A special report on international banking

Rebuilding the banks

A tamer banking industry is already emerging from the debris of the old, failed one, says Andrew Palmer.

Illustration by R. Biesinger

Banking is the industry that failed. Banks are meant to allocate capital to businesses and consumers efficiently; instead, they ladled credit to anyone who wanted it. Banks are supposed to make money by skilfully managing the risk of transforming short-term debt into long-term loans; instead, they were undone by it. They are supposed to expedite the flow of credit through economies; instead, they ended up blocking it.

The costs of this failure are massive. Frantic efforts by governments to save their financial systems and buoy their economies will do long-term damage to public finances. The IMF reckons that average government debt for the richer G20 countries will exceed 100% of GDP in 2014, up from 70% in 2000 and just 40% in 1980.

Despite public rage over bank bail-outs, the industry has also comprehensively failed its owners. The scale of wealth destruction for shareholders has been breathtaking. The total market capitalisation of the industry fell by more than half in 2008, erasing all the gains it had made since 2003 (see chart 1).

Employees have scarcely done better. The popular perception of bankers as Porsche-driving sociopaths obscures the fact that many of the industry's staff are modestly paid and sit in branches, information-technology departments and call-centres. Job losses in the industry

have been savage. “Being done” used to refer to hearing about your annual bonus. Now it means getting fired. America’s financial-services firms have shed almost half a million jobs since the peak in December 2006, more than half of them in the past seven months. Many have gone for good.

The pain is nowhere near over. The credit crunch has been a series of multiple crises, starting with subprime mortgages in America and progressively sweeping through asset classes and geographies. There are now some glimmers of optimism in the investment-banking world, where trading books have already been marked down ferociously and credit exposures to the real economy are more limited. But most banks are hunkering down for more misery, as defaults among consumers and companies spiral. In its latest Global Financial Stability Report, the IMF estimates that the total bill for financial institutions will come to $4.1 trillion.

With so much red ink still to be spilled, it may seem premature to ask, as this special report does, what the future of banking looks like. For most industries, failure on this scale would mean destruction, after all. Banks, notoriously, are different. The most seismic event of the crisis to date, the bankruptcy of Lehman Brothers last September, demonstrated the costs of letting a big financial institution collapse. Trust evaporated and credit dried up. “October was the most uncomfortable moment in my career,” recalls Gordon Nixon, the boss of Royal Bank of Canada (RBC). “There was a possibility that the entire global banking system could go under.”

Concerted actions by governments since then, first in the form of capital injections and liability guarantees, and more recently via schemes to buy or guarantee loans, have signalled their determination to stabilise and clean up their big banks.

Politics notwithstanding, the commitment of governments to defend their banking systems removes the existential threat to the biggest institutions (or, more precisely, transfers it to sovereign borrowers). Bank bosses have learnt not to pronounce too confidently about the future. If the IMF’s loss predictions turn out to be accurate, there is still too little capital in the system. But most think that the chance of another Lehman-style blow-up has been greatly reduced.

There is still great uncertainty about the nature and extent of the support that governments will end up offering to their banks. But governments are now deeply embedded in banking systems. They are guaranteeing far more retail deposits than before the crisis. They are guaranteeing the issuance of new debt. They own preferred shares in many banks, common equity in others and stand ready to inject capital in others still. Banks that have not taken a scrap of government money still benefit from their stabilising presence. “We all exist at the largesse of the government right now,” says a bank boss.

The types of losses that banks now face have also changed. The huge writedowns on trading-book assets that defined the first phase of the crisis were horribly unpredictable. The complexity of structured finance made it difficult to know how losses would cascade down the ladder of investors in securitised assets. The patchy credit histories of subprime and low-documentation borrowers made it hard to model default rates accurately. And mark-to-market accounting meant that banks were valuing illiquid assets at prices which reflected a lack of buyers as much as underlying credit quality (accounting-standards bodies have since been bullied into allowing bankers to exercise more judgment in how they classify and value such assets).

Although the losses that banks face in their loan books are ugly, they should be more predictable. Shocks are still likely: for instance, the size of the bubble and scale of the bust may overturn historic relationships such as that between unemployment rates and credit-card

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losses. But losses on loans can be recognised in the accounts more slowly. And the assets that are now under scrutiny may be much bigger than their subprime predecessors but they are also better understood. "The scale of the recession is unprecedented but it is more familiar terrain," says John Varley, the chief executive of Barclays.

The forgotten art

With government backing assured and impending losses somewhat more predictable, the big banks are slowly starting to lift their heads from the floor. Meetings with investors have been dominated for the past 18 months by discussions about banks' balance-sheets and, in particular, the amount of capital that banks had. "This is my first experience of the quarterly-earnings game where no one has cared about earnings," says Bob Kelly, the boss of Bank of New York Mellon.

That is changing. Even the biggest victims of the crisis expect to return to profitability this year. Galling as it may be to contemplate the returns that will once again accrue to banks, the rest of us badly need them to make money. Just as the prospect of continuing losses is what has stopped private capital from entering the system, the prospect of future profits is what will lure investors back in to replace governments. Profitability is also critical to the ability of banks to cover future losses without calling on further government cash. The situation is fluid but analysts at Barclays Capital reckoned in March that cumulative pre-tax and pre-provision income at the top 20 American banks for this year, 2010 and 2011 will be $575 billion, just enough to cover their estimates of losses in that period of $415 billion-$560 billion.

Profits need to be sustainable, of course. They may be the first line of defence against trouble but they disappeared all too quickly during this crisis, wiped out by writedowns and by the implosion of business models. "The discounted future profit streams of financial institutions went from quite something to almost nothing in an instant," says Andy Haldane, head of financial stability at the Bank of England.

Banks recognise this as much as regulators do. There is a striking degree of convergence between the thrust of planned regulatory reforms and the new strategic thinking of many institutions. Greater resilience is a shared objective. Banks are reducing their dependence on wholesale funding and increasing their reliance on "stickier" deposits. They are reducing the amount of risk they take, which means reducing their proprietary trading and concentrating more on clients and activities that consume less capital. They are rapidly shrinking their balance-sheets. "The banking industry got it so wrong and destroyed so much value that it is difficult to sit in front of investors and say we are going to carry on as before," says Richard Ramsden, an analyst at Goldman Sachs.

The future looks different to different types of banks. For smaller ones that fall outside the comforting embrace of the state or have less diversified loan portfolios, the outlook is bleaker. American regional banks and Spanish savings banks, or cajas, are among those coming under increasing pressure as commercial-property portfolios suffer. Mike Poulos of Oliver Wyman, a consultancy, expects the number of banks in America, currently some 8,000 or so, to drop by 2,000 or more as a result of the crisis.

Banks in many emerging markets will suffer as the economic climate deteriorates but they need to deleverage less. There is also less need for regulatory change. The Asian banks kept their exposure to cross-border funding flows under control, for example, unlike their peers in eastern Europe. The scale of structural change that these institutions face is relatively limited.

But for those banks at the heart of the crisis, the household names of Western finance, the landscape is different. Their future is secure enough for them to be able to plan beyond

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survival. Their failures have been big enough for them to know that everything they do, from the way they manage their balance-sheets to the way they pay their managers, has to change. But in seeking to work out what the new normality will be for banks, the first question to ask is how quickly and on what terms governments will disentangle themselves from the industry.

Exit right

The contract between society and banks will get stricter.

Illustration by R. Biesinger

NOTHING highlights the scale of banking's upheaval better than the intervention of governments. An industry that embodied the free market turns out to be pathetically dependent on the state for its survival. In some cases, the civil servants are officially in charge. The taxpayer is already the majority owner of Royal Bank of Scotland (RBS) and Lloyds Banking Group in Britain. The German government is poised to take control of Hypo Real Estate. American taxpayers are set to own the largest single stake in Citigroup. In many more cases, officials exercise control without formal representation, imposing pay limits and lending targets. The government is the industry's largest shareholder and the guarantor of its liabilities.

Yet the magnitude of this shift can easily be overstated. Governments routinely step in to rescue banks at times of systemic distress, observes Claudio Borio of the Bank for International Settlements. Rating agencies have long assessed banks' creditworthiness in part on the likelihood of government support should they get into trouble. Their judgment, as everyone knows, is not always right. Moody's was pilloried in early 2007 for awarding gold-plated AAA ratings to the big Icelandic banks on the false premise that the authorities in Reykjavik could afford to rescue them. But the assumption that governments will try to help a big bank in crisis is nothing new.

This contract to intervene was first legally recognised after the Depression, when the Glass-Steagall act of 1933 created the Federal Deposit Insurance Corporation (FDIC). Since then, similar deposit-guarantee schemes have been created around the world to help persuade savers, who are otherwise unsecured creditors of their bank, not to remove their money if it gets into trouble. Indeed, some advocates of free markets argue that this guarantee of compensation helped to cause the current crisis, by reducing the incentives for depositors to look closely at their banks.

Whatever the merits of that argument, it is whistling in the wind to suggest that the state should withdraw from its commitment to support banks in times of trouble. "The body cannot survive without blood," says Bo Lundgren, one of the architects of Sweden's vaunted bank-

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rescue package of the early 1990s, "and the economy cannot survive without banks." But now that this commitment has been called on so dramatically, three questions arise. The first is how long the state will remain so explicitly involved in the industry. The second is what immediate distortions that involvement creates. And the third is what additional charges governments will levy on the industry in future for providing banks with such a huge safety net today.

The answer to the first question will be measured in years. Take Sweden's bank bail-out. It was more successful than anyone had expected but it still took four years for the liability guarantees to be lifted. Nordbanken, the seed of today's Nordea, was fully nationalised in 1992 and partly refloated three years later but the Swedish state remains its largest shareholder.

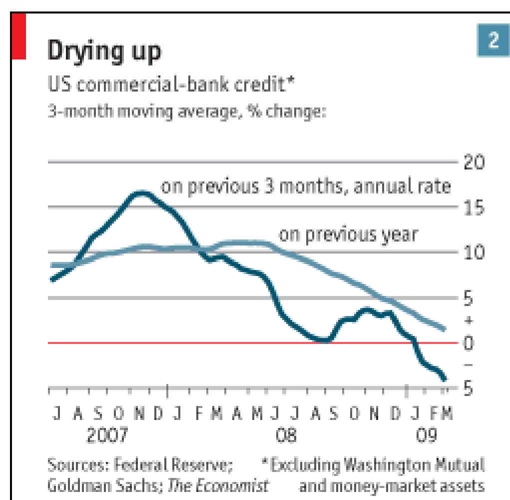
The Swedish policymakers' task was also less daunting. The bad assets in their banks were more homogenous and easier to value than those currently clogging things up. The Swedes intervened at the end of a recession, so banks quickly benefited from the recovery. Governments today have had to step in earlier in the economic cycle, implying a longer period of engagement for two reasons.

