

Wall Street

Wall Street's crisis

Mar 19th 2008

From The Economist print edition

What went wrong in the financial system—and the long, hard task of fixing it

THE marvellous edifice of modern finance took years to build. The world had a weekend to save it from collapsing. On March 16th America's Federal Reserve, by nature hardly impetuous, rewrote its rule-book by rescuing Bear Stearns, the country's fifth-largest investment bank, and agreeing to lend directly to other brokers. A couple of days later the Fed cut short-term interest rates—again—to 2.25%, marking the fastest loosening of monetary policy in a generation.

It was a Herculean effort, and it staved off the outright catastrophe of a bank failure that had threatened to split Wall Street asunder. Even so, this week's brush with disaster contained two unsettling messages. One is analytical: the world needs new ways of thinking about finance and the risks it entails. The other is a warning: the crisis has opened a new, dangerous chapter. For all its mistakes, modern finance is worth saving—and the job looks as if it is still only half done.

Rescuing Bear Stearns and its kind from their own folly may strike many people as overly charitable. For years Wall Street minted billions without showing much compassion. Yet the Fed put \$30 billion of public money at risk for the best reason of all: the public interest. Bear is a counterparty to some \$10 trillion of over-the-counter swaps. With the broker's collapse, the fear that these and other contracts would no longer be honoured would have infected the world's derivatives markets. Imagine those doubts raging in all the securities Bear traded and from there spreading across the financial system; then imagine what would happen to the economy in the financial nuclear winter that would follow. Bear Stearns may not have been too big to fail, but it was too entangled.

Gordian conduits

As the first article in our special briefing on the crisis explains, entanglement is a new doctrine in finance (see article). It began in the 1980s with an historic bull market in shares and bonds, propelled by falling interest rates, new information technology and corporate restructuring. When the boom ran out, shortly after the turn of the century, the finance houses that had grown rich on the back of it set about the search for new profits. Thanks to cheap money, they could take on more debt—which makes investments more profitable and more risky. Thanks to the information technology, they could design myriad complex derivatives, some of them linked to mortgages. By combining debt and derivatives, the banks created a new machine that could originate and distribute prodigious quantities of risk to a baffling array of counterparties.

This system worked; indeed, at its simplest, it still does, spreading risk, promoting economic efficiency and providing cheap capital. (Just like junk bonds, another once-misused financial instrument, many of the new derivatives will be back, for no better reason than that they are useful.) Yet over the past decade this entangled system also plainly fed on itself. As balance sheets grew, you could borrow more against them, buy more assets and admire your good sense as their value rose. By 2007 financial services were making 40% of America's corporate profits—while employing only 5% of its private-sector workers. Meanwhile, financial-sector debt, only a tenth of the size of non-financial-sector debt in 1980, is now half as big.

The financial system, or a big part of it, began to lose touch with its purpose: to write, manage and trade claims on future cashflows for the rest of the economy. It increasingly became a game for fees and speculation, and a favourite move was to beat the regulator. Hence the billions of dollars sheltered off balance sheets in SIVs and conduits. Thanks to what, in hindsight, has proven disastrously lax regulation, banks did not then have to lay aside capital in case something went wrong. Hence, too, the trick of packaging securities as AAA—and finding a friendly rating agency to give you the nod.

That game is now up. You can think of lots of ways to describe the pain—debt is unwinding, investors are writing down assets, liquidity is short. But the simplest is that counterparties no longer trust each other. Walter Bagehot, an authority on bank runs, once wrote: “Every banker knows that if he has to prove that he is worthy of credit, however good may be his arguments, in fact his credit is gone.” In our own entangled era, his axiom stretches to the whole market.

A question of priorities

This mistrust is enormously corrosive. The huge damage it could do to the world economy dictates what must now be done first. No doubt, there are many ways in which financial regulation needs to be fixed; but that is for later. The priority for policymakers is to shore up the financial system. That should certainly be done as cheaply as possible (after all, the cash comes from the public purse); and it should avoid as far as possible creating moral hazard—owners and employees should bear the costs of their mistakes. But these caveats, however galling, should not get in the way of that priority.

To its credit, the Fed has accepted that the new finance calls for new types of intervention. That is the importance of its decision on March 16th to lend money directly to cash-strapped investment banks and brokers and to accept a broader array of collateral, including mortgage-backed and other investment-grade securities. If investment banks can overcome the stigma of petitioning the central bank, this will guard them against the sort of run that saw Bear rejected by lenders in the short-term markets. Henceforth, the brokers will be able to raise cash from the Fed. The Fed is now lender-of-last-resort not just to commercial banks but to big investment banks as well (a concession that will surely in time demand tighter regulation).

Even if that solves Wall Street's immediate worries over liquidity, it still leaves the danger that recession will lead to such big losses that banks are forced into insolvency. This depends on everything from mortgages to credit-card debt. These, in turn, depend on the American economy's likely path, the depth to which house prices decline and the scale of mortgage foreclosures—and none of these things is looking good. Goldman Sachs's latest calculations, which suppose that American house prices will eventually fall by 25% from their peak, suggest that total losses will reach just over \$1.1 trillion. At around 8% of GDP that is not to be sniffed at. But it includes losses held by foreigners, and “non-leveraged institutions” such as insurers. Goldman expects eventual post-tax losses for American financial firms to be around \$300 billion, just over 2% of GDP, or about 20% of their equity capital.

The rebuilders' dilemma

That suggests a serious problem, but not a catastrophic banking crisis. And with the world awash with savings, banks ought to be able to raise new capital privately and continue lending. Unfortunately, things are not quite so simple. It would not take many homeowners to walk away from their debts for the losses to grow rapidly. Also, bank shareholders may prefer to cut back on lending rather than raise new equity. That would suit them, as equity is expensive and dilutes their stake. But it would not suit the economy, which would be pushed further into recession by sudden cuts in leverage.

By lending money to more banks for longer against worse collateral, the Fed hopes to stem panic and buy time. It wants Wall Street's banks to assess their losses and strengthen their balance sheets without the crippling burden of dysfunctional markets. And it hopes that cheaper money will ease that recapitalisation, inject confidence and cushion the broader economy. But that lingering risk of insolvency means that the state needs to be ready to take yet more action.

One option is to keep on intervening as events unfold. The other is to shock the markets out of their mistrust by using public money to create a floor to the market, either in housing or in asset-backed securities. For the moment, gradualism is the right path: it is cheaper and less prone to moral hazard (ask investors in Bear Stearns). Yet it is not easy to pull off—again, ask Bear Stearns's backers, who could possibly have been saved had the Fed begun lending to brokers sooner. If the crisis drags on and claims more victims, gradualism could yet become more expensive than a more ambitious approach.

Something important happened on Wall Street this week. It was not just the demise of a firm that traded through the Depression. Financiers discovered that they had created a series of risks that the market could not cope with. That is not a reason to condemn the whole system: it is far too useful. It is a sign that the rules need changing. But, first, stop the rot.

The financial system
What went wrong

Mar 19th 2008

From The Economist print edition

In our special briefing, we look at how near Wall Street came to systemic collapse this week—and how the financial system will change as a result. We start with how financiers—and their critics—have laboured under a delusion

AP

“A COMPANY for carrying out an undertaking of great advantage, but nobody to know what it is.” This lure for the South Sea Company, published in 1720, has a whiff of the 21st century about it. Modern finance has promised miracles, seduced the brilliant and the greedy—and wrought destruction. Alan Greenspan, formerly chairman of the Federal Reserve, said in 2005 that “increasingly complex financial instruments have contributed to the development of a far more flexible, efficient, and hence resilient financial system than the one that existed just a quarter-century ago.” Tell that to Bear Stearns, Wall Street's fifth-largest investment bank, the most spectacular corporate casualty so far of the credit crisis.

For the critics of modern finance, Bear's swift end on March 16th was the inevitable consequence of the laissez-faire philosophy that allowed financial services to innovate and spread almost unchecked. This has created a complex, interdependent system prone to conflicts of interest. Fraud has been rampant in the sale of subprime mortgages. Spurred by pay that was geared to short-term gains, bankers and fund managers stand accused of pocketing bonuses with no thought for the longer-term consequences of what they were doing. Their gambling has been fed by the knowledge that, if disaster struck, someone else—borrowers, investors, taxpayers—would end up bearing at least some of the losses.

Since the era of frock coats and buckled shoes, finance has been knocked back by booms and busts every ten years or so. But the past decade has been plagued by them. It has been poked by the Asian crisis, the debacle at Long-Term Capital Management, a super-brainy hedge fund, the dotcom crash and now what you might call the first crisis of securitisation. If the critics are right and something in finance is broken, then there will be pressure to reregulate, to return to what Alistair Darling, Britain's chancellor of the exchequer, calls “good old-fashioned banking”. But are the critics right? What really went wrong with finance? And how can it be fixed?

Happy days

The seeds of today's disaster were sown in the 1980s, when financial services began a pattern of growth that may only now have come to an end. In a recent study Martin Barnes of BCA Research, a Canadian economic-research firm, traces the rise of the American financial-services industry's share of total corporate profits, from 10% in the early 1980s to 40% at its peak last year (see chart 1). Its share of stockmarket value grew from 6% to 19%. These proportions look all the more striking—even unsustainable—when you note that financial services account for only 15% of corporate America's gross value added and a mere 5% of private-sector jobs.

At first this growth was built on the solid foundations of rising asset prices. The 18 years to 2000 witnessed an unparalleled bull market for shares and bonds. As the world's central banks tamed inflation, interest rates fell and asset prices rose (see chart 2). Corporate restructuring, wage competition and a revolution in information technology boosted profits. A typical portfolio of shares, bonds and cash gave real annual yields of over 14%, calculates Mr Barnes, almost four times the norm of earlier decades. Financial-service firms made hay. The number of equity mutual funds in America rose more than fourfold.

But something changed in 2001, when the dotcom bubble burst. America's GDP growth since then has been weaker than in any cycle since the 1950s, barring the double-dip recovery in 1980-81. Stephen King and Ian Morris of

HSBC point out that growth in consumer spending, total investment and exports in this cycle has been correspondingly feeble.

Yet, like Wile E. Coyote running over the edge of a cliff, financial services kept on going. A service industry that, in effect, exists to help people write, trade and manage financial claims on future cashflows raced ahead of the real economy, even as the ground beneath it fell away.

The industry has defied gravity by using debt, securitisation and proprietary trading to boost fee income and profits. Investors hungry for yield have willingly gone along. Since 2000, according to BCA, the value of assets held in hedge funds, with their high fees and higher leverage, has quintupled. In addition, the industry has combined computing power and leverage to create a burst of innovation. The value of outstanding credit-default swaps, for instance, has climbed to a staggering \$45 trillion. In 1980 financial-sector debt was only a tenth of the size of non-financial debt. Now it is half as big.

This process has turned investment banks into debt machines that trade heavily on their own accounts. Goldman Sachs is using about \$40 billion of equity as the foundation for \$1.1 trillion of assets. At Merrill Lynch, the most leveraged, \$1 trillion of assets is teetering on around \$30 billion of equity. In rising markets, gearing like that creates stellar returns on equity. When markets are in peril, a small fall in asset values can wipe shareholders out.

The banks' course was made possible by cheap money, facilitated in turn by low consumer-price inflation. In more regulated times, credit controls or the gold standard restricted the creation of credit. But recently central banks have in effect conspired with the banks' urge to earn fees and use leverage. The resulting glut of liquidity and financial firms' thirst for yield led eventually to the ill-starred boom in American subprime mortgages. The dance of debt

The tendency for financial services to run right over the cliff is accentuated by financial assets' habit of growing during booms. By lodging their extra assets as collateral, the intermediaries can put them to work and borrow more. Tobias Adrian, of the Federal Reserve Bank of New York, and Hyun Song Shin, of Princeton University, have shown that since the 1970s, debts have grown faster than assets during booms. This pro-cyclical leverage can feed on itself. If financial groups use the borrowed money to buy more of the sorts of securities they lodged as collateral, then the prices of those securities will go up. That, in turn, enables them to raise more debt and buy more securities.

Indeed, their shareholders would punish them if they sat out the next round—as Chuck Prince let slip only weeks before the crisis struck, when he said that Citigroup, the bank he then headed, was “still dancing”. Mr Prince has been ridiculed for his lack of foresight. In fact, he was guilty of blurting out finance's embarrassing secret: that he was trapped in a dance he could not quit. As, in fact, was everyone else.

