

13 January 2009

UK Banks

The windward side of the island

In this note we look at banking trends from 1920s onwards. The most notable trend is change in mix from corporate and Government assets to consumer. This has consequences for the duration of the current crisis relative to historic examples (we believe this one will last longer.)

UK bank balance sheets are weaker than in previous crises. For instance, in the 1930s and 1970s loan/deposit ratios were 50%, with excess liquidity (a third of the balance sheet) invested in short term Government debt. Currently loans to deposit ratio for UK banks vary between less than 1x (HSBC) and 1.5x (Lloyds Banking Group) with liquid assets probably less than 10% of total assets.

The mix of balance sheet assets has also shifted dramatically from corporate to consumer. In the 1950s, 80% of bank loans were to industry, but over the last 60 years there has been a change in mix so that now over 70% of bank lending is to households.

Mortgage brokers and estate agents who go on the BBC and explain how to fix the banking system, often suggest if 'banks just start lending' all our problems would be solved. These commentators appear to believe that UK household indebtedness can outpace UK disposable income forever. UK household debt/disposable income, at 1.77x is high compared international comparisons and off the scale compared to historic crises in the UK.

This means, unlike previous crises where bank share prices rallied following recapitalisations, investors will only know how bad things are when house prices have stopped falling. We expect that to take several years.

	Rec	Price	Target Price
BARC	Reduce	177p	140p
HSBC	BUY	634p	950p
LLOY	Reduce	133p	n/a
RBS	Reduce	53p	18p
STAN	Reduce	884p	600p

Date	Deposits	GDP (Real)	Liquid Assets	Investments	Loans
1921	1,759		680	325	833
1967	9,412	478,305	3,127	1,405	4,862
2007	1,562,006	1,281,302	57,875	2,186,492	1,963,118
1921-1967	5.4x		4.6x	4.3x	5.8x
1967-2007	166x	3x	19x	1556x	404x

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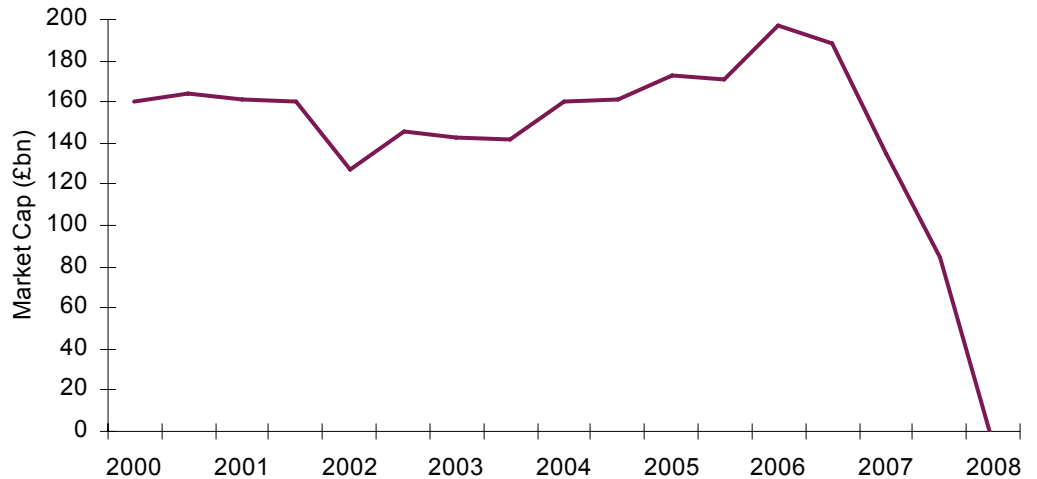
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Introduction

Nothing goes down forever. Not even UK banks.

Deducting the £20bn capital raising in H1 and £37bn in H2 of 2008 from the sector's market cap would leave UK banks' equity (ex STAN and HSBC) worth nothing. Which normally represents a "floor" for equity investors.

UK banks (ex HSBC and STAN) adjusted for 2008 capital raisings



Source: Datastream

We outline the starting position – relative to international comparisons with other developed economies and relative to UK banking history (going back to 1921).

When do we turn positive?

From there, we believe it will be possible to see how far we are from where we want to be, and so answer the question "when do we turn positive?"

Where we start from

We have looked at UK banking back to the 1920's – not to depress our readers (and ourselves), but to look for solutions to the current problems.