First, while loan losses continue to raise doubts about banks' solvency, the presence of governments will be necessary to reassure creditors and counterparties. In America the healthiest banks are increasingly vocal about their desire to repay money from the Troubled Asset Relief Programme (TARP). But many bankers also recognise that they should not be too hasty in their bid for freedom. We are not going to pay off TARP money until we are certain we don't need it, says a bank boss.

Regulators may not allow relatively strong banks to buy out the government early in any case, for fear of a further lurch downward in the economy and of leaving straggling institutions vulnerable to attack from short-sellers. "The idea of TARP repayment is a nonsense," steams a Wall Street executive. "It all has to be paid back at the same time."

Finding a way out

Even if it is feasible to replace government equity fairly quickly, most believe that it will take far longer for governments to exit their debt guarantees. Banks have lots of bubble-era debt to refinance this year and next. The coming torrent of government borrowing may make it harder for banks to attract private funding. And the more government-backed bank debt is issued, the greater the risk of creating another refinancing problem when state guarantees expire.



The second reason why governments need to stay engaged is to counter the banks' usual instincts during slowdowns. The obvious thing for banks to do in a recession, let alone one in

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which trust in counterparties has been shattered and a credit bubble is deflating, is lend less (see chart 2). Governments are urging banks to lend more to prop up the economy, even though in the long term they will want them to be more cautious lenders.

The political imperative for governments to try to make a return on their investments complicates matters further. Banks will have to look relatively risk-proof before they can be passed back into private ownership at a profit. All of which suggests that governments have to negotiate a prolonged transition before they will exit all of their investments in banks or remove their liability guarantees.

The longer governments stay involved, the more they will distort competition. Normally, private firms moan about having to compete with state-backed rivals but in this case government backing is likely to change from a boon into a handicap. Bank bosses in America who welcomed the initial injection of TARP capital have become progressively less enthusiastic about it. Those who have stayed outside the government net, in terms of equity participation at least, are revelling in their independence. "There is some tactical advantage to government money but it is deeply politicised," says the boss of a big bank which has not taken state cash.

Compensation is the obvious example. The top 25 employees at banks that have taken TARP money face tight regulation of their incentive-based pay until the government has been paid back. Prior bonuses are also at risk from punitive tax proposals. That may be sustainable for a while, says another boss: "We can say for a year or two that 'we value you, you're a leader and if you stay with us we will make it up to you'." But eventually competition from unfettered rivals will tell.

Freedom to act on the international stage is particularly prized by institutions that have not taken government cash. Taxpayers have little interest in seeing their money used to finance activities in other countries: they want it used for lending at home. The dismantling of RBS's global empire is the most conspicuous example of this type of financial nationalism, but pressure to lend domestically is universal. With many competitors gone, impaired or under the cosh of government masters, banks that have been able to keep operating normally in global markets are already grabbing new wholesale business. Capital-raising is easier for independent banks too because shareholders and politicians have different priorities. "Investing capital where government is involved on a continuing basis is difficult because of concerns over restrictions on marketing and compensation expenses," says Gary Parr of Lazard, an investment bank.

There are also disadvantages to having government-owned rivals. The obvious one is unfair competition. Northern Rock, a British bank which was nationalised in early 2008 and was originally told to shut its doors to new borrowers and shrink its book, abruptly changed course in February. It now aims to lend an extra £5 billion ($7.6 billion) in mortgages in 2009, and up to an additional £9 billion in 2010. If government-owned banks were to underprice risk for a long period of time in order to meet lending targets, everyone would feel under pressure to respond.

The shadow of the state

Let's be foolhardy and assume the best. Economies start to recover relatively rapidly. Governments are able to plot a relatively fast exit from their equity investments. And a revival in funding markets allows for a smooth exit from debt guarantees (as happened in Sweden). Even so, the crisis will leave a lasting mark on the terms of trade between banks and the taxpayers who periodically come to their rescue. "Banks have to have a licence to operate, which is granted by a common understanding of what is right and fair," says Hans Dalborg, the chairman of Nordea.

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Some elements of this new contract between banks and society are already clear. Amendments to bank-capital regimes are certain, although regulators clearly do not want to squeeze banks to raise more capital until credit shortages have eased. There is now impressive momentum behind the idea of a leverage ratio, a measure that puts a fixed ceiling on the total amount of assets that a bank can hold relative to its capital. Some countries, including America, already have such a system, and others are fast coming around. The Swiss are introducing just such a ratio for their two biggest banks, which will be phased in by 2013, to sit alongside the international "Basel 2" capital rules.

Basel 2 takes a different approach to capital, charging banks on the basis of how risky their assets are. These "risk weights" will also become far more punitive. Ask supervisors about the biggest flaws in the previous regulatory framework and many will point to the meagre capital charges that banks faced in their trading books, which were based on disastrously optimistic assumptions about the liquidity, risk profile and price stability of assets such as mortgage-backed securities. These charges are going to be driven higher.

The liquidity of banks' balance-sheets will also be regulated more intensively. Britain's Financial Services Authority (FSA) has already issued proposed guidelines on liquidity which will require banks to hold a greater cushion of liquid assets, mainly in the form of government bonds. The proposals have attracted plenty of criticism but they are indicative of what is coming: a more robust approach to liquidity in general and, in the wake of the Lehman bankruptcy and the collapse of the Icelandic banks, greater efforts by national regulators to safeguard the local operations of foreign banks from the risk of their parents getting into trouble.

If the regulation of balance-sheets is set to become more prescriptive, other things will be designed to increase levels of uncertainty. Take the stance of Britain's newly scary FSA. Its previous philosophy meant that the regulator focused primarily on the management controls and systems that banks had in place. That passive approach will be replaced by a more intrusive and capricious regime, which questions the decisions of individual institutions.

Uncertain times

Widespread enthusiasm for a more "macroprudential" approach to regulation—in which regulators think harder about the stability of the system in addition to the health of individual institutions—also implies a higher level of uncertainty for executives. Banks that may be doing a good job could still find themselves subject to higher charges if systemic risks are rising. Countercyclical rules requiring banks to beef up capital in good times and run it down in bad times may well rely on the discretion of authorities.

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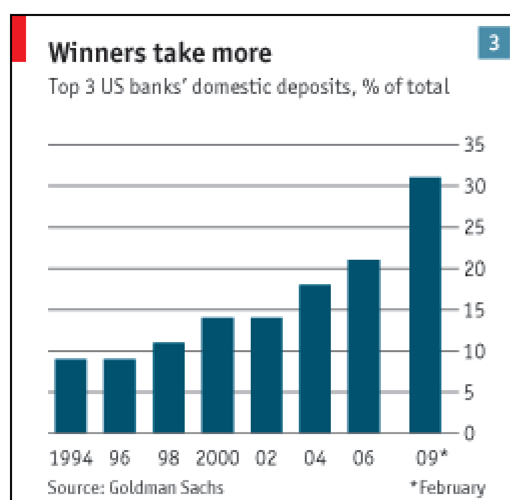


What of the two big structural questions that now dog industry regulators—whether to separate out "utility" retail banks from "casino" investment banks; and what to do about those banks that are too big to fail? Both problems have got more acute because of the crisis. Deals such as the takeovers of Bear Stearns by JPMorgan Chase, and of Merrill Lynch by Bank of America, have further blurred the boundaries between retail and investment banks, not sharpened them. Combinations like those of Wells Fargo and Wachovia, Lloyds TSB and HBOS, Commerzbank and Dresdner Bank have bloated the biggest institutions, not slimmed them. And the trend towards concentration of deposits among America's top banks has accelerated as a result of these deals, for example (see chart 3).

Yet despite some talk about the need for a new Glass-Steagall act to separate retail and investment banking, and for higher capital charges based on size, the idea of breaking up institutions does not have great momentum. No business model has come through the crisis unscathed and size is manifestly not the only attribute that makes a bank too important to fail.

Standalone investment banks have failed and, as Lehman vividly demonstrated, were too central to the architecture of global finance to disappear smoothly. Pure retail banks have imploded too. Investment bankers archly observe that judgments on which bit of the business is the casino ought to be withheld until the end of the credit cycle. The woes of Citigroup put paid to the myth of the indestructible universal bank, even as the success of Canada's banks (see article) showed that a system of a few domestic giants can work.

Any radical regulatory surgery would also require governments to mark out some very artificial boundaries. Take the distinction that some make between deposit-taking institutions, which should be protected, and wholesale-funded entities, which should not. With so much wholesale funding coming ultimately from individual investors in the form of pension and mutual funds, that distinction is blurrier than it first looks.

There are similar problems with defining the borders between acceptable and unacceptable activities. Peter Sands, the boss of Standard Chartered, an emerging-market leader, argues that there are swathes of the industry doing blameless but critical things like cash management and trade finance for companies that fall outside the definition of narrow banking.

What is more, any form of lending entails risk. The extension of credit to a small business is one of the riskiest things a bank can do, but it wins taxpayers' unequivocal support. Credit-default swaps are vilified, by contrast, but they serve a valuable function. "We will buy credit protection but not sell it, buy catastrophe risk [protection] but not sell it," says the boss of a bank that has negotiated the crisis successfully. Fine, but that implies it is useful for someone to be selling these kinds of instruments. Proprietary trading is harder to defend when it is sheltered by a government guarantee but any bank that acts as a marketmaker between buyers and sellers will end up taking some form of proprietary risk.

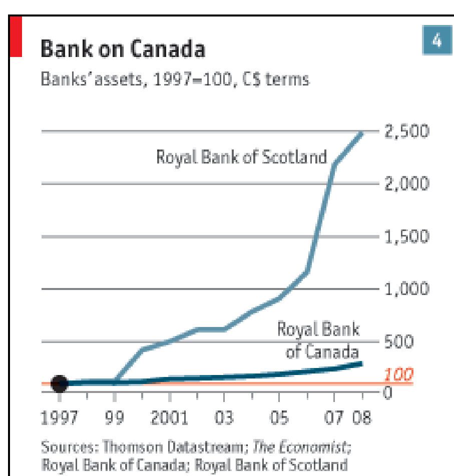
Faced with this untidy set of choices, a sensible philosophy would not make hard-and-fast judgments about what businesses belong together. Quality of management, not business models, is better at explaining the difference in performance between banks. The right approach conceptually is a dynamic regulatory regime that looks sceptically at the boardrooms and strategies of financial institutions and is capable of intervening effectively when need arises. In any case, systemic changes to institutions' balance-sheets will have a substantial impact on the types of businesses banks become.

Don't blame Canada

A country that got things right.

"IT IS the only time I feel like royalty," says the boss of a big Canadian bank, describing the reception he now gets in America. He is not the only one basking in acclaim. All of Canada's main banks were profitable in the quarter ending January 31st, when market conditions were at their worst. None has needed government investment. The country's financial system has been praised by Barack Obama.

Trouble is, some differences between the two countries are culturally ingrained. "The United States has an inherently higher risk appetite," says a banker familiar with both sides of the fence. It is hard to find pre-crisis equivalents in America of the decision by Toronto-Dominion (TD) to exit its structured products business in 2005, or the 20-30% band that RBC imposes on the share of earnings that its capital-markets business can contribute.



Structural differences matter too. The Canadian system is an oligopoly of five dominant banks. That dampens price competition: independent brokers originate less than one-third of the mortgages in Canada, compared with up to 70% in America during the bubble. It also makes it easier for Canadian banks to pull back when things are getting too risky.

Having a few banks that are clearly too big to fail has led to more stringent supervision, including imposing a maximum leverage ratio and a single regulatory regime for commercial and investment bankers. Laxer and more fragmented capital regimes allowed the balance-sheets of banks elsewhere to balloon (see chart 4).

Perhaps the most striking divergence between Canada and America is in their regulation of mortgages. Interest paid on home loans is tax-deductible in America, encouraging people to borrow more; not so in Canada. American mortgages are non-recourse in many states, making it harder for lenders to pursue defaulting borrowers; not in most of Canada. (Then again, Britain is like Canada in these respects but still has soaring defaults).

Canadians taking out mortgages with a loan-to-value ratio over 80% must also take out insurance on them from a federal agency called the Canada Mortgage and Housing Corporation (CMHC). The banks insure the rest of their portfolios with the CMHC, which keeps them honest by applying strict standards to the mortgages they guarantee. Taking out insurance also brings the risk weighting that regulators apply to these mortgages down to zero, which means that the banks derive no capital advantage from funding them through securitisation. Some argue that Freddie Mac and Fannie Mae, America's housing-finance giants, should likewise guarantee mortgages but not buy them.

From asset to liability

The shifting shape of bank balance-sheets.

Illustration by R. Biesinger

THE dirty secret of the golden age of finance was that it was obscenely easy to make money. The supply of credit was seemingly inexhaustible, so banks could fund their expansion at will. Demand was equally insatiable, providing those infamously complex structured products with a stream of ready buyers. The years of plenty disastrously skewed risk models, allowing banks to run with lower capital on the assumption that past performance was, contrary to the industry's standard advice, a guide to future returns. And the theory that risk had been dispersed because of securitisation added to the false sense of security.

The result for many banks was a strategy of expanding their balance-sheets by writing more and more loans and holding ever more securities. With risk low, liquidity ubiquitous and many institutions under fire for appearing to be overcapitalised, there seemed to be little cost to growth. "If we could have an infinite balance-sheet for a penny return, we were going to take it," says a Wall Street veteran.

Things are somewhat different now. If boardroom discussion in the past decade revolved around the asset side of the balance-sheet, the next decade will see managers focusing on the liabilities side—the amount and quality of capital they hold to protect against losses, and the duration and sources of their funding. Banks will go from being unconstrained by their balance-sheets to being caged by them.

Start with capital, which has suddenly become the industry's scarce resource. That is particularly true today as the prospect of further losses continues to unnerve private investors. But it will remain true after the immediate crisis has eased. The amount of capital that banks have to hold will go up, and not just because their regulators want them to have a bigger buffer against losses.

The risk weightings on assets are rising as the effects of the downturn feed through into banks' risk models, forcing them to set aside more capital. Bondholders want a greater cushion beneath them in the capital structure to protect them against losses. Shareholders too are belatedly happy to trade higher returns on equity for a reduced chance of being wiped out. So banks with more equity capital are now valued more highly by the market. Between 2000 and 2007 there was no correlation between equity-capital ratios and the total return on banks' shares, says Mr Varley of Barclays. "Now the correlation is meaningful."

The amount of capital banks hold is not the only thing under scrutiny. They also need to have the right kind. Their capital is a mix of common equity, which is first in line when losses strike, and various other instruments, often hybrids of equity and debt. A gradual pre-crisis increase

in the proportion of this sort of capital has accelerated rapidly in recent months, as common equity has been eaten up by losses and governments have largely filled the gap with preferred shares, which helps to avoid nationalisation.

The curious effect of this changing capital mix has been to bolster banks' overall capital bases while disturbing shareholders, who see common equity as the only dependable bulwark against losses. Thus banks with less of it have been punished by the markets. "It turns out that hybrids don't have much loss-absorbing capacity and are not much use in a period of stress," concludes Mr Ramsden of Goldman Sachs. That realisation helps to explain why American commercial banks, despite appearing well capitalised compared with their European peers ahead of the crisis, have still had a capital problem. It also helps to explain the banks' rush to buy back hybrid debt at discounted prices: they can book the gains as profits and use these to beef up capital where it counts.

Holders of hybrid instruments, as well as of other forms of junior debt, have been given their own reasons to reflect. The British government's decision in February to amend the terms of subordinated debt issued by Bradford & Bingley, a nationalised bank, spooked European markets, for example. Bondholders were locked in when Deutsche Bank decided in December not to redeem a €1 billion ($1.3 billion) subordinated bond at its first opportunity. John Raymond of CreditSights, a research firm, says investors used to like buying debt lower down banks' capital structure because they thought its higher yield overcompensated for a marginal increase in risk. Now their thinking has changed.

Senior debtholders, who rank first in the hierarchy of unsecured creditors if a bank is liquidated, have less to worry about. In general regulators have stuck to the standard script of bank bail-outs, in which shareholders take the pain and bondholders are protected. And a bigger equity cushion should help to reduce the cost of debt by counteracting fears that debtholders are too exposed to losses.

Bank debt of all kinds will nevertheless be perceived as more risky after this crisis. Investors will not soon forget Washington Mutual's failure last September, when assets and deposits of the Seattle-based thrift were transferred to JPMorgan Chase but its creditors were left high and dry. Even in countries that do not formally prioritise depositors over other creditors, as America does, the political necessity of reimbursing taxpayers before anyone else has become crystal clear. Thanks to Iceland's crisis the creditworthiness of banks will also be far more closely tied to the creditworthiness of the countries in which they are headquartered.

The primary effect of all these changes will be to make it more expensive to expand the balance-sheet. Scared bank shareholders will now demand a higher risk premium, as will debtholders. Competition for capital and safer forms of debt will be greater, as investors demand fortress-like balance-sheets. And equity will go less far in a world where banks are more constrained in the amount of assets they can support with each unit of capital.

All this in turn will lead banks to think harder about where they deploy capital. Executives will ask tough questions about activities that absorb lots of capital but have lower returns now that leverage is lower, the risks are clearer and cost of funding is higher. "Some banks' balance-sheets could be expanded indefinitely in the past," says Paul Calello, the boss of Credit Suisse's investment bank. "Now that capital is more scarce the banks have to be even more efficient in their balance-sheet and capital usage to maximise profitability." Dedicated proprietary-trading desks, where a group of traders put the bank's own capital at risk, look much less attractive in this changed environment, for example. The advantages of running such desks have largely gone, says Bill Winters of JPMorgan Chase's investment bank.

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Finer judgments about the liquidity of assets will also come into play. When markets are less liquid, assets stay on the balance-sheets for longer. That exposes institutions to greater risk and ties up capital that could be better deployed elsewhere. Credit Suisse is planning to continue to operate in American residential mortgage-backed securities (RMBS), for example, where markets are deeper and more liquid, but exit the sludgier European RMBS market, where the bank is forced to hold assets for longer.

Businesses that throw off plenty of earnings without absorbing much capital or running great risks are naturally in demand. Take the advisory businesses of investment banking, an area in which plenty of boutiques make a decent living without having a balance-sheet at all. Or custody businesses, where banks look after the assets of other financial institutions. Or asset management, where someone else's money is at risk. The two remaining independent investment banks, Goldman Sachs and Morgan Stanley, have both signalled greater emphasis on less capital-intensive businesses.

Debt dilemmas

Capital is not the only bit of the balance-sheet that will get a lot more attention in future. Executives (and regulators) will also focus more on the funding profile of their businesses in light of the crisis, as the costs of borrowing rise, lenders demand greater security and keener awareness of liquidity risk informs behaviour.

They will pay greater attention, for example, to whether assets can be used as collateral for further borrowing. Huw van Steenis, an analyst at Morgan Stanley, says banks will divide activities between those generating collateral that can be placed with central banks (high-quality mortgages, for example) or is otherwise decent enough to be used as security (shares, say), and those that do not throw off any collateral at all and therefore consume unsecured funding. The cost and scarcity of this type of funding means that these businesses—equity underwriting is an example—will command higher margins.

Above all, banks will have a deeper awareness of funding risk—their ability to roll over debts as they come due. Institutions that keenly exploited the pricing differences between long-term assets and short-term liabilities paid heavily when liquidity dried up and they were unable to refinance fast-maturing debts or sell the assets that they held.

To be more precise, the weakness revealed by this crisis has been in short-term wholesale funding, which rolls over quickly but does not have the government-backed guarantees that help to keep retail depositors quiescent. This type of funding has been at the heart of the crisis.

Many subprime mortgage-backed securities were held in off-balance-sheet vehicles that funded themselves by issuing short-dated, asset-backed commercial paper to money-market funds and other investors. When those funds suddenly stopped buying paper, the banks' liquidity lines to these vehicles abruptly came into force. Similarly, the amount of funding that investment banks were doing through overnight repo agreements surged between 2004 and 2007; they were rolling over one-quarter of their balance-sheets every day prior to the crisis, making them vulnerable to a sudden loss of confidence.

Short-term wholesale funding also helped to sink Northern Rock, one of the earliest victims of the crisis. The bank's failure in September 2007 is indelibly associated with images of Britain's first retail bank run since 1866 and is often blamed on its enthusiastic use of securitisation to expand its mortgage book. Yet a 2008 paper by Hyun Song Shin of Princeton University, dissecting the bank's implosion, suggests that neither the run nor securitisation was the principal culprit.

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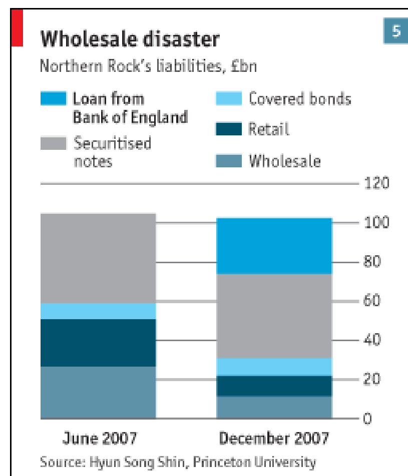


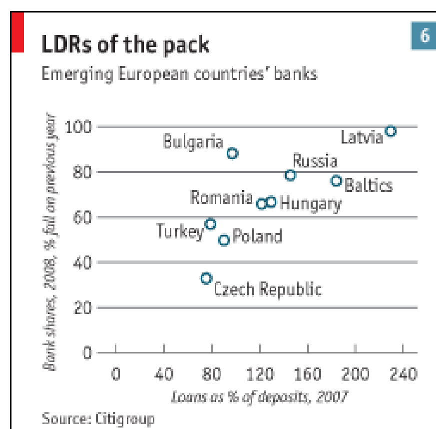
Source: Hyun Song Shin, Princeton University

The retail run on the bank came in mid-September, when news broke that the Bank of England was providing it with emergency support. Yet Northern Rock had been experiencing funding problems since mid-August. The retail run came after the bank had already been destabilised by wholesale-funding problems. Nor can securitisation really be blamed for the withdrawal in funding. Northern Rock's securitisation vehicle issued relatively long-term notes to investors, so it did not face the threat of massive redemptions from this particular quarter. The first and most damaging run on the bank took place in its other short- and medium-term wholesale liabilities (see chart 5).

Faced with this stress fracture in their funding structures, banks have two obvious ways to respond. The first is to lengthen the maturity of the wholesale debts that they have. Some institutions have less far to go than others: the unsecured debt of Goldman Sachs already boasts an average maturity of eight years, for instance. But when markets get back to normal, funding maturities are likely to rise.

There are limits to issuance of longer-dated liabilities. A big rise in the proportion of long-term bond funding across the industry is bound to be costly, especially since banks will have to compete to attract interest from bond investors who already have exposure to many of these institutions anyway. Securitisation markets are badly damaged (see article).

The second option, and the more important shift, is for banks to increase their dependence on more stable deposits. The most dramatic volte-face has been that of the surviving investment banks, Goldman Sachs and Morgan Stanley, which became bank holding companies in September, making it easier for them to take deposits.



Source: Citigroup

The upheaval in funding profiles is arguably greater for retail banks, however. Just as capital ratios are now strongly correlated with share prices, so too are loan-to-deposit ratios (LDRs).

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Among emerging European countries, where cross-border capital flows were critical and have now dried up, those with higher LDRs (ie, fewer deposits) have seen their banks' share prices dive the most (see chart 6).

Retail-bank bosses who had financed loan growth by tapping wholesale sources of funding are now targeting lower LDRs. Before it was snapped up by Lloyds TSB, HBOS, another stricken British lender, was trying to dispose of businesses that were dependent on wholesale funds and therefore increased the group's LDR. Many banks have now imposed limits on asset growth, requiring that loans do not expand more quickly than deposits.

A perennial industry debate, on the merits of bank branches versus other customer channels, has been given fresh piquancy by this need to gather in deposits—and the branch is likely to emerge strengthened. Studies consistently suggest that branch networks with a strong local presence are the most effective way to win deposits. Mr Shin's analysis of Northern Rock contains some fascinating detail on the retail-deposit run. Despite those snaking queues, customers with branch-based accounts were stickier than many others. Online account-holders fled in roughly similar proportions to branch customers. Holders of postal accounts and offshore accounts were flightier.

In truth, banks need to have a diverse set of funding sources and maturities, whether wholesale or retail. Relying on deposits alone still entails risk. Deposits can be withdrawn at a moment's notice, after all, and government guarantees do not stop depositors from discriminating between institutions: companies and individuals alike want to avoid the hassle of having to retrieve deposits from a failed bank. There will be a bigger question to consider as well. Are there enough deposits to go round?

Too big to swallow

The future of securitisation is the industry's most pressing question.

ONE of the canards of the credit crisis, trotted out regularly by politicians and pundits, is that banks have stopped lending. It is a charge that bankers vehemently reject and the data largely back them up. It is true that overall flows of credit have fallen steeply. Yet analysis by Oliver Wyman, a consultancy, suggests that net lending by American banks, for example, has contracted by amounts that are broadly in line with previous recessions, when demand for credit naturally diminishes and lending standards inevitably tighten. Indeed the worry of some observers, given that easy credit got us into this mess, is that banks are still lending too much.

The really precipitous contraction in credit has come from non-bank lenders—the array of money-market funds, hedge funds, former investment banks, exchange-traded funds and the like that is sometimes called the "shadow banking system". These capital-market lenders are especially important in America—banks have supplied only 20% of total net lending in the country since 1993 (see chart 7)—but they play an increasingly important role elsewhere too.

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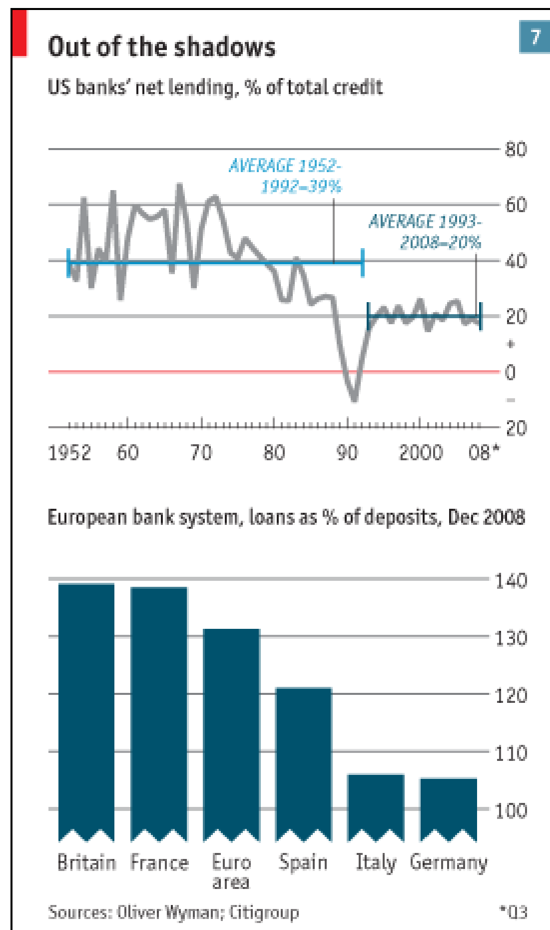
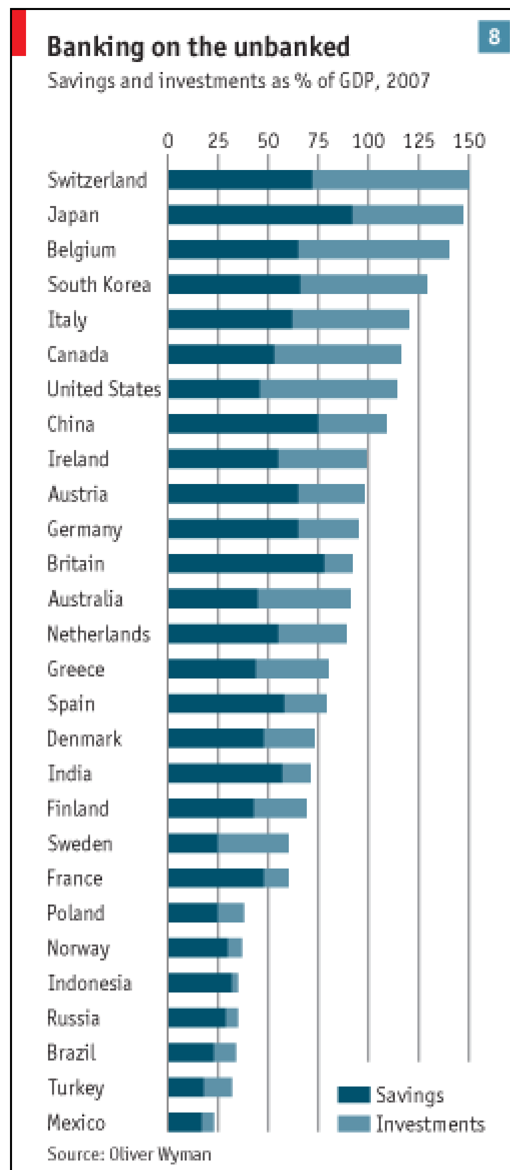


In particular, non-bank lenders have been buyers of securitised products, loans that are bundled together into securities and sold on to investors. An estimated $8.7 trillion of assets worldwide are funded by securitisation. More than half of the credit cards and student loans originated in America in 2007 were securitised. Many European banks used securitisation to fund the expansion of their loan books in the boom (see chart 7).

There is a stylised model of what is meant to happen when the shadow banking system contracts, in which banks act as "lenders of second-to-last resort". Borrowers who can no longer get money from capital markets can call instead on contingent funding commitments made by the banks. And banks can fund their expanded asset base because at the same time deposits are attracted into the banks by the comfort of deposit insurance. A 2005 paper from Evan Gatev and Philip Strahan of Boston College and Til Schuermann of the Federal Reserve Bank of New York showed how this flight to traditional banking operated when the Long-Term Capital Management hedge fund failed in 1998.

Some of these things happened this time too. Liquidity lines from banks to off-balance-sheet entities such as conduits and structured investment vehicles (SIVs) were activated as securitisation markets evaporated. Bank executives report heavy loan demand as a result of the collapse in non-bank credit. Some savings flowed into banks too. The problem is that the amount of money needed from the banks this time around is so vast. Oliver Wyman calculates that in the first three quarters of 2008, lending via capital markets in America shrank (on an annualised basis) by $950 billion. In contrast, banks' total net lending in 2007 was just $850 billion.



