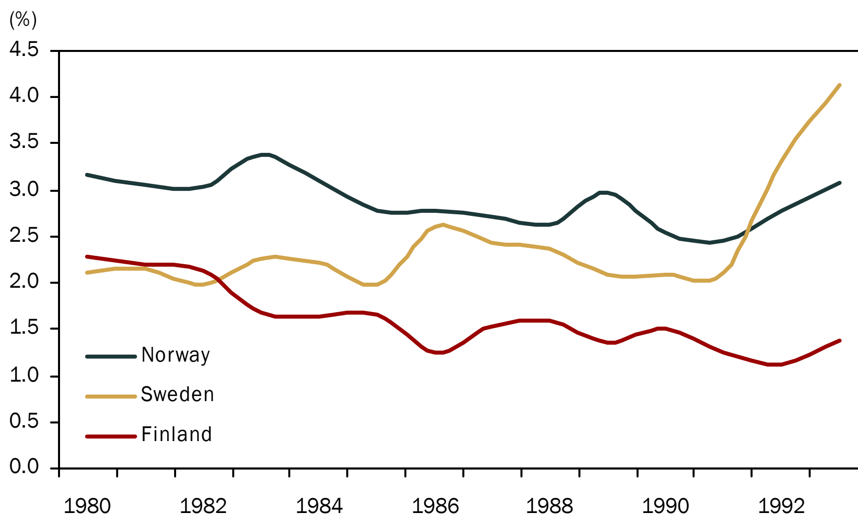
Bank net interest margins (%)



Source: Bank of England FSR 04/08.

In the Nordic region, there was some net interest margin expansion once bad debts had started increasing. In Sweden and Norway this rose above the 1985-90 five-year average, but not in Finland.

Net Interest Margin (Commercial Banks)



Source: IMF.

Differences to the UK

- US subprime CDOs in the Treasury portfolio.
- Mark to market accounting.
- Off balance sheet vehicles.
- Basel II.
- UK banks have raised over £20bn of equity in the last three months.
- International diversification and potential for disposals.
- Losses likely to reside in the consumer sector, as opposed to corporate sector losses in previous downturns.

It is only fair to draw attention to the obvious differences with between the UK and Nordic crises, as well as the similarities. Aside from size, we believe the UK banks would point to their capital positions as being much stronger than the Nordic banks. As we have seen, the Danish banks saw similar losses to their neighbours, but were able to avoid a systemic crisis because of their stronger capital positions.

Basel I had not yet been implemented in the Nordic region at the time of the crises, whereas all banks are now reporting on a Basel II basis, which makes comparisons hard. Also, the growth in the 'shadow banking system' and 'mark to market' accounting on banking treasury portfolios (where the bulk of losses have materialised) further confuses the issue. For instance, it is now possible for a bank to be undercapitalised on a fair value accounting basis, yet still be reporting adequate Basel II capital ratios.

Although the UK banks have raised capital, the HBOS and BB/ rights issues, probably mark the end of the private capital-raising phase (just 8% of shareholders took up their HBOS rights). Moreover, SWFs appear much less willing to buy into the Western banking system, with CDB and Temasek having seen their investment in Barclays halve in value in less than a year. According to the NAB, we are less than halfway through the likely $1.3trn of credit losses, and with the debt markets suggesting that UK banks have not raised enough equity, we would be cautious about calling a premature end to the crisis.

Conclusion

The final difference we wish to draw attention to between the Nordic banks and the current UK situation is that the bulk of the losses in previous crises have been due to corporate sector exposure. In the current crisis, it is individuals with mortgages who face the most severe problems, we believe. Thus, the current crisis is more of a social problem, with political implications, in our view.

We have already noted that in the UK, interest expense on Buy to Let loans is tax deductible, which creates a disadvantage for first-time buyers and other owner-occupiers. In January 2006, well before the 'credit crunch', first-time buyers were at a 25-year low, according to research by HBOS.

In this context, it is interesting that the UK Housing Minister, Caroline Flint, is saying that the government will look at doing more to help the housing market.

"Over the coming months, we will be further looking - both internationally and nationally - at what more we can do to limit and mitigate the damage that people are facing in their lives at the moment: through rising prices but also their worries and concerns about the housing market," she told Sky News.

In the US, the House of Representatives approved a package of legislation designed to support the US housing market by propping up Freddie Mac and Fannie Mae, helping subprime borrowers refinance their homes, and funding the government purchase of foreclosed properties. However, as the *FT*'s 'Lex' column observed on 24 July, the policy response aimed supporting the housing market risks storing up trouble for the future:

"When compared to rents and household income, US house prices remain significantly overvalued. Millions of homeowners are sitting on negative equity. Millions more will no longer be able to tap their homes for more cash. And the inevitable cost of nationalising these liabilities will be higher taxes or borrowing costs. The Congressional Budget Office estimated the mortgage agency rescue cost at $25bn, but it could be higher."