Anyone who simply wants to draw conclusions from historic banking crises, should consider that:

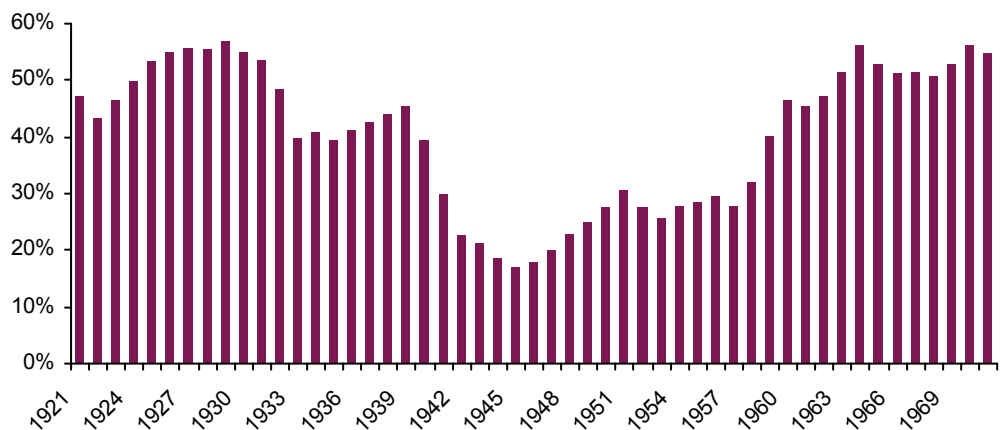
- ▶ UK bank balance sheets are weaker than any time in history.
- ▶ UK consumers have more debt than in any time in history.

We have looked at bank balance sheets and liquidity ratios going back to before the war. For 50 years, between 1920 and 1970, UK clearing banks loans/deposit ratio averaged 40% (low was 17% in 1945). In 2008 the UK loans to deposits is 170% (£740bn funding gap).

*Bank balance sheets
back to 1920s*

To be fair, this comparison is distorted by different funding structure of new entrant "Other Specialist Lenders" and converted building societies growing their loans faster than deposits for several years, yet even the "big four" clearing banks have relied on wholesale markets for funding with RBS, BARC and Lloyds reporting Loans/Deposit ratios above 1.3x. The exception was HSBC, both at a Group level and its UK bank subsidiary (the old Midland Bank) which has a loans/deposit ratio of 1x.

UK Clearing Bank loans/deposit ratio 1921-1971



Source: The Banker, EVO Securites

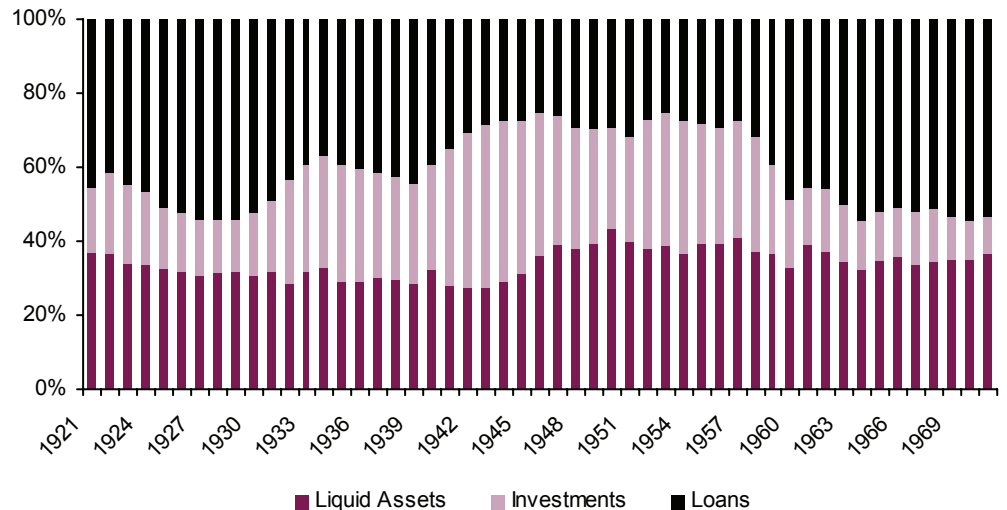
The chart below also shows that, as far back as the 1920's loans have only been half of bank total assets and this has remained true for non-investment banks today. But this masks a couple of structural trends which have occurred since the end of the Second World War in the other two items of the balance sheet.

- ▶ Liquid assets
- ▶ Investment portfolios

From the 1950s to the 1970s liquid assets, by which we mean cash and short term government debt, was one third of UK clearing banks balance sheets. Not only has this fallen to under 10% currently, but the liquidity portfolio contains assets which are suspect, such as CDOs and other structured credit. Consumer debt, previously contained in a bank's loan book, is now spread liberally around all parts of a banks' balance sheet. A brief digression into history is probably necessary to put this into context.

After the war, the investment portfolio peaked at just over a third of clearing banks' balance sheets. Of this 90% was UK Government debt. Yet by the early seventies the Government debt in this part of the balance sheet was replaced by increasing amounts of corporate bonds. But at the same time the investment portfolio shrunk to just 10% of banks' balance sheets.

UK Clearing Bank balance sheets 1921-1971



Source: The Banker, EVO Securites

Then in the 1970s, banks began to lend to developing nations (first direct lending, but also buying their debt in the bond market.) There are some parallels with this and the securitisation boom: developing nations appeared to offer attractive yield with no credit risk (Walt Wriston, Chairman of Citicorp famously declared "countries don't go bust", shortly before they did ¹).

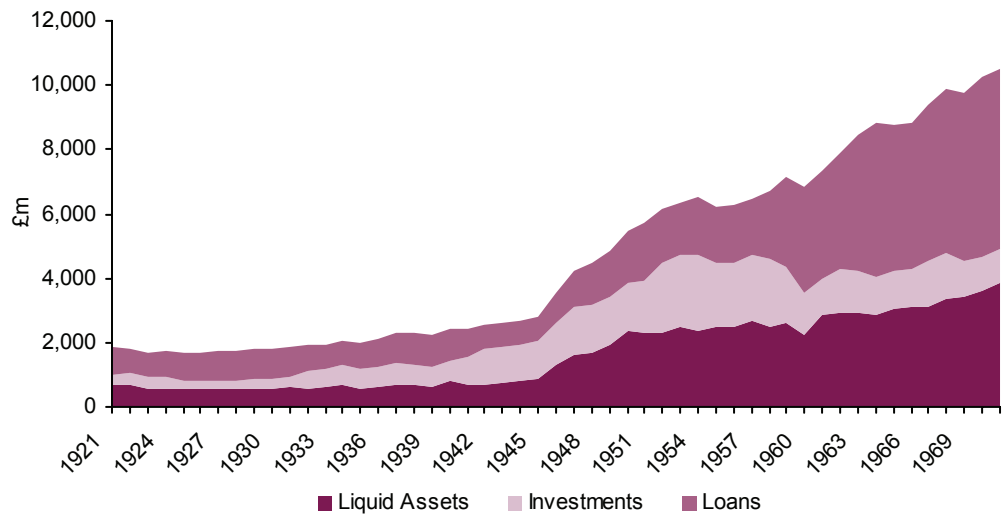
Emerging market debt crises v securitisation

The key difference was that securitisation made it possible for consumer debt to be packaged up and treated as a "liquid" AAA rated assets, which had a low regulatory capital risk weighting. Even more importantly, securitised assets could be held in a bank's liquidity book (ie as a cash equivalent) as opposed to the investment portfolio.

That is, in earlier cycles a banks liquid assets were genuinely liquid (cash and short term government debt) whereas now, so-called treasury assets contain liquidity risk, market risk, credit risk and downgrade risk.

¹ See appendix

UK Clearing Bank balance sheets 1921-1971



Source: The Banker, EVO Securites

Indebtedness shifts from companies to households

If that weren't enough, the mix of the loan book has also shifted dramatically from corporate to consumer. In the 1950s 80% of bank loans were to industry, but over the last 60 years there has been a change in mix so that now over 70% of bank lending is to households. Or put another way, bank lending to corporates has increased by 246x, even without including Other Specialist Lenders and Building Societies.

£m	Balance Sheet	Loans	Corporate	Household
1954	6,518	1,783	1,426	357
2008	4,207,485	980,000	351,000	629,000
Increase	646x	550x	246x	1764x

Source: The Banker

This has created structural weakness in banks balance sheets, which had far outpaced growth in the real economy (for instance GDP growth or average earnings). But still more significantly this has allowed consumer debt to outpace growth in bank balance sheets or growth in the economy as a whole. Unlike previous crisis, this debt be an enduring burden on consumers (rather than companies), and will reduce disposable income for many years to come.

This makes arguments about Keynesian responses to the 1930's theoretical and academic. Modern consumers are more predictable than company defaults, in the sense that the "law of large numbers" means that defaults increase on more regular curve. By contrast, corporate and sovereign defaults are "lumpy" where one large bankruptcy may be large enough to be noticeable impact on the p&l.

Predicting defaults for companies v consumers

But household behaviour is less predictable in the sense that it is more susceptible to feedback loops (both positive and negative). On the way up, borrowers were willing to borrow against rising house prices, creating a virtuous circle. A large debt burden and falling house prices creates a vicious circle.

Not only this but borrower behaviour may differ by country, in Hong Kong 1998-2003, when house prices fell 75% consumers continued to pay their mortgages, even seeking help from extended family members rather than being repossessed. Yet in

the US, where mortgages are non-recourse, home owners have been much more willing to “post their keys back through the door” and hand the problem of negative equity back to the bank. This is probably because in the US borrowers can default on their mortgage without declaring bankruptcy, whereas in most other countries (Hong Kong and the UK included) households in negative equity are faced with a choice of complete bankruptcy or continuing to service the debt, which is secured on an asset that is falling in value.

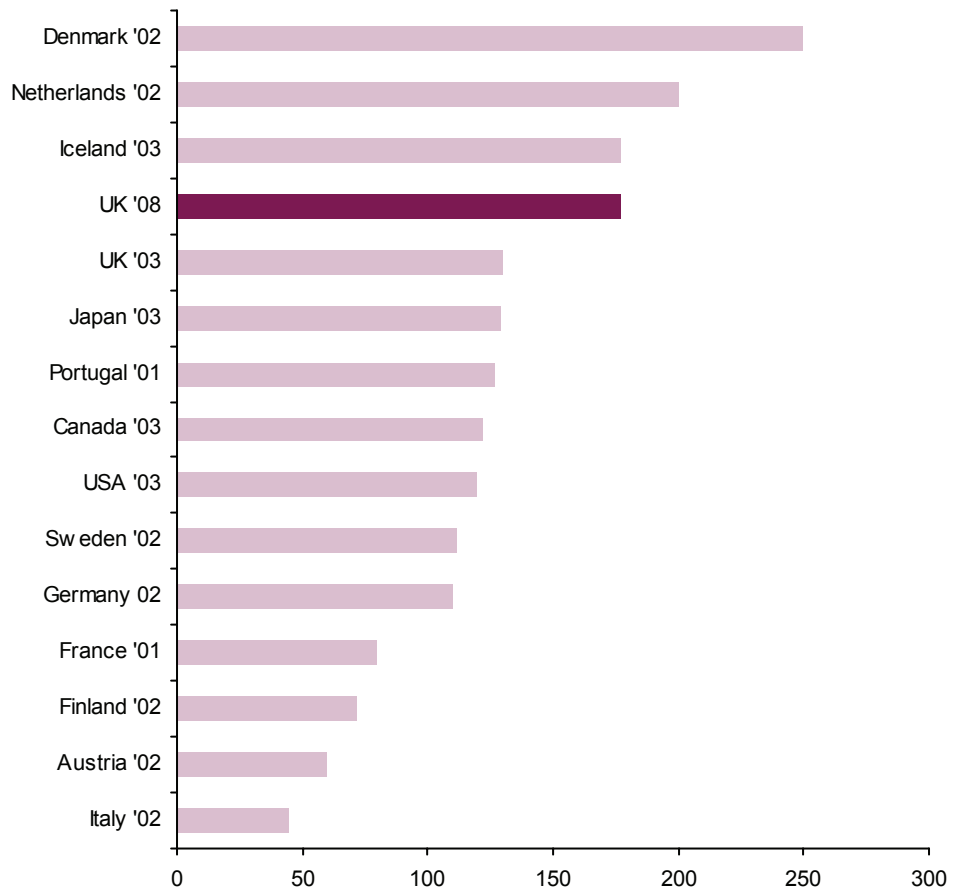
Whichever outcome we see, the experience of Northern Rock suggests herding behaviour by individuals is likely (that is, if my neighbour has defaulted on their mortgage just because they are in negative equity, it probably makes sense for me to do so too.) Paul Krugman has pointed to the financial blog “Calculated Risk” who have analysed data from First American CoreLogic, and concluded if house prices fall 30% in the US (Case Schiller -23% from the peak so far) then 20 million Americans are in negative equity.

This suggests that, unlike previous crises where bank share prices rallied following recapitalisations, investors will only know how bad things are when house prices have stopped falling.

International Comparisons

Though these processes are global – the UK has been particularly guilty of building up an imbalance of household debt funded by savings from overseas. The UK funding gap, the difference between UK loans and UK deposits is £740bn pounds at the last count (Bank of England, Financial Stability Review Oct 2008).

UK household indebtedness international comparison



Source: Central Bank of Iceland, Bank of England, ONS

Mortgage brokers and estate agents who go on the BBC and explain how to fix the banking system, often suggest if 'banks just start lending' all our problems would be solved. These commentators appear to believe that UK household indebtedness can outpace UK disposable income forever. The chart above and the one below suggest that they are wrong.

Employment growth versus Debt / Disposable Income



Source: Halifax Economic Fact Book, Bank of England

As a final point, there has been some excitement about a possible “good bank, bad bank” restructuring, the remedy used in Sweden with mixed success.

We believe the reason why this approach worked in Sweden was the assets were domestic in nature, and that household and corporate debt to disposable income was below 100% (versus over 150% in both US and UK, for households alone). The reason the approach was recently abandoned in the US (the TARP) was that it was unclear what price assets would be transferred into the bad bank, and instead the US decided to follow the British approach of recapitalising the banks directly. Indeed, given the difficulty of the situation, we are reminded of a British Admiral’s advice to new Royal Navy ship’s captains:

“Don’t get your ship caught on the windward side of an island in a hurricane”

In response, Royal Navy Capitan: *“What action do I take, if my ship does get caught on the windward side, sir?”*

British Admiral: *“Don’t get your ship caught on the windward side of an island in a hurricane”*

Where do we go now?

So we find ourselves on the windward side of an island during a hurricane.

Once the seriousness of the situation is realised, we believe the next step is to distinguish clearly between problems that will eventually self-correct and problems which might not be self correcting.

We would put a run on the banking system in the second category. Suppose an over excited journalist goes on TV and suggest people's money isn't safe in banks. A rumour, even if it is false, can break the banks and the payment system. The Government and the Bank of England can come to the rescue though. If all the bank lacks is liquidity, the central bank can act as Lender of Last Resort giving the bank a temporary loan until things calm down.

However, given the huge debt fuelled housing market bubble, the ratio of debt to disposable income well above historic or international comparisons, and rising unemployment; the Government or the Bank of England can do little to prevent the avalanche of bad debts likely to come. The only way of avoiding the bad debts would be to increase growth in disposable income, yet we think this would require wage inflation rising to double digit percentage growth rates in order to erode the nominal value of consumer debt. We don't recommend this as a policy response.

*Imbalances will self correct
given time*

Instead, we are seeing signs of many of destructive trends of recent years self correcting, (spreads on mortgages widening, consumers saving more and paying back their mortgages, competition abating) which we set out below. In fact many of the negative headlines (for example falling house prices) are actually evidence of a functioning economy responding to events, in the same way that a fever is the body's reaction to a disease. Unfortunately the well intentioned policy response is in danger of backfiring, in our view.

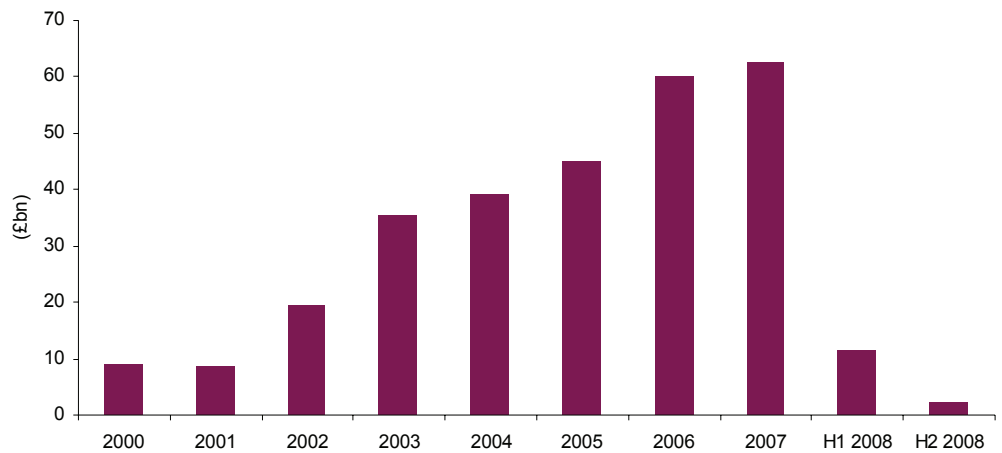
The UK newspapers have put us on tenterhooks to expect a raft of Government initiatives. We look forward to this with as much enthusiasm as a visit to the dentist.

Evidence of problems self correcting

Competition reducing

Over the last few years many new entrants started lending at unrealistically low margins to UK consumers. The strategic response chosen by some UK bank managements to increased competition has been to lower pricing, increase volumes and increase leverage, with fatal consequences. However, Other Specialist Lenders (Paragon, Kensington, GMAC, GE Money but also investment bank securitisation “platforms”) have now mostly imploded.

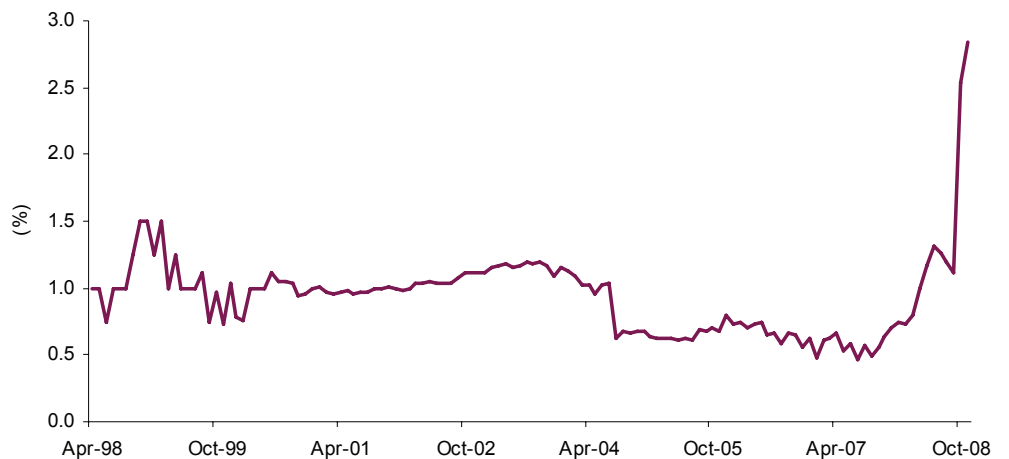
Mortgage approvals, Other Specialist Lenders £bn



Source: Bank of England

We see this as a good thing. Despite some political pressure banks have been able to widen their mortgage margins. The chart below shows the spread above the Bank of England rate for an indexed tracker (maximum Loan To Value 75%).

Base rate tracker spread (max 75% LTV)



Source: Bank of England

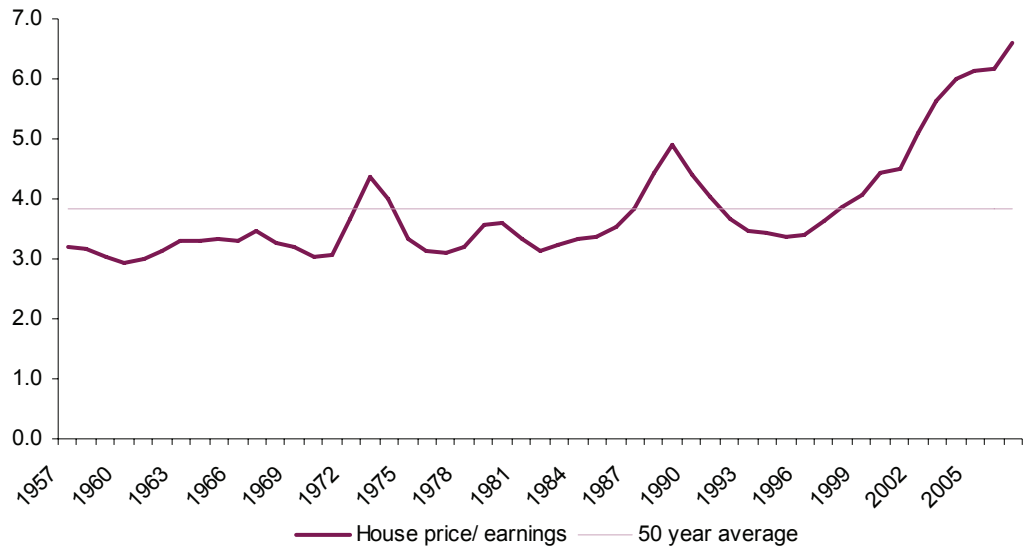
The chart may be slightly misleading, when the Bank of England cut interest rates by 1.5% in November, many lenders withdrew their tracker products. However, we believe it is broadly representative, with many customers coming to the end of fixed rates deals automatically switched on to a bank's Standard Variable Rate (SVR), which is 200bp above the Bank of England Rate.

Unaffordable house prices

HBOS reported at the end of 2007 that the number of first-time home buyers in the UK has dropped to its lowest point since 1980. Mortgage brokers and estate agents assume high house prices are a good thing and tend to justify them by the basis of low interest rates. But they may be interested to know that the Bank of England rate from 1951 to 1970 averaged 5% (minimum 2%, maximum 8%) yet house prices never rose above 3.5x the average salary during that time.