Banking on the unbanked
Savings and investments as % of GDP, 2007
Source: Oliver Wyman

Supposing for a moment that the banks actually wanted to take on the credit risk associated with these assets, the sums simply do not add up for two reasons. First, taking securitised assets back on to bank balance-sheets implies extra demand for capital that would be very hard for banks to meet in benign circumstances, let alone these ones.

Second, plenty of banks depend on securitisation for a big chunk of their own funding, so they would have to replace this source of finance with deposits. In most mature markets, savings penetration is already relatively deep, so there are limited options for driving deposits higher still. There is greater capacity to increase deposits in emerging markets, where there is more cash under the mattress (see chart 8), but doing so takes years. “You cannot be disintermediated over ten years and then reintermediated in a month,” says Mr Nixon of RBC. Hence the near-universal agreement that securitisation needs to be revived.

Resuscitation procedures

If only it were that simple. The intellectual case for securitisation certainly remains strong, and not just because without it, deleveraging will be even more painful. Banks that have concentrations of risk in their portfolios can reduce them by selling assets to other investors. Those investors who cannot extend credit directly to individuals or small businesses can get

exposure to these assets via securitisation. "We didn't come out of the internet bubble and say that we should give up on venture capital," says a regulator.

Optimists point out that some of the worst excesses of the market have already gone. Ludicrously complex securitised products, the CDO-squareds and -cubeds, have gone forever. Greater emphasis on the quality of borrowers will mean that risk should become more predictable. "The problem comes when you start securitising things for which you cannot compute the odds of default," says Stephen Cecchetti, chief economist at the Bank for International Settlements. Even if those predicted default rates are high, the risk can be mitigated by techniques such as overcollateralisation, where there is an excess of loans to cover losses.

There is also an emerging consensus on how to fix securitisation's biggest flaw, the moral hazard which meant that originators had less incentive to care about the quality of the business they wrote because they thought the risks were someone else's problem. By making issuers take the first loss on any defaults in the securitised pool of assets (and stipulating that they cannot hedge that exposure away), regulators will give them a clear incentive to think about asset quality.

This goal of aligning the interests of issuers and investors also explains official enthusiasm for covered bonds, a type of secured-funding instrument in which creditors have recourse to both assets and the issuing bank. By keeping all the assets on the balance-sheet, however, a surge in covered bonds would still require banks to find a lot of additional capital. That cost is more manageable if banks keep some exposure but sell most of the securities to other investors who have no recourse. Assume a risk-weighting of 20% on a portfolio of high-quality mortgages, calculates Jamie Dimon, JPMorgan Chase's boss, and retaining a 10% slice of a $50 billion pool of mortgages would imply a capital charge of $80m. "That's doable," he says.

There is broad agreement on how a revived securitisation market would work (high-quality assets, simple products, some retained risk on the part of the issuer). But big worries remain. First, regulators may impose higher capital charges on banks for the contingent risks they run as a result of securitisation. Banks were not just undercharged for the formal liquidity lines they offered to conduits and SIVs; they were also undercharged for reputational risk, the informal obligation to reabsorb troubled off-balance-sheet assets to help their clients. That reputational exposure will surely attract a more explicit cost in future. Coming changes to FAS140, an American accounting rule for off-balance-sheet assets, will also mean that banks can no longer claim capital relief by securitising assets through special-purpose vehicles.

Second, many buyers of securitised products are also likely to be more constrained in future. Leveraged investors, such as some hedge funds, are going to find it harder to gear up, making the returns on securitised products less attractive.

Banks themselves, also important buyers of securitised products, will have less room for manoeuvre too. Matt King, an analyst at Citigroup, believes that the surge in securitisation during the bubble can partly be explained by a massive mismatch between the regulatory regimes of American and European banks. Those American banks whose regulator imposed a leverage ratio had an incentive to move assets off their balance-sheets. European banks which operated only under a risk-weighted capital regime were able to buy those very same assets because they attracted a low capital charge. With risk weightings on the rise, and leverage ratios all the rage, the capacity of European banks to purchase these assets is shrinking.

Money-market funds, which invested heavily in securitised products, will also be more constrained. One of the most unnerving moments of the crisis was the massive outflow of cash from these funds after the announcement by one of them last September that it had "broken

the buck", meaning that its net asset value had fallen below $1 a share and investors were going to get less back than they had put in. With $3.4 trillion of assets under management, allowing a run on money-market funds was unthinkable. The American government stabilised the market with a temporary guarantee that investors would not lose money.

The issue is what kind of quid pro quo money-market funds will now face. There is a particular focus on their break-the-buck commitment, which means that they mimic a bank by engaging in maturity transformation while promising shareholders that they can get all their money back whenever they want it. A choice is looming for the industry—either to keep this commitment and submit to greater regulatory oversight, potentially including capital charges, or to drop it and make shareholders understand the risk.

Neither outcome is great for securitisers. If money-market funds keep the break-the-buck promise, they are likely to move into more liquid asset classes than securitised products. If they abandon it, they will demand even higher yields on securitised assets or even greater amounts of credit enhancement, which inevitably means higher borrowing costs for issuers. (On the flip side, if funds produce lower yields or more risk in future, that could lead investors to keep more of their money in banks).

Even for long-term investors—think of pension funds and insurers with long-dated liabilities of their own—likely levels of demand for securitisation are horribly murky. Rating agencies are going to be far more wary of giving AAA ratings for structured products. Since many of these investors have to put their money into top-rated products, that implies a smaller market.

When AAA ratings are awarded, investors will in any case derive less comfort from them. That is partly because of the high-profile failures of rating agencies and partly because investors are rethinking their assumptions about the supposed diversification benefits of securitised products. A large portfolio of securities clearly offers greater protection against idiosyncratic risk—the chance that a particular borrower will get into trouble—than buying a single-name corporate bond, say. But as a paper by Joshua Coval and Erik Stafford of Harvard Business School and Jakob Jurek of Princeton University argues, a diversified portfolio offers far less protection against systemic risk such as a general economic downturn. The chance of losses on securitised products increases as the economy worsens; for single-borrower bonds, firm-specific factors are more important than the economic climate. Growing awareness of this disproportionate exposure to systemic risk may reduce investors' appetite for securitised products.

The uncertainties do not end there. Government intervention in America and elsewhere to ease homeowners' repayment difficulties will shake investor confidence in future income streams. The prospect of court-ordered reductions in mortgage principal—or "cramdowns"—is particularly alarming. According to Anna Pinedo of Morrison & Foerster, a law firm, there is also fogginess around the tax status of securitisation trusts, the entities into which securitised assets are placed. For tax purposes, they are structured as "pass-through" entities, meaning that the servicing firms that administer mortgage payments have little scope to modify the terms of loans if borrowers get into difficulty. With servicers now given greater leeway to intervene, questions about how far they can go without compromising trusts' tax status hang over the industry.

How these various uncertainties resolve themselves will not be known for years but two assertions look pretty safe. The first is that the market for securitisation will shrink substantially. Borrowers are scaling back, buyers are thinner on the ground, risk aversion is up and banks are in any case under pressure to improve their loan-to-deposit ratios. The second

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is that the extent of banks' continued deleveraging depends to a large extent on the scale of that drop.

The wild card, of course, is the degree of long-term support that governments are willing to provide to buttress the market, whether through guarantees, loan programmes for investors or future incarnations of government-sponsored enterprises such as Freddie Mac and Fannie Mae. Whisper it softly, but one of the lasting effects of this crisis could end up being institutionalised guarantees for buyers of securitised assets to sit alongside guarantees for retail depositors.

Opportunity gently knocks

Who will gain from the crisis?

DESTRUCTIVE? Absolutely. But will the financial crisis also be creative? When incumbents disappear and established business models no longer work, that is usually good news for up-and-comers. The massive disruption in banking has members of the industry's fringe rubbing their hands. They include:

Advisory boutiques. "Like gnats" is how an executive at a big investment bank describes boutiques. Without financing capacity, a global presence or big capital-markets businesses, they lack the firepower of bigger rivals. But the crisis has nevertheless increased their capacity to irritate the giants. Clients' faith in the advice of the industry's big names has been badly dented by their conspicuous inability to manage their own businesses. Many banks have damaged client relationships more directly, by skimping on credit as they slim their balance-sheets. Conflicts of interest for large banks are also more common now that their ranks have thinned. And boutiques have lots of high-quality job-hunters to choose from.

Peer-to-peer lending platforms. These websites, through which savers pool money and lend to borrowers, have also been boosted by the crisis. Derisory interest rates are encouraging savers to seek better returns elsewhere. Zopa, a British website that pioneered the concept, says the number of lenders joining it has soared. For borrowers spurned by their banks, low-cost and unleveraged social lenders are an attractive alternative. Zopa's boss, Giles Andrews, says new entrants like his should gain from how the crisis has undermined customers' faith in banks' solidity and intensified their doubts about whether the banks have customers' best interests at heart.

Islamic finance. This was booming before the crisis, thanks to oil-fuelled liquidity in the Gulf, rising devoutness among Muslims and a fast-developing market infrastructure. But its emphasis on risk-sharing and prohibition of speculation has a fresh resonance given the failures of Western finance. Its backers stress the ethical side of sharia-compliant finance. However, the Middle East is suffering its own economic headwinds and the industry's fundamental problems, including an over-reliance on short-term funding, have yet to be solved.

Supermarkets. They see the crisis as an opportunity to push further into financial services. Their costs of acquiring customers are low, because they already have millions of shoppers passing through their stores. Their brands are trusted. And those who have seen how retailers work with banks in joint ventures consistently note how much more focused grocers are on the customer's needs. "Retailers think first about the customer, banks about the profit," says an executive. Britain's Tesco announced an ambitious expansion of its banking activities in March.

Just how capable non-banks are of taking big chunks of the market is unclear. The downturn is hitting most institutions, retailers included. Regulators will also have a big say. The rules may

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have been tweaked to make it more attractive for private-equity firms to invest in American banks, for example, but Douglas Landy of Allen & Overy, a law firm, expects continuing hostility to the idea of non-banks owning banks. And serious questions hover about whether it makes sense to encourage more competition in banking. “Anything that smacks of loosening regulatory standards is going to be politically hard,” says Andrew Schwedel of Bain, a consultancy. There are great opportunities lying among the debris of the banking industry but reaching them may be tricky.

The revolution within

The way banks manage risk—including how they reward managers for taking it—will change greatly.