Weighing up the pros and cons, we think that nationalisation of the most leveraged UK banks may present the "least worst" solution, versus other policy initiatives.

Appendix I: The UK Tripartite Authorities SRR

Below we list the UK Tripartite Authorities' published measures in anticipation of a potential deterioration. Many of them look similar to measures taken during the Nordic banking crises. While we welcome this preparation from the Authorities, we believe shareholders ought to be equally prepared for the "worst case scenario".

- ► The triggers, structure, objectives and governance arrangements for a special resolution regime.
- ► The tools included within the special resolution regime:
  - A transfer of part or all of the failing bank to a private sector third-party.
  - A transfer of part or all of the failing bank to a publicly-controlled bridge bank.
  - A new bank insolvency procedure.
  - The power to take a bank in to temporary public sector ownership.
  - The existing option to support any of these tools by providing financial support to a failing bank through funding or the provisions of guarantees, subject to legal and other constraints.

Appendix II: Sources

The bulk of the subject matter referred to in this document is taken from articles written by Norges Bank (Central Bank of Norway) plus the IMF.

Kristin Gulbransen, *Conference on Banking Crisis Resolution - Theory and Policy, Oslo 16 June 2005*

Bent Vale, Presentation at Bank of Slovenia Conference, October 2005

The Nordic Banking Crises: Pitfalls in Financial Liberalisation, B Drees, C Pazarbasioglu, June 1995, IMF WP 95/61.

Distressed Relationships: Lessons from the Norwegian banking Crisis (1988-1991), S Ongena, D Smith, D Michalsen, December 1999.

Bank Failures in Mature Economies, Basel WP No. 13, April 2004

The 1990s banking crisis in Finland: main causes and consequences, lessons for the future, Liisa Halme Rahoitustarkastus, Financial Supervision Authority

The Big Cleanse: Japanese Response to the Financial Crisis of 1990s Seen from a Nordic Perspective, Richard Nakamura, Stockholm School of Economics WP No. 149

Important regulatory disclosures on subject companies

Analyst certification

I, Bruce Packard, in my role as Banks Equity Analyst for Pali International Limited, hereby certify that the views about the companies and their securities discussed in this report are accurately expressed and that I have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

Pali International Limited is registered in England No. 4436519, is a member of the London Stock Exchange, Xetra, and Euronext and is authorised and regulated by the Financial Services Authority.

Analyst stock ratings

Different securities firms use a variety of rating terms as well as different rating systems to describe their recommendations.

Pali International Limited uses BUY, NEUTRAL, SELL. Investors should carefully read the definitions of all ratings used in each research report. In addition, since the research report contains more complete information concerning the analyst's views, investors should carefully read the entire research report and not infer its contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Ratings are explained as follows

BUY: We expect that over the next twelve months the share price will outperform the Banks sector by more than 10%, defined by the FTSE All Share Banks Index

NEUTRAL: We expect that over the next twelve months, the share price will be move between +10% and -10% of the Banks sector, defined by the FTSE All Share Banks Index

SELL: We expect that over the next twelve months the share price will underperform the Banks sector by more than 10%, defined by the FTSE All Share Banks Index

Disclosure of distribution of ratings

Pali International Limited must disclose in each research report the percentage of all securities rated by us to which we would assign a 'Buy', 'Neutral', or 'Sell' rating. The said ratings are updated on a quarterly basis. Below is the distribution of Pali International Limited's research recommendations (as at 30 June 2008):

BUY: 27.5% NEUTRAL: 40.6% SELL: 31.9%

Legal disclaimer

This report is not an offer to buy or sell any security or to participate in any trading strategy. In addition to any holdings disclosed in the section entitled "Important US Regulatory Disclosures on Subject Companies", Pali International Limited or its employees and its affiliates not involved in the preparation of this report may have investments in securities or derivatives of securities of companies mentioned in this report, and may trade them in ways different from those discussed in this report.

Pali International Limited makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in this report change apart from when we intend to discontinue research coverage of a subject company.

With the exception of information regarding Pali International Limited, reports prepared by Pali International Limited research personnel are based on public information. Facts and views presented in this report have not been reviewed by, and may not reflect information known to, professionals in other Pali International Limited business areas or its affiliates.

Pali International Limited research personnel conduct site visits from time to time but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits.

The value of and income from your investments may vary because of changes in interest rates or foreign exchange rates, securities prices or market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in your securities transactions. Past performance is not a guide to future performance. Estimates of future performance are based on assumptions that may not be realised.

Other disclosures

This research report has been published in accordance with our Research Policy which is available on written request from Pali International Limited. Pali International Limited's research is available on the web at: http://palii.europeanresearch.co.uk/.

This report does not provide individually tailored investment advice. It has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The securities discussed in this report may not be suitable for all investors. Pali International Limited recommends that investors independently evaluate particular investments and strategies, as the appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives.