

insights on risk

Watching out for the Black Swan

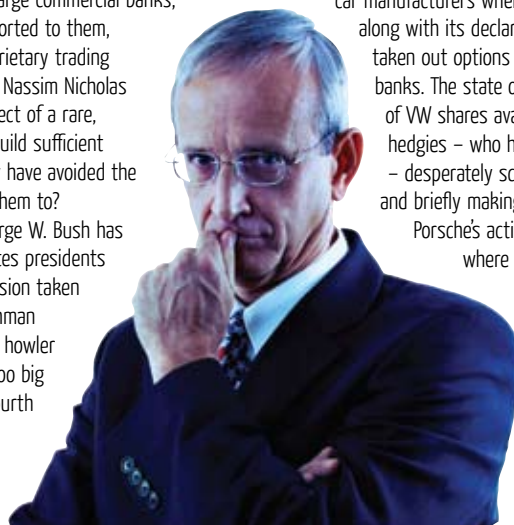
Has it flown away – and did leading bankers fully understand risk?

*If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss.*

RUDYARD KIPLING OBVIOUSLY NEVER WORKED IN THE CITY. In the good old bull market days (was it only a couple of years ago?), not even the ballsiest trader would have tried to put everything on red. Compliance would have been on to him like a ton of bricks, and he'd soon have been carting his bin liner of personal effects on to the street.

Sounds simplistic? Well, something of that sort was going on inside some of our major financial institutions, and there is a plausible argument that top bankers' greed and inability to control the risks they were running has brought the economy to its knees and is causing untold misery to millions. There is a certain ring of truth in the accusations that the main board directors of some large commercial banks, as well as the risk assessment committees that reported to them, simply did not comprehend the risks that their proprietary trading desks were taking on. Maybe they should have read Nassim Nicholas Taleb's book *The Black Swan*, which describes the effect of a rare, large-impact, and hard-to-predict event. Did banks build sufficient systemic robustness to Black Swans, and could they have avoided the huge losses which their defective models exposed them to?

Was Lehman Brothers last year's Black Swan? George W. Bush has been widely derided as one of the worst United States presidents of recent times. History will judge that; but the decision taken by his Treasury Secretary, Hank Paulson, to allow Lehman Brothers to fail in September will probably rank as a howler of the first degree. The mantra that Lehman's was 'too big to fail' was ignored by the Treasury, and America's fourth largest investment bank duly filed for bankruptcy. It left behind \$613bn of debt, and, more worryingly, a notional value of almost \$800bn of credit-default swaps (CDSs). As a top-ten counterparty in

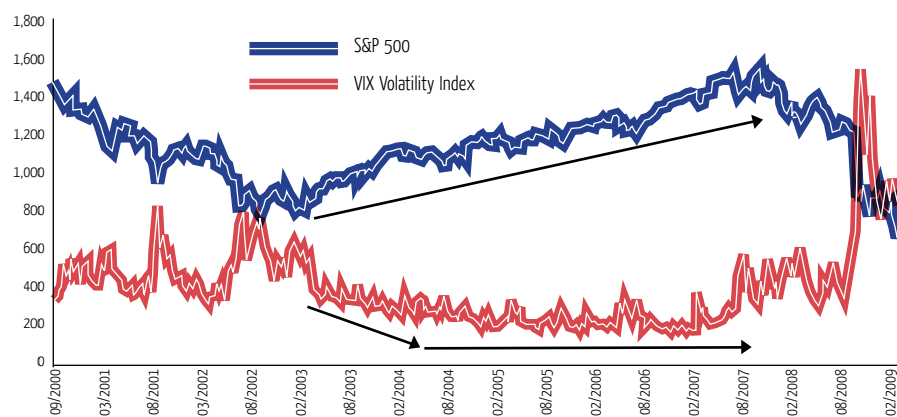


CDSs, Lehman's bankruptcy created mayhem in the derivatives market. Any investor who bought a swaps contract as insurance against, say, an AIG default, with Lehman's on the other side of the deal as a counterparty, could find that protection worthless once Lehman's had gone bust. This risk of counterparty default is not just confined to swap obligation. As a futures broker, Lehman's were in receipt of margin payments on behalf of the futures exchange; any two clients who placed future trades with Lehman's (both long and short) would be paying margin. When Lehman's went under, the exchange was in a position to maintain the contract, but the two individual clients now had to make two individual margin payments. Lehman's had previously netted these trades – and not lodged any margin with the exchange.