THE changes to the environment in which banks operate—tougher regulation, higher capital requirements and scarcer funding—will have a dramatic impact on the way that banks are managed. But banks are also reflecting hard on some fundamental internal questions, such as how to manage risk, compensation and growth itself. Too many bosses and shareholders accepted years of double-digit returns without probing the sources and sustainability of those profits. “No one was asking the ‘Columbo’ questions,” says Toos Daruvala of McKinsey, a consultancy.

The most basic of these questions, particularly for banks with large wholesale operations, is what kind of businesses they want to be. The bubble was characterised by a game of copycat, in which banks strove to match the returns of their most profitable rivals by piling headlong into asset classes where they were lagging, irrespective of the risks. “The securities industry was based on revenue, not on risk-adjusted returns,” says a bank boss.

Consultants armed with league tables and presentations full of “gap analysis” increased the pressure on sluggards to catch up. Mr Winters of JPMorgan Chase recalls how executives at the bank worried about its underperformance in fixed-income markets. “We used to beat ourselves to death about it and wonder ‘what aren’t we getting right?’ Now we know.” For the foreseeable future, managers will think harder about where they have a competitive advantage over rivals, not where they don’t.

Besides working out what they are good at, banks must decide how much risk they want to take. Helped along by the ratcheting-up of capital charges in trading books and other planned regulatory changes, a sweeping shift in risk appetite is already under way. There are obviously distinctions between firms: Goldman Sachs has maintained a stronger bias towards risk exposure than Morgan Stanley, for example. But in general proprietary risk-taking is being scaled back drastically. Risk capital will reside outside the banking system, in hedge funds and private-equity firms, much more than before.

The likes of Deutsche Bank, UBS and Credit Suisse have all unveiled strategies to cut their proprietary activities in illiquid markets and focus on high-volume “flow” businesses: for example, helping clients to manage exchange-rate and interest-rate risk. That means leaving some moneymaking opportunities on the table, a most unbubble-like thing to do. “We could have held on to certain assets and made money now but we cannot have this kind of risk irrespective of future potential,” says Josef Ackermann, the boss of Deutsche Bank.

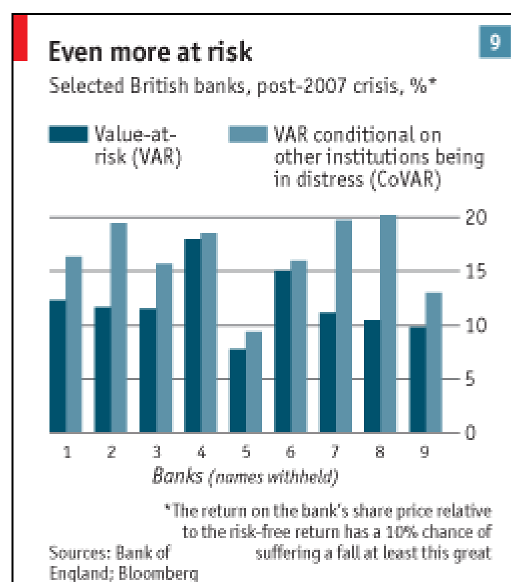
Fireproofing

Banks are also taking measures to ensure that a poor year in more volatile businesses cannot overwhelm a decent year in steadier ones. And they are reviewing the appropriate mix of

earnings between divisions, given the capital-intensity and risk profile of some activities. The firewalls between businesses are being fortified, too, so that managers have a clearer idea of the standalone profitability of each division.

UBS was especially guilty of underpricing its internal funding, letting its investment bank take advantage of the bank's cheap overall cost of funds without paying an appropriate premium for the risks it was taking. The Swiss bank has reorganised itself to ensure that businesses are more autonomous and are funded at market rates. Such changes arguably have more impact than any regulatory reforms. "The real revolution will be within the businesses," says Charles Roxburgh of McKinsey, "as managers see real detail on who is making money and how."

The mechanics of risk management are also in upheaval. Articulating how much risk to take or deciding how much to charge internally for a certain activity is less clear now that many banks' risk models have proved unreliable. (The impression of additional uncertainty is itself partly illusory: the clarity models provided during the bubble was misleading.)



In truth, the crisis will make models more useful. They will be using data from a whole economic cycle rather than looking myopically at a period of exceptionally high returns. The improved risk profile of banks' borrowers also means they will have better data to work with. Methodological improvements will capture the relationships between institutions—the effect on its peers of Lehman Brothers going bust, say—as well as their independent risk profiles, which are commonly assessed by a measure called "value at risk" (VAR). Tobias Adrian of the Federal Reserve Bank of New York and Markus Brunnermeier of Princeton University have proposed a measure called CoVAR, or "conditional value at risk", which tries to capture the risk of loss in a portfolio due to other institutions being in trouble. Taking account of such spillover effects greatly increases some banks' value at risk (see chart 9).

Despite such improvements, risk managers are well aware of the need to beef up their qualitative controls too. Stress tests, designed to think through how institutions cope with periods of pressure, will become more important to boards as they seek to define institutions' risk appetite. They will also become more important to shareholders. Bank of New York Mellon has started to include figures in its earnings statements showing what could happen to its capital under various scenarios.

Stress tests will also become more demanding. Take the assumptions about how long liquidity can disappear for. Measures such as VAR seek to capture the effects of a single explosive event within a relatively short period. This crisis, says Koos Timmermans, chief risk officer of

ING, a Dutch bank, has been “more like slow death by torture”. Peter Neu of the Boston Consulting Group says stress tests must also become more “coherent”. Too many banks defined stress events in isolation—asking what kind of losses they might sustain in the event of, say, a 20% stockmarket fall without asking what sorts of changes in the economic climate would prompt a fall that big.

Even Goldman Sachs, widely regarded as the best manager of risk in the industry, did not foresee quite how bad things could get. The bank’s most demanding pre-crisis stress test—known as the “wow”, or worst of the worst, test—took the most negative events to have happened in each market since 1998 and assumed that they got 30% worse and all happened at the same time. That still wasn’t pessimistic enough.

Banks must revisit their assumptions about how effective their defences are against multiple risks. The crisis will live long in the collective memory for showing that all markets can become illiquid and all risks are correlated, removing many of the benefits of diversification. “The fourth quarter of last year was remarkable for showing how fragile the system has actually turned out to be,” says Wilson Ervin, chief risk officer of Credit Suisse.

The inadequacy of specific hedges, something known as “basis risk”, also came as a shock to many. A corporate bond and a cash-collateralised credit-default swap written on the same company ought to offset each other—if the company looks likely to default, the bond will fall and the swap rise. In late 2008 the system-wide evaporation of liquidity meant that banks could lose money on both.

A degree of calm has returned to the markets since then, reversing some of the losses banks suffered from basis risk. The amount of counterparty risk in the system will be reduced greatly by central clearing-houses for credit-default swaps. But confidence in hedges and market liquidity as a way of mitigating risk has been badly damaged. In response, banks will use a simpler set of palliatives. They will take greater account of their gross as well as net exposures. They will charge more for taking on risk on clients’ behalf. And to the extent that they continue to package and sell securitised assets to investors, they will reduce the amount of inventory they hold.

A game of pay sense

All of these aspects of risk management, from models to hedges, are important. But another risk-related question—bankers’ pay—has dominated the public debate on the industry’s failures. Pay has been the touchstone issue of the financial crisis, vilified both as the incentive that drove bankers to take foolish risks as well as the most inequitable feature of an industry that makes obscene profits in the good times and comes crawling to the taxpayer when it gets into trouble. From the bonuses paid to executives at AIG, a monumentally failed insurer, to the expensive tastes of John Thain, a former head of Merrill Lynch, and the huge pension granted to Sir Fred Goodwin, a former boss of RBS, pay has captured the public’s attention, far more than the banks’ many other failings.

Managers admit privately that things got way out of line. “It was better to be an employee than a shareholder,” says a bank’s chief executive. The traditional argument against changing pay structures has been that no institution could move unilaterally without competitors poaching its best people. Now, no bank can fail to alter its compensation policy without having its executives publicly humiliated by politicians and the news media, and frowned upon by regulators.

The broad thrust of the coming changes on pay is clear. Banks will tie compensation more closely to performance and spread rewards over longer periods. It should be said that neither

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idea is foreign to the industry. Bonus pools based on profits (though not revenues, an indefensible practice) may be seen as a problem now but are clearly more closely tied to performance than a fixed base salary. Awards of shares were common within the industry before the crisis and caused employees, those of Lehman Brothers included, to suffer vast losses when share prices dropped. What the industry as a whole did not do well enough was to design pay so that it better reflected long-term risk.

According to a survey of industry practices published by the Institute of International Finance (IIF) in March, many banks still fail to use risk-adjusted measures either to calculate the size of their bonus pool or to allocate it. That will change (see chart 10). Economic-capital models, which calculate the use of capital based on assumptions about expected losses, will be more widely used to set bankers' pay in future. The bonus/malus structure introduced by UBS in 2008, whereby a cash portion of a bonus award is held back at the end of a financial year and reduced if targets are not met in subsequent years, will also become more common as institutions seek to track and reward the performance of senior managers over time.

Some banks will be more sophisticated still. With costs and capital under so much pressure, the incentive for executives to identify those who add genuine value to a bank has rocketed. A few banks already try to adjust, when calculating bonuses, for franchise value—the advantage derived by employees from the bank's brand value, league-table positions and other institutional strengths. An industry veteran says that more managers of big banks will come to realise that they do not need to pay twice over for the same bit of business, first by building a global infrastructure and then by rewarding an investment banker. "They would get one in five calls for big projects anyway," he says.

Other ideas in the vanguard of designing pay structures include "S-curves", which pay less below a certain threshold of profit so as not to reward employees for market conditions and franchise value, but also pay out less above a certain threshold, to discourage excessive risk-taking. These types of thinking are likely to become more prevalent.

Many of these changes are welcome, with two caveats. First, no system can be foolproof. Risk-adjusted measures of compensation work only if risk is being measured properly, for example, and the industry has proved how unsafe an assumption that is. And attempts to control pay in one area tend to inflate it in another. As bonuses fall, pressure on banks to increase basic pay is already rising. That pressure will grow as the industry recovers and competition for the best staff increases. "At some point in the next few years, the industry is going to have an absolutely stellar year," says a pay consultant who predicts that firms with clawback policies will have to offer more in upfront pay to attract recruits. The second caveat is that some employees really are worth lots of money. Asked to defend levels of pay prior to the crisis, many in the industry would reach for the analogy of film or sport, two other industries where talented individuals are critical to success and are richly rewarded as a result. The trouble with this defence is that it was not just the big-name stars who got really rich in financial services;

the extras did too. Lower profits and more sensitive pay structures will mean that most jobs are repriced across the industry but the best people will still be the subject of frenzied competition and will still command huge sums. That may be distasteful to many outsiders but if pay structures better reflect information about the risks such star bankers are taking and if their pay levels do not inflate the compensation of everyone around them, it ought to be defended.