Sooner or later, though, the music stops. And when it does, the very mechanisms that create abundant credit will also destroy it. Most things attract buyers when the price falls. But not necessarily securities. Because financial intermediaries need to limit their leverage in a falling market, they sell assets (again, the system is pro-cyclical). That lowers the prices of securities, which puts further strain on balance sheets leading to further sales. And so the screw turns until those without leverage will buy.

You do not need bankers to be poorly monitored or over-incentivised for such cycles to work: finance knew booms and manias long before deposit insurance, bank rescues or bonuses. And, human nature being what it is, Jérôme Kerviel, who lost Société Générale a fortune, and the staff of various loss-making, state-owned, German Landesbanks did not need huge pay to lose huge sums. The desire to show that you are a match for the star trader next door, or the bank in the next town, will do.

Yet pay—or at least bad management—probably made this crisis worse. Trades determine bonuses at the end of the year, even though their real value may not become clear until later. Earlier this month a group of financial supervisors reported how managers at the banks worst hit by the crisis had failed to oversee traders or take a broad view of risk across their firms. Perhaps, with proper incentives, managers would have done better.

Alan Johnson, a consultant who designs pay packages for Wall Street, predicts that in future senior executives will

face the prospect of some of their bonuses being contingent on the bank's performance over several years. Yet to the extent that many senior bankers are paid in shares they cannot immediately sell, they already are. And to the extent that Bear Stearns's employees owned one-third of the firm, they already looked to the longer term.

If altering pay cannot stop manias, can regulation? The criticism that this crisis is the product of the deregulation of finance misses an important point. The worst excesses in the securitisation mess are encrusted precisely where regulation sought to protect banks and investors from the dangers of untrammelled credit growth. That is because regulations offer not just protection, but also clever ways to make money by getting around them.

Existing rules on capital adequacy require banks to put some capital aside for each asset. If the market leads to losses, the chances are they will have enough capital to cope. Yet this rule sets up a perverse incentive to create structures free of the capital burden—such as credits that last 364 days, and hence do not count as “permanent”. The hundreds of billions of dollars in the shadow banking system—the notorious SIVs and conduits that have caused the banks so much pain—have been warehoused there to get round the rules. Spain's banking regulator prudently said that such vehicles could be created, but only if the banks put capital aside. So far the country has escaped the damage seen elsewhere. When reformed capital-adequacy rules are introduced, this is an area that will need to be monitored rigorously.

It is the same with rating agencies, the whipping boys of the crisis. Most bonds used to be issued by companies, and to judge something AAA was straightforward. Perhaps back then it made sense for some investors, such as pension funds, to be obliged to buy top-rated bonds. But this rule created a boundary between AAA and other bonds that was ripe for gaming. Clever people, abetted by the rating agencies, set out to pass off poor credit as AAA, because they stood to make a lot of money. And they did. For a while.

The financial industry is likely to stagnate or shrink in the next few years. That is partly because the last phase of its growth was founded on unsustainable leverage, and partly because the value of the underlying equities and bonds is unlikely to grow as it did in the 1980s and 1990s. If finance is foolishly reregulated, it will fare even worse.

And what of all the clever and misused wizardry of modern finance? Mr Greenspan was half right. Financial engineering can indeed spread risk and help the system work better. Like junk bonds, reviled at the end of 1980s, securitisation will rebound, tamed and better understood—and smaller. That is financial progress. It is a pity that it comes at such a cost.

Buttonwood
Apocalypse now?

Mar 19th 2008
From The Economist print edition
Investment havens in a time of panic

IF THE world is going to hell in a handcart, what should you buy? With newspaper headlines dominated by the credit crisis, and with big banking names perceived to be under threat, this is a question all investors need to consider.

Much depends on what form you expect the apocalypse to take. In recent weeks investors have been flocking to buy Treasury bonds, relying on the unimpeachable credit of the American government. But with the dollar falling almost every day, foreign investors may feel the government's credit is about as unimpeachable as Richard Nixon; they will be paid back only in devalued paper. And if, as some observers believe, the Federal Reserve has taken its eye off inflation in its zeal to rescue the financial sector, domestic investors may not find ten-year Treasury-bond yields of just 3.4% (on March 18th) all that appealing.

Perhaps index-linked Treasury bonds would be a better safeguard? After all, they provide protection against inflation. The problem is that other people have already thought of that. Earlier this month, the real yield on America's five-year issue was briefly negative; investors were willing to see their investments not quite keep pace with prices. That does not make them look great value.

Then there is cash. Fortunes have been made by being a cash buyer at the end of a bear market. But where to keep the money? Given the nervousness about banks, many savers will want to keep their holdings below the ceiling for deposit insurance (in America, \$100,000 per saver per bank). The past few months have also thrown up doubts about money-market funds, some of which have taken a bit too much risk in the search for higher yields. So far, the fund-management firms have stood behind these funds. Come the real apocalypse, would they be able to do so?

In any case, it is not just a matter of choosing cash; investors must choose a currency too. Chris Watling of Longview Economics suggests they should aim for countries that have demonstrated control of their money supply and have current-account surpluses; that points to the Japanese yen and Swiss franc, both of which have been gaining against the dollar in recent weeks.

The Swiss franc certainly did well in the 1970s, an era that strategists are frequently citing as the model for recent events. At one point, the Swiss were even able to charge investors for the privilege of holding accounts in their currency—a rare instance of negative interest rates.

Gold is another possibility, because it is seen as a hedge against both inflation and the breakdown of the financial system. But as Buttonwood noted two weeks ago (see article), gold can itself be the subject of speculative excess, as it was in 1980: any asset that takes 28 years to reclaim its peak is hardly a reliable store of value. The same is true of other commodities. It was significant that raw-material prices were battered on March 17th, when risk aversion was at its height. Hedge funds may well have been selling their commodity positions to meet demands for cash from other parts of their portfolios.

In a complete meltdown, for example during world wars and revolutions, it is hard to find anything that keeps its value. Stockmarkets collapse. Governments default on their debt. Private property is no longer respected, either because governments seize the assets or because goods cannot be protected from criminals. Jewellery might hold its worth, but you had better have a good hiding-place. Think of all the treasures looted by the Nazis or the Red Army.

In his book “Wealth, War and Wisdom”, Barton Biggs, a Wall Street veteran, suggests that investors should own, as insurance against the apocalypse, “a farm or a ranch somewhere far off the beaten track but which you can get to quickly and easily.” A sheep farm in New Zealand would not really qualify, unless you already live in Wellington. And even land can be grabbed by governments, as has happened recently in Zimbabwe.

But, even on the assumption that war and civil disorder are avoided, Mr Biggs's advice still has some merit. After all, farmland, after many years in the doldrums, is suddenly fashionable again, thanks to revitalised agricultural prices. Those prices may be due for a retreat in the short term, but competition from biofuels and increased demand from Asia may nevertheless mean that the era of cheap food is over. British farmland prices rose by 25% last year, according to Knight Frank, an estate agent. It would be a nice irony if the best hedge against a collapse of the post-industrial economy turned out to be a return to the agrarian past.

Commodities
A bit tarnished

Mar 19th 2008

From The Economist print edition
Wobbles over the Wall Street crisis

ONE of the main selling points of commodities, according to the financiers who have been cheering their vertiginous ascent over the past few years, is that they do not move in lockstep with other assets. And so it had seemed in recent months, as commodity prices continued to climb even as disaster struck property, shares and bonds. Yet on March 17th the turmoil on Wall Street finally spread to the commodities markets.

On that day, oil set a new record of \$111.80 a barrel before falling to \$103.23 at one point—the biggest drop during a single day in 17 years. It was not alone: Goldman Sachs's main commodity index fell by over 4%. At the Chicago Board of Trade, wheat, maize (corn) and soyabean futures fell by as much as the exchange's rules permit. The price

of coffee dropped by 11%. Although most commodities recovered the next day, the episode did call into question their status as a haven.

Michael Lewis, the head of commodities research at Deutsche Bank, attributes the fall to investors seeking to cover losses in other markets, as well as to growing risk-aversion in such tumultuous times. But he does not believe that skittish investors will drive prices down dramatically, thanks to resilient demand for raw materials and meagre supply.

Although the economic outlook for America is grim, most analysts assume that emerging markets will continue to grow relatively strongly. Meanwhile, global copper inventories amount to only two weeks' demand. Lead stocks are closer to one week's worth. Stocks of oil are also unusually low. So even small disruptions to supplies prompt dramatic reactions from the markets. Aluminium prices, for example, have risen in recent weeks because of a shortage of power in South Africa, which has reduced output from several smelters. Fears of a shortage of hydroelectric power in Chile are helping to buoy the price of copper.

Jeff Currie, of Goldman Sachs, sees little prospect of a dramatic increase in the supply of most commodities. Nationalist governments, he argues, are impeding investment in the most promising new mines and oilfields, forcing Western energy and mining firms to spend lots of money developing less accessible and profitable reserves. Higher marginal costs of production, he believes, will sustain higher prices for a long time to come.

The dollar's decline also seems to be fuelling commodities' rise. Gold, in particular, has risen as investors seek a hedge against inflation and turbulent markets. The falling dollar also pushes the prices of other commodities higher, Mr Currie points out, because producers outside America need higher prices in dollar terms to maintain their margins.

Francisco Blanch, of Merrill Lynch, believes there is more to the story than that. He argues that the interest-rate cuts that have prompted the dollar to fall have produced a surge in liquidity in fast-growing emerging markets such as China and the Middle East. At the same time, governments in those countries try to insulate consumers from rising prices with subsidies and price controls. So demand for raw materials from such places continues to grow, despite high international prices.

If Mr Blanch is right the Federal Reserve's latest cuts will only spur faster growth in demand in emerging markets, and so higher commodity prices. That, in turn, will increase America's oil-import bills, which will add to the current-account deficit and therefore heap further pressure on the dollar, setting a vicious cycle in motion. On the other hand, if the dollar starts to rise in value again, the cycle might go into reverse, pushing the price of commodities down again. As in so many other markets, all eyes are on America's beleaguered central bankers.

economics focus
History lesson

Mar 19th 2008
From The Economist print edition
How to deal with banking crises
Illustration by JAC

THE decline and fall of Bear Stearns illustrates both an old truth and a new one. The old truth is that when cash is scarce, he who has deep pockets is king. Bear Stearns is still standing only because JPMorgan Chase was solid enough to prop it up. The new truth lies in the Federal Reserve's role as matchmaker of last resort, smoothing the deal with a temporary loan of \$30 billion. This shows just how far a financial supervisor's purview now extends. Even though Bear is not a fully regulated institution, the investment bank was deemed too central to the complex web of America's financial system to be allowed to fail.

Private-sector solutions to banking crises, in which strong institutions buy the weak, demand well-heeled banks. Just now, these are in short supply. Few institutions have been left unscathed by bad mortgage debts; JPMorgan Chase is a rare exception. When banks are threatened with insolvency, it is often the government—with the deepest

pockets of all—that has to make good their losses. But how much might the state have to stump up? And how should it go about it? As today's credit crisis widens, commentators are turning to history as a guide.

One lesson is that trouble is all too common. Most members of the IMF have undergone at least some distress since the late 1970s. Crises in poorer countries tend to be deeper and more costly, often because they are twinned with collapsing currencies. According to a 1996 survey of insolvencies by economists at the World Bank, the bail-out of Argentina's banking system in the early 1980s cost a stunning 55% of GDP to fix.

The rich world's banking troubles have not been cheap either. The bill for bolstering Finland's banks in the early 1990s came to 8% of GDP; Sweden's bail-out was scarcely less dear. America spent more than 3% of GDP cleaning up the savings-and-loan crisis, its priciest to date. That suggests that the possible cost of today's troubles, though alarming, is not off the charts. The best, though still highly uncertain, estimate of prospective lending losses is around \$1.1 billion, less than half of which would be borne in America by banks, investors and in forgone taxes: \$460 billion is equivalent to about 3% of last year's GDP.

Ideally, fiscal support for banks should be targeted, if it is needed at all. Bail-outs are often limited to just one institution. Continental Illinois in America and Johnson Matthey Bankers in Britain were rescued in 1984, because regulators judged that the banks were large enough to rock the whole system should they go bust. When Barings, another British bank, was wiped out by trading losses 11 years later, regulators let it fail, judging that the risk of wider damage was low.

These episodes occurred in times of relative financial calm, so have few lessons for today. The parallels with the Nordic crises of the early 1990s look more useful. Then as now, the banking bust followed economic and asset-price booms fired by the deregulation of credit, low interest rates and lax supervision. Norway's three biggest lenders were nationalised, but research by its central bank puts the fiscal cost at far less than in Finland or Sweden. Once banks were taken into public ownership, shareholders were universally wiped out. And though the cost of working out bad debts was around 2% of GDP, all that and more was recouped when the banks were privatised. In other words, the state made a profit from the crisis. Denmark, meanwhile, avoided the storms altogether because of stricter capital rules—prevention is better than cure.

The Nordic crises were not so long ago, yet they seem a world away. Norway probably avoided a worse fate by acting swiftly once it was clear that its biggest banks were insolvent. The obvious contrast is with Japan, where bad debts were left to fester. But today it is much harder for regulators to tell which banks, if any, are insolvent. That is because bad debt is hidden within complex securities, and the value of those securities is almost impossible to measure when markets have dried up. These days, the trouble lies as much in the financial markets as with the banks that trade in them.
1998 and all that

The growing complexity of links between banks is the reason why Bear Stearns, an investment bank that may not have worried regulators had it failed 15 years ago, could not be left to collapse today. The manner of its rescue recalled the efforts to shore up Long-Term Capital Management, a hedge fund tied intricately into the financial system, in 1998. Bear's demise also shows how the boundary between illiquidity and insolvency is fast dissolving. The bank was sold for a fraction of its book value after it was shut out of lending markets. Yet it is not clear whether it was insolvent in the sense that its assets were worth less than it owed.

By throwing open its discount window to investment banks, the Fed has tacitly admitted that the old rules no longer apply. It was a bold step, but not necessarily a sufficient one. There is still a stigma attached to discount-window borrowing, which means banks may be unwilling to avail themselves of it until it is too late, even when they are truly desperate.

In today's unholy tangle of short-term funding and long-term derivatives contracts, more banks may well fall into the liquidity traps that snared Bear and Britain's Northern Rock. If so, central banks may find they have to go further than ever and provide a floor for asset prices in illiquid markets. Since banks are unwilling to trade in mortgage assets, because they do not have the capital or cannot risk marking losses to market, there may be an opportunity for governments to buy assets at big discounts. Judicious intervention could in principle improve

liquidity, bolster confidence and may in the end even make money for taxpayers if asset prices recover. But supporting badly run investment banks should also come with strings attached: regulatory control to reduce the chance that public support will be needed again.

Foreign exchange
The yen also rises

Mar 19th 2008 | TOKYO
From The Economist print edition
How far can the dollar fall before Japan feels the need to intervene?

AP A headache, but not yet a migraine

Correction to this article

IN RECENT years the yen has been a profitable carry-trade currency, used by investors to borrow cheaply in order to splurge on risky assets around the world. If the carry trade is now part of a bygone era, so is the weakness of the yen. It has soared almost 30% against the dollar since June and on March 17th it hit a 12-year high of ¥95.76. After the Federal Reserve cut interest rates on March 18th, the dollar remained under pressure.

The yen's strength causes little jubilation in Japan. A strong yen squeezes company profits since Japan is heavily dependent on exports. Toyota, for example, bases its earnings on an exchange rate of ¥105: every ¥1 appreciation against the dollar costs the firm ¥35 billion (\$350m) in annual operating profit. That, in turn, hurts the Nikkei 225, which has tumbled even faster than the yen climbs; it has shed more than 20% since the start of the year. Almost 60% of the companies on the exchange's main market are trading at less than their book value. Moreover, a strong yen cuts into economic growth.

Even without a governor for the Bank of Japan, the market is starting to price in a quarter-point rate cut at the bank's next meeting in early April. At the same time, the rising yen is becoming a political issue. Fukushima Nukaga, the finance minister, called its appreciation "excessive" and worrisome. In the past, the finance ministry has moved fast to prevent the yen from becoming too strong. As recently as 2003-04 it sold ¥35 trillion to prevent a rise in the currency that might derail its nascent economic recovery.

Japan has several reasons to hold fire, however. Although a strong yen hurts exporters, it helps hold down the prices of imports, for such things as oil and food. It is not considered overvalued on a trade-weighted basis or against other currencies. In inflation-adjusted terms, a rate of ¥100 to the dollar is equivalent to ¥125-130 a decade ago, according to Eisuke Sakakibara of Waseda University (who was known as "Mr Yen" for managing Japan's currency interventions from 1997 to 1999 at the Ministry of Finance).

Even if it were to sell yen, America may be an unwilling buyer; its carmakers say the appropriate exchange rate is ¥90-100 to the dollar, notes Yasunari Ueno of Mizuho. He believes the Japanese government won't consider intervening until the rate goes at least to ¥90.

Today it is not even certain how effective intervention might be. Globally, daily foreign-exchange transactions exceed \$3.2 trillion, more than twice the value in 2003. For intervention to work, Japan would need to recruit other central banks to the cause. But the dollar may not be weak enough for that—even against the yen.

Correction: We wrongly implied that foreign reserves are necessary to intervene to weaken a currency. This is nonsense: you simply print yen and buy dollars. This article was corrected on March 20th 2008.

China's stockmarket
Earnings up, prices down

Mar 19th 2008 | HONG KONG
From The Economist print edition

Risk aversion hits Chinese stocks

NINE DRAGONS PAPER lies at the heart of China's booming industrial relations with the rest of the world: it packages exports. The strength of the business was abundantly clear on March 17th, when it announced record first-half earnings. Immediately afterwards, however, its share price tumbled by 40%. That reflects a pattern during the latest earnings season, says Alvin Chong of Sun Hung Kai Financial, a Hong Kong brokerage firm. Good results: awful stockmarket performance.

Amid nervousness in global markets about risky investments, over-leverage and slowing growth, even China's once impregnable stockmarkets seem to be hitting reality with a bump. There is as yet none of the panic that has afflicted Wall Street. But China's stockmarkets are off by about 30% this year (see chart)—by comparison, the S&P 500 is down by 13%.

China appears to be suffering from a home-grown liquidity squeeze that is not so different from the one afflicting the West. As inflation pushes higher, the Chinese government has curbed lending by the banks. On March 18th the reserve ratio for Chinese banks was raised to 15.5%, the latest in a string of tightening measures.

Tighter credit is likely to crimp expansion plans and hence revenue growth. Higher inflation is also creeping into costs. At Nine Dragons, net margins fell to 15.8% from 20.4%; for years they had increased on the strength of higher sales and more efficiency. The drop, say analysts, was enough to spook an already nervous market. A year ago, Nine Dragons' shares traded at up to 40 times earnings. Now, they trade at 13 times, similar to paper firms elsewhere in the world.

The froth is coming off in other parts of the market too—even China Mengniu Dairy, a company that transformed the dietary habits of a vast nation by making milk a staple, is no longer trading like an internet stock; its shares have fallen by almost a half this year. Much of the pain has been felt by Chinese property developers. R&F Properties and Agile Property, to name just two, saw their share price double or triple between 2006 and mid-2007. They have since lost two-thirds of their value. There is growing concern that smaller developers may have problems raising money to complete building works, which could trigger fire sales.

Not all the troubles are locally produced, however. Adding to the gloom is the waning enthusiasm of foreign investors. As of March 17th the New York-listed Morgan Stanley China A Share fund was trading at a 30% discount to net asset value—more than almost all closed-end exchange-traded funds listed in America. In Hong Kong investment banks say they have huge pipelines of potential initial public offerings, but investors have lost their appetite. On March 17th Want Want China Holdings, a cracker company, managed to raise \$1 billion, but only after the valuation on its shares had been cut by more than a third. By last year's standards, that would have been a flop. This year it was enough for people to think that Want Want had lived up to its name.

The fallout at Bear Stearns
Sore heads

Mar 19th 2008 | NEW YORK
From The Economist print edition
Disaster yields disbelief—and disgruntlement

WALL STREET is often criticised for heaping gold on bankers in fat years, but failing to penalise them in lean ones. Witness the 10% rise in total pay at America's investment banks last year, despite an awful second half. But the fate of Bear Stearns shows that, when things go really wrong, punishment can be severe.

Bear's executives have lost billions. At \$2 a share, the 5% stake held by Jimmy Cayne, the chairman and former chief executive, worth \$1.2 billion at the shares' peak last year, is now valued at \$11m (less than half of what Mr Cayne recently paid—mortgage-free, naturally—for an apartment in the Plaza Hotel). There are reports of managers putting holiday homes on the market. BFdesigns, which tarts up such dwellings before they are sold, has charitably offered to cut its fees for any Bear employees.

Lowlier workers have been hit even harder. Bear encouraged them to buy shares after it went public in 1985. Their

purchases have pushed employees' combined stakes to one-third. Some have lost their main nest eggs, others the money to put children through college. Worse, half or more of the 14,000 staff are expected to lose their jobs. Counsellors are on hand. Comparisons are being made with Enron, where the employees lost \$2 billion in pensions.

The shock is fast turning to anger: that bosses left it so late to seek capital; that employees were prevented from selling shares because an earnings announcement was coming; and, above all, that JPMorgan Chase has probably got a bargain.

Allied with big shareholders such as Joe Lewis, a Bahamas-based billionaire who spent \$1 billion on Bear stock last year, some employees like to think they can muster a majority against the deal when the vote is held in six weeks. On March 18th Bear's shares closed at \$6.51, reflecting the chance of a higher offer.

That looks a forlorn hope. JPMorgan is backed by the Treasury, the president and the central bank. It is small solace to Bear's bankers that they will serve as a salutary example to others.

Their fate is also likely to harden resistance on Wall Street to receiving bonuses in shares rather than hard cash. The dollar may be taking a battering, but at least it will be worth something this time next year.

Derivatives
Caveat counterparty

Mar 19th 2008
From The Economist print edition
When banks cannot trust each other

THERE is a lot to worry about when you deal in the financial markets—whether you have made the right judgment about profits, interest rates or the economy. But life gets even harder if you worry that the bank you trade with is about to go bust.

That problem—counterparty risk—has been roiling the markets lately. Traders often insist on some protection in the form of collateral (usually cash or short-term government debt) when dealing in derivatives. But in recent weeks counterparties have been pushing to ensure that collateral gets bigger “haircuts”—that is, they accept assets only at a greater discount. The idea is to make sure they do not end up as the ones being scalped.

Even with collateral, sorting out a counterparty default would be a nightmare. Hence the Federal Reserve's extraordinary measures to keep Bear Stearns from falling into bankruptcy. “If Bear Stearns had failed, banks would not have known where they were for days or weeks,” says a hedge-fund manager. The markets might well have frozen and other banks might have collapsed.

What makes life particularly difficult is that banks have a multitude of offsetting positions with each other. When assessing their market risk, they normally look at their net positions. But if a counterparty is in trouble, that may not be appropriate.

Investors may have taken one position with Bear Stearns as a counterparty, and then hedged its risk through another trade with, say, Morgan Stanley. In the event of a Bear Stearns default, that hedge would have broken down; they would suddenly have found themselves with an unanticipated (and unwanted) market risk. The effect could have been chaotic.

Bear Stearns was particularly active in the credit-default swaps (CDS) market, which has grown exponentially to around \$45 trillion. A CDS enables its buyer to separate the risk of default from a bond's other features, such as its interest rate. Like insurance against fire or theft, it protects investors against the risk of default.

But, as often in finance, an instrument designed for insurance became a tool for speculators. In some cases, the amount of outstanding insurance via CDSs is far greater than the underlying value of the bonds. That can be overcome through cash settlements in the event of default. But the auction price of the cash settlement may not

represent the eventual recovery rate after the company has been wound up. So the CDS is far from a perfect hedge.

Even more difficult is the question of what constitutes default. Say a brilliant investor had forecast Bear Stearns's troubles last month and bought protection accordingly. Even though Bear Stearns's shareholders have been all but wiped out, the company has not defaulted on its debt. Indeed, once the investment bank becomes part of JPMorgan Chase, the risk of default will fall sharply. The cost of protection on Bear Stearns duly fell by two-fifths on March 17th. And the CDS premiums on the debts of other American banks also dropped, even as their shares were taking a pasting. That suggested investors had decided that the Fed, while penalising shareholders, would not allow another member of Wall Street's finest to fail outright.

Investment banks
The \$2 bail-out

Mar 19th 2008 | NEW YORK
From The Economist print edition
The wreck and rescue of America's fifth-biggest Wall Street bank

AS PRANKS go, it oozed vitriol. On March 17th, while employees at Bear Stearns were coming to terms with the implosion of their once-venerable investment bank, one of them stuck a \$2 note to the revolving doors of the firm's midtown-Manhattan headquarters. That was the amount, per share, that Bear had fetched in a fire sale to JPMorgan Chase a day earlier, when the Federal Reserve was rushing to secure a deal before the markets opened on Monday (see chart 1). A year ago the shares had topped \$170.