No wonder the lawyers are having a field day unraveling all Lehman's derivatives positions. A salutary lesson, perhaps, about the unknown risks in the derivatives markets. But aren't derivatives supposed to lessen investor risk, rather than increase it? Not always, especially when the market turns unexpectedly and abruptly against you. Just ask any of the investors – mostly hedge funds – who were shorting Volkswagen shares last October, and are estimated to have dropped a cool £24bn on their positions. Hedge funds thought they were in a good position – who would want to buy overvalued car manufacturers when the recession was starting to bite? Well, Porsche did, and along with its declared equity holding of 42.6% had secretly (the Black Swan?) taken out options to buy another 31.5% of VW stock owned by German banks. The state of Lower Saxony owned another 20.1%, leaving just 5.8% of VW shares available to buy. When Porsche revealed its hand, horrified hedgies – who had committed to sell 12% of VW's shares to counterparties – desperately scrambled to buy VW shares, quintupling the price in two days and briefly making VW the most valuable company in the world.

Porsche's actions would have been illegal in the UK; but not in Germany where politicians refer to hedge funds as 'locusts'. Hedge funds are easy targets for grandstanding politicians; but shorting is, after all, a perfectly legitimate market tool that many observers believe improves the efficient working of stock markets. And, whilst some of the new regulations proposed for derivatives are focusing on things like leverage and interconnectedness – which undoubtedly contributed to the post-Lehman's chaos – it is impossible to anticipate all the ways in which regulations can be evaded. How do you shoot a moving target? 

Volatility: Make it work in your favour



Inverse Correlation of S&P 500 Versus the VIX Volatility Index

The chart demonstrates the reliable inverse correlation between the S&P 500 and the associated VIX index. Note the period mid 2003 to start 2007, where sustained equity market growth results in a declining option implied volatility, to a point where the VIX reaches a floor. Although the relationship here looks less reliable (or at least less interesting), the actual discrete upward shifts in short term volatility in this range are more correlated and have 'higher' negative beta to the SP500. When option implied volatility was this low, hedging was cheap and about twice as effective.

How are the mighty fallen! Lehman Brothers, once a pillar of Wall Street with a proud history dating back to 1850, finally turned up its toes in September last year, making it the largest bankruptcy in US history. And some of Britain's largest banks, including Royal Bank of Scotland, after prolonged agony in the accident and emergency department, are now in the recovery ward on life support provided by state ownership. Not even the gloomiest doomsayer would have been likely to predict these events two years ago; and even if he had, would probably have been

laughed off the stage. Today, bankers are hate figures, in close competition with estate agents for the mantle of most despised profession.

Historians, and people in general, seem to like marking apocalyptic events by hanging them on the peg of specific dates. October 24th, 1929 is widely accepted as the day on which the Great Crash, and the subsequent Great Depression, were triggered; and people of a certain age like to tell you exactly where they were at 12.30pm on November 22nd, 1963, when the news of President Kennedy's assassination

came through. We've just seen the first anniversary of another date – March 24th, 2008 – the collapse of Bear Stearns and its fire sale to JPMorgan Chase for two bucks a share or just over \$200m. This was a fraction of its value of \$15bn just a year earlier – a year in which it was also voted the 'most admired' securities firm in a *Fortune Magazine* survey. Whilst the present crisis has its origins in the freezing of the credit markets in August 2007, the demise of the august house of Bear Stearns initiated a series of market panics that brought the entire global

financial structure close to systemic meltdown. (An event only just averted, as he is quick to remind us, by the timely intervention of Gordon Brown last October to "save the world").

The monetary events of the last eighteen months are well documented, and, in perspective, will be the subject of many learned treatises by brainy professors of economics and the like. As a sign of the times, sales of J K Galbraith's masterly account of Wall Street greed and folly, *The Great Crash 1929*, have leapt to the top of Amazon's

Who needs

The world economy is in a parlous state. But does political grandstanding – which can lead to duff new regulations – really provide any answers?