The biggest upheavals in pay and in risk management will be in wholesale banking. The assumptions that underpin the way retail banks manage risks and pay have withstood the crisis better. There are still lessons to be learned, of course. One result, for example, will be that lenders demand more data on customers, leading borrowers to concentrate more of their business on particular institutions. But the basics of credit-risk management have been reinforced rather than overturned.

There is a problem with this picture, however. Retail banks may have less to change operationally (their funding profile is the obvious exception) yet they still got into a ton of trouble. The worst mistakes of this crisis were arguably made in relatively simple areas of retail and commercial banking—from the concentration of risk in the corporate-loan book of HBOS to Wachovia's kamikaze acquisition of Golden West, a Californian lender stuffed full of mortgage-shaped grenades. Complexity is not much of an excuse here. For many banks, the crisis reflects a simpler tale of frenetic asset growth and the inevitable turn of the credit cycle.

And that raises a bigger management question—how institutions can resist the pressure to grow when a boom is in progress. Such pressure comes from all quarters: from shareholders who want growth, from analysts who want to see higher returns on equity, from staff who want bonuses, from managers who want to keep their jobs, and from politicians who want higher employment and tax takes. One way of getting around this is to operate in markets that offer high growth without requiring great risks. "We run a boring business model in exciting markets," says Mr Sands of Standard Chartered, which is headquartered in London but operates in developing countries. "The problem was that others were running exciting business models in boring markets."

Industry bosses agree that saying "no" to opportunity is one of their most important jobs and among their most difficult. Those who did sit out some of the boom were heartily criticised for doing so. Ed Clark, the boss of Canada's TD, recalls the heat he got from analysts for exiting the structured-products business. Ulf Riese of Svenska Handelsbanken (see article) remembers the pressure that the bank resisted to join its peers in the Baltic lending boom. Mr Timmermans, the risk chief at ING, points to the problem of getting out of positions at the right time. "It is relatively easy to get discipline into the process of putting assets on to the books. The problem is when you have held them for two years and think it may be time to offload," he says.

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The governance gap

The memory of this most painful of episodes should make it easier for bosses to shake their heads, at least for a few years. Private capital will be more patient and managers will be more focused on sustainable growth rather than short-term returns on equity. Wrong-headed assumptions about risk dispersion will be less easily made. But there is an increasing recognition that the governance of financial institutions needs to be reviewed carefully (the British authorities have already initiated just such an exercise).

One obvious area of scrutiny will be the quality and composition of bank boards, which were found sorely wanting in many cases. That does not mean that directors should take

responsibility for risk management, a job for bank executives. “Directors do not design aeroplanes for Boeing or make the food for Taco Bell,” says Mr Dimon of JPMorgan Chase.

But it does mean that they can do a better job of vetting key executive appointments—for example, the rise of Chuck Prince, a lawyer, to head Citigroup and of Andy Hornby, a youthful former retailer, to lead HBOS should have prompted more searching questions. It means dedicating more time to reviewing the business, which implies a limit to the number of directorships that board members hold. It means separating risk and audit committees. It ought to mean dividing the role of chairman and chief executive. And it means asking more robust questions around such things as “key person” risk, in which only a few employees really understand what is going on in a particular line of business.

Profound questions are also being asked about the right model of bank ownership. Some fondly remember the old days of private partnerships on Wall Street. But for banks that need lots of money to operate, that is not an option. “Capital is like heroin,” says an investment banker. “Once you go down the capital-intensive route, you cannot go back.” Others promote the merits of mutuals, banks that are owned by their customers. Tony Prestedge of Nationwide, a British building society that has come through the crisis relatively well so far, says that being unlisted, mutuals can avoid being obsessed with short-term growth targets and can live with periods of reduced profits. Then again, Nationwide has spent much of the crisis snapping up other mutuals that have got into trouble, so the model is not infallible.

With quality of management being both the best defence against bank failure and something that can change with the appointment of a new chief executive or a rush of empire-building madness (step forward the managers of Bank of America and Lloyds TSB), regulators are likely to address the problem of governance in two different ways. The first will be to cushion the impact of those bank failures that do occur by creating better resolution regimes for large institutions and for non-banks. There are also proposals for banks to buy an option on capital via a kind of disaster-insurance scheme, paying out premiums to long-term investors in return for dollops of equity when crisis strikes.

The second direction of policy will be to intervene more forcefully to prevent failures in the first place, stepping in whenever asset growth accelerates, demanding a greater say in board appointments and vetoing dodgy acquisitions on the grounds of financial stability as well as competition concerns. More daring voices are even suggesting that there may be a case for an official presence at board meetings. There is at least time to get all of these things right. It will be a long time until anyone has to worry about the next bubble.

Back at the branch

More Swedish lessons for the banking industry.

IF A bank posts record results during the worst quarter in living memory for financial markets, it could be a quirk. When the same bank has produced higher-than-average returns on equity compared with its peers for a number of years, it deserves a closer look. And when it has a business model that appears to answer some of the main governance concerns afflicting the industry, it repays much wider attention.

The bank is Sweden’s Svenska Handelsbanken, a retail bank with operations in Scandinavia, Britain and elsewhere. Handelsbanken posted a 39% quarter-on-quarter jump in operating profits in the fourth quarter of 2008. It has gobbled up great chunks of market share in deposits and new lending in the past year. The worst of the economic downturn is yet to come

in Sweden but the bank has good reason to believe it can navigate stormy waters, since it sailed through the country's 1990s banking collapse unscathed.
The bank's managers put its success down to an extremely decentralised management model, introduced in 1972 after a period when Handelsbanken had got into trouble. Branch managers are the banks' main decision-makers, following what is known internally as the "church-tower principle"—namely, that you should do business only as far you can see from the local church tower. Responsibility for all credit decisions rests with the branches. No loans can be extended over the heads of branch managers (larger sums also require approval from higher up).

The bank is unimpressed by the idea of selling loans on to other investors. Ulf Riese, the bank's chief financial officer, says 30% of credit losses can be traced to the initial decision to extend credit but 70% come from changes in borrowers' circumstances and the way banks respond to them. Banks need to have deep customer relationships to spot and respond to these changes, he says. If loans do sour, Handelsbanken has no specialist central workout team, like those at many other banks, to come in and sort out the mess. The job is left to branches, which similarly have responsibility for cost management, salary levels and product offerings. A tier of regional management makes the decisions on where to open new branches.

The effects of making branches responsible for their own fate run deep. The bank's credit culture is consistent throughout the cycle, meaning that it loses market share in boom times and wins business in environments like this one. There are no formal budgets or projections for the year ahead, on the principle that customer needs, not product targets, should determine growth. Handelsbanken eschews bonuses too, on the grounds that they work against long-term relationships with customers and employees. If the bank meets its return-on-equity goals, however, a portion of the profits goes into the bank's pension scheme, which is its largest shareholder.

Is Handelsbanken just a Scandinavian oddity or can it teach others something? Its approach works in part because it is selective about the types of customers it takes on. A mass-market bank would find it tougher to copy its model and be profitable. Mr Riese reckons that the bank's initial shift to a decentralised model was helped by the fact that lending growth was very tightly regulated in Sweden at that time. Handing full control to branches would lead to more missteps in a deregulated market. But the bank's core philosophy—a focus on customers, not products; on profitability at the level of each operating unit; and on long-term relationships, not short-term gains—is clearly of its time.

From great to good

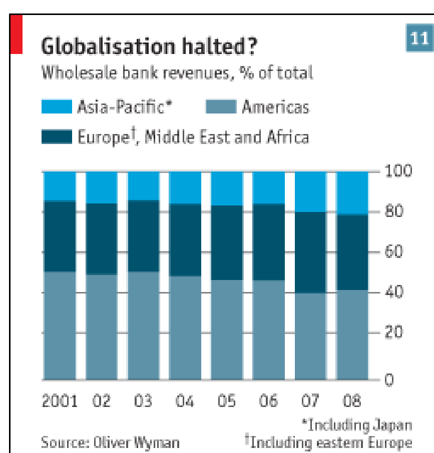
Banks will still make money, just less of it.

FUNDING markets are damaged. Borrowers have to recover from the biggest credit bubble in history. Bankers' reputations are mud. Regulators are not just reading riot acts, they are rewriting them. Yet many industry executives are surprisingly bouncy about the future. Investment bankers in particular have been sounding brighter, thanks to a healthy start to the year. Are banks in denial or do they have genuine cause for optimism?

The answer is obscured by a couple of big unknowns. One is the length and depth of the recession. A depressing analysis by Citigroup looks at what happened to banks in four previous episodes of extreme stress, including the Depression, Japan's "lost decade" in the 1990s and the Swedish banking crisis of the 1990s. Loan books collapsed in all cases (by 50% from peak to trough in America, 30% in Japan and 25% in Sweden), greatly reducing earnings even before credit losses were taken into account.

Direct comparisons are dangerous. Banks have fewer loans as a percentage of total assets nowadays (because they hold more securities) and they also have the chance to gain business that had been going to the shadow-banking system. But the dynamics that operated in earlier periods of stress are also present now—falling demand, pressure to deleverage to meet new capital rules and reduce loan-to-deposit ratios, and dipping asset values. European banks look especially leveraged in comparison with their American counterparts. If things turn out anywhere near as badly as before, says Simon Samuels of Citigroup, banks' pre-provision returns have a lot further to fall.

Another important unknown is the extent to which globalisation unravels. The threat of financial nationalism, sparked initially by political pressure on lenders to focus on domestic markets and reinforced by the likely tightening of rules on liquidity and capital for any bank operating within a country's borders, is arguably the biggest long-term worry for international banks. (Local banks, by contrast, should find it easier to win more business.)



Business volumes are likely to fall in markets that have been producing a rising proportion of revenue at the big banks (see chart 11). Returns will drop if banks have to set aside more capital at the national level, or fund themselves from domestic deposits. Big customers may take things into their own hands if the system gets too fragmented. "If international banking gets more difficult, multinationals will end up doing things like cash management themselves," says Mr Sands of Standard Chartered.