We think the reason why house prices became so out of kilter with average earnings in the last 10 years was bank's willingness to lend ever greater amounts against rising collateral values (in fact, Northern Rock told us this explicitly 3 years ago.) Moreover, we believe falling house prices are evidence of the banking system self-correcting from the excesses of the past. It is also worth noting that the correlation of bank share prices to house prices is low to non-existent.

UK house prices relative to average earnings



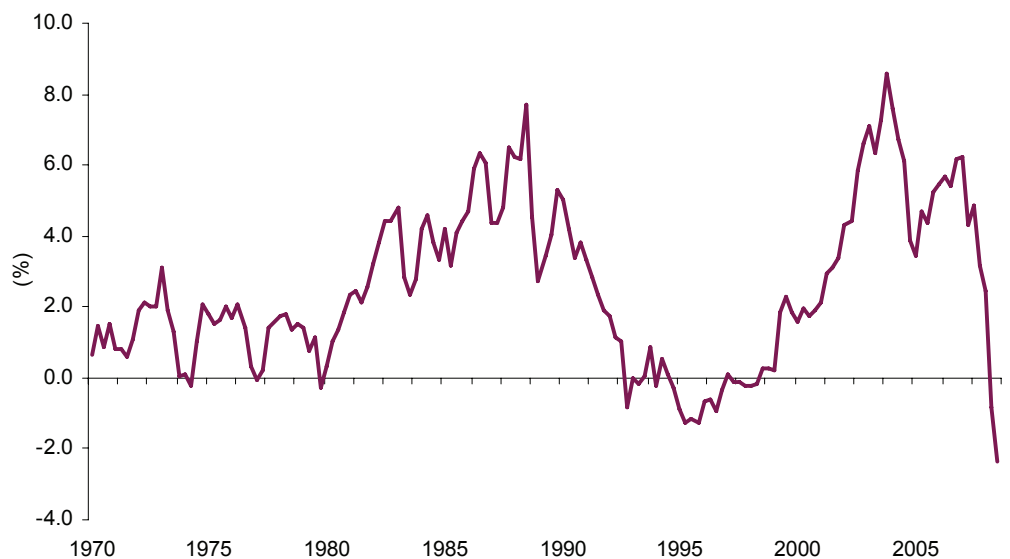
Source: Halifax Economic Fact Book, Bank of England

Over indebted consumers

We believe the best cures for over indebtedness is to pay back borrowing rather than add further to debts. The Bank of England data shows that homeowners paid back £5.7bn of Housing Equity Withdrawal in Q3 2008, versus £50bn withdrawn for the whole of 2006 .

However, this trend is only just beginning, the £5.7bn represents 2.4% of Q3 disposable income, whereas household debt to disposable income stands at 177%.

UK housing equity withdrawal as % of disposable income



Source: Bank of England

Note to “countries don’t go bust”

A cursory glance at history would suggest countries have defaulted more frequently than one might first assume. During the Middle Ages there were frequent defaults, for instance, 700 years ago King Edward I raised money to pay his armies, but in the process ruined his bankers (the Ricciardi family).

In the first half of the twentieth centuries there are many examples of countries defaulting, including the Kingdom of Italy’s in the 1930s. Other examples from the time are the issues of the Republic of Mexico listed on the NYSE were in default and selling at 4 to 6 cents on the dollar in June 1933 and Republic of Chile 6s were in default in 1931 and were selling at prices ranging from 11 to 12 cents in the dollar.

(Source: University of Reading, Dr Adrian Bell and Security Analysis, Graham/Dodd 1934 edition)