Now that the credit crisis has hit at the heart of Wall Street, policymakers are meeting the threat of catastrophe with some extraordinary manoeuvres. On March 18th the Fed slashed interest rates by 75 basis points, adding to big cuts over recent months. It is also ripping up its rulebook on financing troubled institutions. As the takeover of Bear was being finalised, it extended lending through its discount window, usually reserved for commercial banks, to all bond dealers; for the first time, investment banks have a lender of last resort (though too late for Bear, alas). All this underlines how what began as a seemingly containable problem in one part of the mortgage market now threatens the integrity of America's financial system. One day, the Fed will make Wall Street pay for its support—possibly through far stronger oversight.

The frenzy highlights another big change. Thanks to rampant innovation, particularly in futures, options and swaps, regulators must worry not only about those banks that are too big to fail, but also about middle-sized outfits with tentacles that wind through the derivative markets. Measured by assets, Bear is not that big. But with positions in credit-default and interest-rate swaps worth a notional \$10 trillion, the idea of its sudden collapse was chilling—and nobody wanted to put that foreboding to the test. Aptly, although the Fed's rescue is no bail-out of Bear, it does set out to save the system.

Bear, the smallest of the big five Wall Street investment banks, was the most exposed to the toxic mortgage market. It had been in trouble since two of its hedge funds collapsed last summer. Regulators had been frustrated that the bank was working less hard than its peers to shore up its funding. Nevertheless, the speed of its demise was shocking. Clients withdrew \$17 billion in two days last week, after rumours swirled that other banks were refusing to step into clients' shoes as counterparties in derivatives trades. The Fed moved in with emergency funding, using JPMorgan Chase, Bear's clearing bank, as a conduit. But it was clear that no one would want to do business with a bank reliant on 28-day loans from the central bank. With Bear facing bankruptcy if it could not find a quick buyer, JPMorgan opened its arms.

At \$236m, the deal looks like a steal for Jamie Dimon, JPMorgan's canny boss—and reward for keeping his bank relatively stable as others have stumbled. Bear's swanky headquarters alone is worth six times that. To smooth the deal, the Fed is taking the unprecedented (and, some say, disturbing) step of financing up to \$30 billion of Bear's weakest assets. This could cost the central bank several billion dollars if those assets fall in value.

Tellingly, JPMorgan's shares rose sharply the day after the takeover, even as other financials tumbled. The \$14 billion added to its stockmarket value was Bear's true worth, said cynics. Brad Hintz, an analyst at Alliance

Bernstein, puts the break-up value of Bear's good bits at \$7.7 billion. Around \$3 billion comes from its prime-broking business, which finances hedge funds' trading, and which Mr Dimon has wanted to get into for some time.

But the deal carries risks. JPMorgan has pledged to honour all of Bear's commitments, despite having had only two days for due diligence. Bear's gross mortgage exposure is still likely to be well over \$10 billion after the Fed guarantees the least liquid stuff. And the bank faces piles of lawsuits over the hedge-fund collapses and, now, a takeover that wipes out almost all its perceived value (see article). JPMorgan puts the costs associated with the deal at some \$6 billion (though it clearly has an interest in overestimating them). Moreover, Mr Dimon has to weave the two banks together, in an industry with a terrible record on mergers.

JPMorgan's motivation is not purely opportunistic. As the biggest dealer in credit derivatives, it was heavily exposed to Bear. Had the bank gone bust, it would have led to huge uncertainty, and large potential losses, on a variety of contracts.

Investment banks are particularly vulnerable to credit-market turmoil, because they rely on funding not from depositors but from wholesale markets, much of it short-term. Understandably, the other big Wall Street firms—Goldman Sachs, Lehman Brothers, Merrill Lynch and Morgan Stanley—portray Bear as an outlier when it comes to this “liquidity risk”. Its mix of businesses was less diverse and it relied more heavily on overnight funding in repurchase, or repo, markets, in which dealers sell securities to investors then buy them back the next day for slightly more, with the difference being the interest. This vast, \$4.5 trillion market usually functions like clockwork, but has come under strain in recent weeks. As doubts grew, Bear was in effect shut out.

Could the same happen to a competitor? All of them felt funding pressure this week. Merrill, which has had to swallow enormous mortgage-related write-downs, is seen by some as vulnerable. But Lehman, the fourth-largest Wall Street bank—and, like Bear, big in mortgage-backed securities—is top of many worry lists. It is going to great lengths to avoid a similar fate, providing unprecedented detail on its levels of cash and reassuring nervous counterparties. Senior managers are sweet-talking supervisors at other firms where traders are reluctant to deal with Lehman. Dick Fuld, Lehman's boss, cut short a trip to India to manage the crisis.

The hope is that the investment banks are safer now that they have emergency funding, thanks to the Fed, which will take a range of securities from them as collateral. And on one measure at least, Lehman's liquidity looks stronger than that of its peers (see chart 2). On March 14th the bank secured a \$2 billion, three-year facility with a group of banks. It also says that its holding company has \$64 billion of “unencumbered” assets that can be used as collateral to generate cash.

There is much at stake. The new Fed window is untested and the very act of drawing on it could rattle markets. The fear is that if Lehman suffers a Bear-style run, funding will dry up across Wall Street. “If Lehman goes there are no sacred cows,” says a rival. Just in case, others are busily touting numbers that put them in a positive light. Morgan Stanley, for instance, says it has cut its use of repos sharply, to 15.6% of total funding, and that it now has 45% more accessible cash than it did last year. Goldman, too, has reduced its reliance on overnight funding. Across Wall Street, long-term funding has doubled since 2004, to around \$800 billion.

Though all this may be reassuring, the nature of liquidity in today's ready-cash funding model of investment banking is that it is strong until it suddenly is not. Only a few days before Bear's desiccation, remember, some analysts embarrassingly pointed out that it had enough liquid assets and borrowing capacity to keep it going for almost two years. Hank Calenti of RBC Capital Markets thinks that, at the Fed's urging, “shotgun weddings” for Lehman and Merrill could be in the planning stages, in case of emergency.

This explains the palpable relief when, on March 18th, both Lehman and Goldman posted first-quarter results that were less bad than feared. Net income dropped by 57% and 53%, respectively, thanks to write-downs of around \$2 billion each, but there were no nasty surprises. Share prices stormed ahead on the news, with the financial shares in the S&P 500 gaining 8.5%.