Let us again make some non-apocalyptic assumptions: that the business of international banking is less profitable but survives broadly intact and that the recession reaches a bottom in the relatively near future. That still leaves many banks with the task of finding a new set of profit drivers to replace the old ones.

The extraordinary returns on equity that banks enjoyed in recent years (see chart 12) were largely created by leverage, the ability to increase the amount of assets they held relative to their equity, and by "asset velocity", which let banks reuse capital multiple times during the course of a year as assets were originated and speedily moved off balance-sheets through securitisation. The new emphasis on stability of capital and funding ensures that neither source of profits will be readily available to banks in the future. The banks' hope is that they can compensate by increasing their unleveraged returns, which means grabbing higher volumes of business and repricing their products.

They do have some cause for optimism. The structural potential of developing markets remains intact. And in mature markets, banks' financing and risk-management capabilities are arguably in greater demand than ever. Lots of companies still need to raise capital, for example, as evidenced by the rush of bond issuance in the first two months of the year. The advisory business is ticking over too, as waves of companies seek to restructure debts.

Still hedging

Many expect clients to demand more hedging because of the crisis. "There are companies that cannot continue operating today as a result of a failure to hedge," says Mr Winters at JPMorgan Chase, who also reckons that clients will ask for more precise, and therefore expensive, forms of protection given the inadequate performance of some hedges through recent months. "If you are exposed to real estate in the [English] Midlands it is no good being hedged with a European property index," he says.

A heightened awareness of risk will affect clients' relationships with the banks themselves. Banks are supposed to worry about borrowers going bust. Now the reverse is also true. Mergers and acquisitions mandates often require companies to pay banks a fee even if they are no longer involved at the time a deal is done, for instance. Some clients now want engagement letters for the services of banks to spell out what would happen if the banks failed in the interim. The bankruptcy of Lehman Brothers gave a harsh lesson to hedge funds about the dangers of doing all of their borrowing and saving with a single prime broker. Custody banks are winning lots of hedge-fund business as a result of this. Tri-party collateral management, whereby a third bank acts an intermediary between a buyer and seller, is another growth area for custodians. Bank of New York Mellon is currently servicing $1.8 trillion of tri-party collateral a day, up from $1.2 trillion in 2007.

Trend-watching

Changes in consumer behaviour can also create opportunities for retail banks. A shift towards saving is one trend to capitalise on. Retail bankers are already thinking about structured savings products that offer consumers the chance to start putting money back into shares while protecting their principal. Given worries about the stability of the dollar, says David McKay of RBC, there will also be greater demand for products denominated in other currencies such as the euro.

More important is the fact that competition has fallen sharply in many markets, either because banks have disappeared or because they are financially and politically constrained. The credit environment has changed from being demand-driven to supply-constrained, which means that market share is up for grabs and pricing power has increased markedly. A recent report on the future of wholesale banking from Morgan Stanley and Oliver Wyman reckons that bid-offer spreads have increased by anything from 50% to 300%. "The change in the competitive landscape has been absolutely brutal but for the winners, volumes are up, margins up and market share up," says Mr Varley of Barclays.

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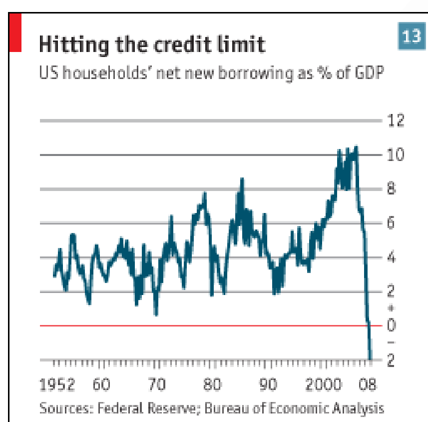
Survivors of the crisis will also be protected by higher barriers to competition. Regulators are going to be nervier about letting new entrants into the finance industry and allowing foreign banks free rein in their markets. Many of the most important sources of earnings in the new banking landscape, such as cash-management services and flow businesses, are gigantic, technology-heavy operations that are difficult to replicate. Economies of scale will also count for more in areas such as deposit-gathering, risk analysis, cross-selling and wholesale-debt issuance. Although there is much talk about constraining banks that are too big to fail, the smallest institutions are the ones that will suffer most in this changed environment.

All of these factors help to explain why banking will continue to be a highly attractive business. But they do not make up for what has been lost. Huge swathes of the wholesale industry's product offering (including some of its most profitable areas) have disappeared. So have many of its newer customers—analysts at Morgan Stanley reckon that hedge-fund assets fell by around 40% in the second half of 2008 alone, and that a further 15-30% of assets will be redeemed this year. The contribution that prime brokerage, structured credit and private-equity activities made to profits in wholesale banking rose from approximately 20% in 2000 to around 35% in 2006, according to estimates by Oliver Wyman. These sources of revenue will not easily be replaced.



The goal of many retail customers, meanwhile, will be to deleverage. The fact that households, not businesses, have so much debt to unwind is something that marks this episode out from many previous banking crises. According to McKinsey, American consumers have accounted for more than three-quarters of the country's GDP growth since 2000 and for more than one-third of worldwide growth in private consumption since 1990. Although deleveraging can also occur through income growth, the immediate response of consumers has been to save more, depressing demand for credit (see chart 13). That is likely to continue for the foreseeable future. (The situation in emerging markets is different: assets there will probably grow rapidly again once the economic cycle turns, although the need to reduce loan-to-deposit ratios will weigh on several eastern European markets.)

The ability of retail banks to make money from those customers who do still need to borrow is also more constrained than it may appear. The politics of ramping up lending rates to taxpayers is sensitive, to say the least. As Andy Maguire of the Boston Consulting Group points out, there is also an adverse-selection problem. Borrowers who are applying for credit right now are likely to be the ones that are having trouble getting loans elsewhere. Moving existing customers on to higher-priced loans prematurely can strain relations.

Nightmare scenario

Low interest rates have steepened the yield curve, the difference between short- and long-term rates, but they also make this a terrible environment for deposit margins, which banks

calculate as the difference between what they pay for deposits and what they make by putting them to work in money markets. With interest rates so close to zero, banks are having to cut their lending rates but have no room to drop their deposit rates further. Spreads compress as a result. “The nightmare scenario is a period of extended low interest rates like Japan,” says Mr Clark of TD.

There is another threat to profits. Banks make money not just from the spreads they can command on lending but also from fees. The politicisation of banking could easily mean that the fairness of bank fees comes under closer scrutiny. Britain’s Office of Fair Trading has already ruled some bank charges unfair. American lawmakers are taking aim at credit-card fees in a proposed law. With voters, ie, consumers, now in charge of the industry, other fees such as overdraft charges may also fall under the spotlight. Offshore banking secrecy is an example of something that did not cause the crisis but has been vigorously targeted in its aftermath.

Wealthier clients are also likely to be less inclined to pay fat fees in such businesses as asset management, as falling markets, frauds such as the Bernard Madoff scandal and broken promises of absolute returns make investors question the value they are getting. As the full effect of the crisis on savings and pensions becomes clearer, consumer activism is likely to rise.

A glistering era ends

Add to this picture the drag of continuing losses from toxic assets and souring loans, and it is clear that as an industry, banks are going to find it much tougher to make money than before. Clearly, costs, particularly those related to pay, will fall as well as revenues. But there seems to be broad consensus among industry observers that average returns on equity through the economic cycle will be in the low- to mid-teens henceforth, well down on the 20%-plus achieved before the current crisis.

Another way of looking at the industry is to compare its growth with GDP growth. In emerging markets, the industry should still be able to grow faster than GDP as the use of financial products spreads. In mature markets, with the turbo-boost of leverage gone and bank balance-sheets still to be slimmed, a growth rate in line with GDP is probably as much as can be hoped for. That would still make banking a decent business, comparable to many other industries. And if you look at returns on a risk-adjusted basis, as some converts to the cause now urge, it may even be a more profitable one than before. But masters of the universe it ain’t.

It is possible to glance at the emerging landscape of banking and think that not an awful lot is going to change. Aside from a few tweaks to capital here, some tougher rules on liquidity there, and the disappearance of a handful of badly-run institutions, the same big names dominate the industry. And yes, banks will make less money than before but the industry will still return decent profits and still pay its people well. Their first-quarter earnings showed that they can generate huge amounts of money in even the most difficult times. With so many assets trading at such distressed levels, many expect the wholesale side of the industry to record massive gains when sentiment properly turns around.

Regulators themselves wonder whether the measures now being discussed go far enough. As Mr Borio at the Bank for International Settlements points out, many of the ideas around countercyclicality (setting aside more capital in good times) and macroprudential regulation (safeguarding the stability of the whole banking system as well as of individual banks) were oven-ready, having been worked on by a coterie of central bankers, academics and regulators

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for a number of years. Calls to dismantle the biggest institutions and split up universal banks have not got far.

Yet the scale of the change sweeping over banking should not be minimised. Banks will seek to conserve capital, not find ways to run it down. They will cut their dependence on wholesale funding, and grow more slowly as a result. They will manage risk, not assume it away. Staff and lines of businesses will have to show they add value to a bank, not just increase its revenues. Regulators will bare their teeth more, and look away less. And taxpayers, whether explicit owners or implicit guarantors, will peer at the industry and its leaders with hostility, not admiration.

As dramatic as these changes will be to those inside the banks, they will be just as striking for banks' customers. During the bubble and during the crisis, credit was tidal. It swept in, buoying everything from subprime mortgages to leveraged buy-outs. And then it swept out again, stranding everyone from investment-grade companies to emerging-market oligarchs. In the future, credit will be riverine. It will stream towards more creditworthy borrowers. It will follow a more defined course, constrained by embankments of capital, funding and risk management. Its flow will be more domestic, less global. Above all, it will be scarcer.

Given what has gone before, that may seem like no bad thing but it will entail costs. No one knows exactly what the right balance of debt and equity is in an economy, but the shrinkage of securitisation in particular makes it more likely that the process of deleveraging will overshoot. Customers, such as new businesses or immigrants, who lack a credit history but could well be terrific economic bets will find it tougher to raise money. Emerging markets that need to wean themselves off cross-border capital will grow more slowly than their potential. For borrowers such as these, the failure of the banks will not be measured in periods of a few dramatic months. Its legacy will last years.

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