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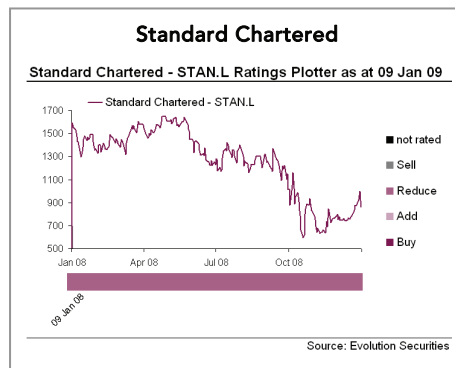
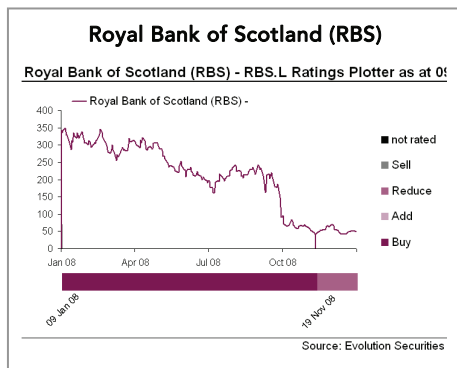
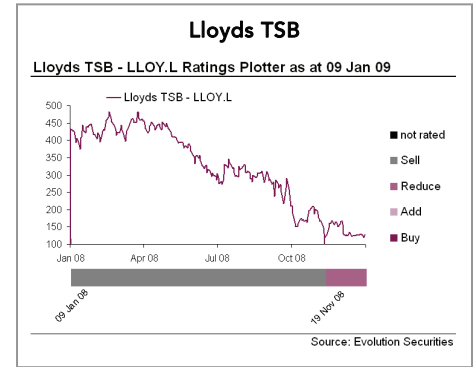
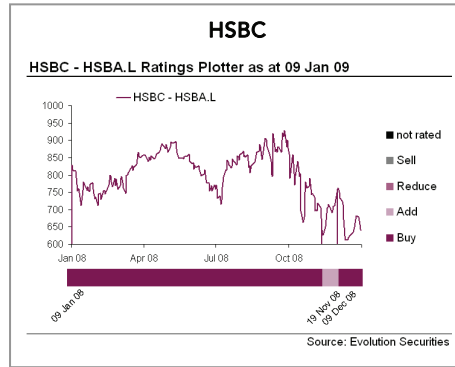
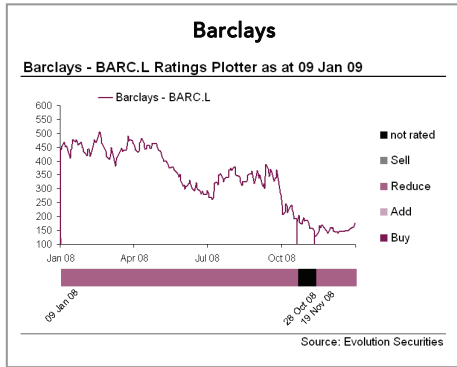
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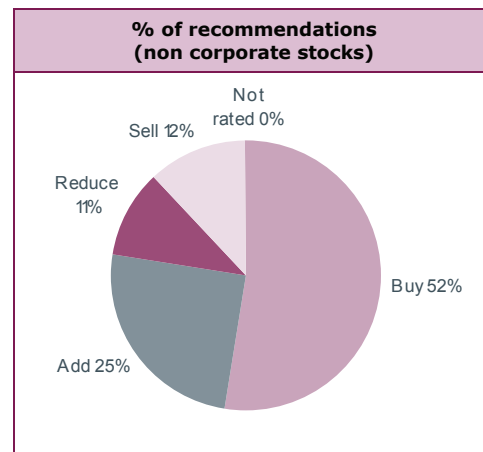
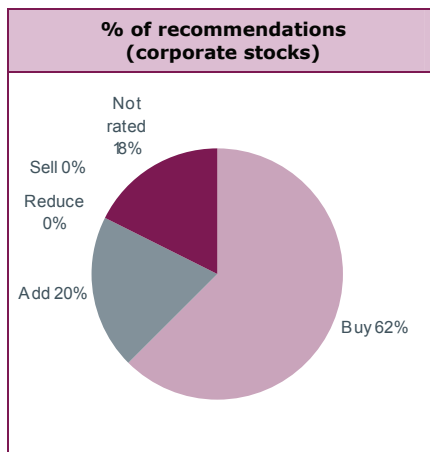
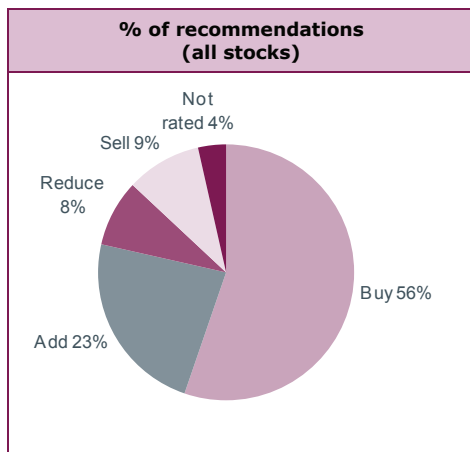
HSBC

Lloyds TSB

Key: ♦ = Analyst has financial interest ● = Analyst has material interest ■ = Analyst is a director □ = Analyst has a business interest

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