The outlook remains bleak, however. By one estimate, banks will write off a further \$50 billion of degraded inventory this quarter. If they are more tightly regulated, they could have less scope to make profits. Using tangible

book value as a yardstick, Meredith Whitney of Oppenheimer concludes that financial shares are due a further fall of up to 50%. With house prices still falling, credit deterioration spreading and derivatives markets deeply unsettled, is anyone willing to bet that Bear Stearns is the last of the \$2 sales?

Online social networks
Everywhere and nowhere

Mar 19th 2008 | SAN FRANCISCO

From The Economist print edition

Social networking will become a ubiquitous feature of online life. That does not mean it is a business

Illustration by David Simonds

A LARGE but long-in-the-tooth technology company hoping to become a bigger force in online advertising buys a small start-up in a sector that everybody agrees is the next big thing. A decade ago, this was Microsoft buying Hotmail—the firm that established web-based e-mail as a must-have service for internet users, and promised to drive up page views, and thus advertising inventory, on the software giant's websites. This month it was AOL, a struggling web portal that is part of Time Warner, an old-media giant, buying Bebo, a small but up-and-coming online social network, for \$850m.

Both deals, in their respective decades, illustrate a great paradox of the internet in that the premise underlying them is precisely half right and half wrong. The correct half is that a next big thing—web-mail then, social networking now—can indeed quickly become something that consumers expect from their favourite web portal. The non sequitur is to assume that the new service will be a revenue-generating business in its own right.

Web-mail has certainly not become a business. Admittedly, Google, Microsoft, Yahoo!, AOL and other providers of web-mail accounts do place advertisements on their web-mail offerings, but this is small beer. They offer e-mail—and volumes of free archival storage unimaginable a decade ago—because the service, including its associated address book, calendar, and other features, is cheap to deliver and keeps consumers engaged with their brands and websites, making users more likely to visit affiliated pages where advertising is more effective.

Social networking appears to be similar in this regard. The big internet and media companies have bid up the implicit valuations of MySpace, Facebook and others. But that does not mean there is a working revenue model. Sergey Brin, Google's co-founder, recently admitted that Google's "social networking inventory as a whole" was proving problematic and that the "monetisation work we were doing there didn't pan out as well as we had hoped." Google has a contractual agreement with News Corp to place advertisements on its network, MySpace, and also owns its own network, Orkut. Clearly, Google is not making money from either.

Facebook, now allied to Microsoft, has fared worse. Its grand attempt to redefine the advertising industry by pioneering a new approach to social marketing, called Beacon, failed completely. Facebook's idea was to inform a user's friends whenever he bought something at certain online retailers, by running a small announcement inside the friends' "news feeds". In theory, this was to become a new recommendation economy, an algorithmic form of word of mouth. In practice, users rebelled and privacy watchdogs cried foul. Mark Zuckerberg, Facebook's founder, admitted in December that "we simply did a bad job with this release" and apologised.

So it is entirely conceivable that social networking, like web-mail, will never make oodles of money. That, however, in no way detracts from its enormous utility. Social networking has made explicit the connections between people, so that a thriving ecosystem of small programs can exploit this "social graph" to enable friends to interact via games, greetings, video clips and so on.

Coming up for air

But should users really have to visit a specific website to do this sort of thing? "We will look back to 2008 and think it archaic and quaint that we had to go to a destination like Facebook or LinkedIn to be social," says Charlene Li at Forrester Research, a consultancy. Future social networks, she thinks, "will be like air. They will be anywhere and everywhere we need and want them to be." No more logging on to Facebook just to see the "news feed" of updates from your friends; instead it will come straight to your e-mail inbox, RSS reader or instant messenger. No

need to upload photos to Facebook to show them to friends, since those with privacy permissions in your electronic address book can automatically get them.

The problem with today's social networks is that they are often closed to the outside web. The big networks have decided to be “open” toward independent programmers, to encourage them to write fun new software for them. But they are reluctant to become equally open towards their users, because the networks' lofty valuations depend on maximising their page views—so they maintain a tight grip on their users' information, to ensure that they keep coming back. As a result, avid internet users often maintain separate accounts on several social networks, instant-messaging services, photo-sharing and blogging sites, and usually cannot even send simple messages from one to the other. They must invite the same friends to each service separately. It is a drag.

Historically, online media tend to start this way. The early services, such as CompuServe, Prodigy or AOL, began as “walled gardens” before they opened up to become websites. The early e-mail services could send messages only within their own walls (rather as Facebook's messaging does today). Instant-messaging, too, started closed, but is gradually opening up. In social networking, this evolution is just beginning. Parts of the industry are collaborating in a “data portability workgroup” to let people move their friend lists and other information around the web. Others are pushing OpenID, a plan to create a single, federated sign-on system that people can use across many sites.

The opening of social networks may now accelerate thanks to that older next big thing, web-mail. As a technology, mail has come to seem rather old-fashioned. But Google, Yahoo!, Microsoft and other firms are now discovering that they may already have the ideal infrastructure for social networking in the form of the address books, in-boxes and calendars of their users. “E-mail in the wider sense is the most important social network,” says David Ascher, who manages Thunderbird, a cutting-edge open-source e-mail application, for the Mozilla Foundation, which also oversees the popular Firefox web browser.

That is because the extended in-box contains invaluable and dynamically updated information about human connections. On Facebook, a social graph notoriously deteriorates after the initial thrill of finding old friends from school wears off. By contrast, an e-mail account has access to the entire address book and can infer information from the frequency and intensity of contact as it occurs. Joe gets e-mails from Jack and Jane, but opens only Jane's; Joe has Jane in his calendar tomorrow, and is instant-messaging with her right now; Joe tagged Jack “work only” in his address book. Perhaps Joe's party photos should be visible to Jane, but not Jack.

This kind of social intelligence can be applied across many services on the open web. Better yet, if there is no pressure to make a business out of it, it can remain intimate and discreet. Facebook has an economic incentive to publish ever more data about its users, says Mr Ascher, whereas Thunderbird, which is an open-source project, can let users minimise what they share. Social networking may end up being everywhere, and yet nowhere.

Even trickier cases than Bear Stearns may be in store. What if troubled firms are split into good banks and bad banks, with the shaky assets being shovelled into the “bad” entity? The effect on CDS buyers would depend on whether the good or bad bank was deemed to be the counterparty. Before this crisis is over, the CDS market looks almost certain to become a lucrative trade for lawyers.