Do we really want poor legislation, cobbled together in a hurry? Are we going to get new regulations that will only serve the dubious purpose of distracting attention from the real, immediate decisions required to avert a global depression?

▶ bestseller list. There is no shortage of opinion – some informed, some less well informed – of what has led us to our present sorry economic state. Some consider it to be the end of capitalism, the death knell for a system that has failed. The mutterings of dear old Karl Marx (the inventor of communism, the mother and father of all failed political systems!) are getting a bit of an airing again in some circles. His critique of capitalism, that “profits are privatised, and risk is socialised” strikes a chord amongst those who are flailing around looking for someone to blame, and who

find an easy target in Sir Fred Goodwin’s £703,000 annual pension arrangements. But, attacking the City trader who may have just lost a big chunk of the bank’s paid-up capital – and yet keeps his bonus and his Ferrari – really only serves to divert the blame.

So what are policymakers doing to solve the woes afflicting the global economy? Not much, it seems, apart from joining the blame game, and building a strong case against the ‘bonus culture’ that encouraged proprietary traders to take excessive risks with

their banks’ money to chase short-term profits. Monetary regulators around the world are burning midnight oil to devise new sets of laws to prevent a re-run of the recent upheavals. Just in case we miss the point, the chief executive of the FSA is warning us to “be afraid”. Afraid of what? Of lightly regulated hedge fund managers who might bet the farm? But, a lot of the new measures being proposed are reactive, and the sound of stable doors being slammed shut after the horse has bolted is echoing around the regulators’ corridors.

Top of the regulators’ hit list,

unsurprisingly, are speculative investors and those who inhabit the murky regions of the ‘shadow banking system’ – creatures of the night such as hedge funds, private equity and their much detested ilk. Conversely, it can be argued that these investors oil many of the wheels of international finance, and have done much to improve the flow of capital around the world (something we desperately need right now). Also, market investigations have shown that hedge funds played virtually no role in the present financial crisis. The worst offenders have been the most heavily

politicians’ platitudes?

regulated financial institutions – large US, British and European commercial banks, including some in Germany that were not only closely regulated but government-owned.


Few people would deny that the heads of some commercial banks, driven like lemmings in the reckless pursuit of bigger profits, have brought us to the brink of disaster. Good, effective regulatory reform can – and should – take months to properly negotiate, but the current febrile atmosphere may result in a proper timescale being ditched in favour of new ‘knee jerk’ regulations being passed. Do we really want poor legislation, cobbled together in a hurry? Are we going to get new regulations that will only serve the dubious purpose of distracting attention from the real,

immediate decisions required to avert a global depression? It may placate the mob howling for bankers’ heads, and will largely serve to demonstrate that our politicians are indulging in their favourite pastime of announcing ‘initiatives’ – usually catchy sound bites that are poor substitutes for proper policy.

The G20 jamboree has just been upon us in London. Apart from a nice photo opportunity, cynics believe that the only real benefits from such gatherings are

to boost journalists’ expense accounts. But co-ordinated decisions need to be urgently made to stabilise the global financial system if we are to get off the slippery slope towards a full-blown depression. The omens are not good: many of the G20 governments seem to have completely divergent economic agendas. The UK wants to close down tax havens, Germany wants to regulate everything in sight, and no one has any clear idea about what America wants.

Ay, there’s the rub – American leadership is vital for reaching any kind of consensus on global economic policy. President Obama enjoys immense personal popularity and prestige, but he has so far failed to present a united and credible response to the worldwide financial crisis, or even to assemble a decent economic policy team. With clear American leadership, a co-ordinated global policy to pull us out of recession – government guarantees for recapitalised banks, public works programmes, credit expansion and so on – could quickly be agreed.

Rome is burning; but policymakers seem to be busy arguing over who gets to play the fiddle. President Obama needs to put on his shiny helmet and start synchronising the fire engines. 

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IS THERE ANYBODY IN?


Barack Obama may walk on water - but he's not so good at answering the phone. Last month everyone was rushing around frantically preparing for the G20 summit, except at the US Treasury where, according to leaks from the British Government, the phone just rings and rings and no one answers. They are a bit short staffed - President Obama is charged with appointing 18 new deputy and assistant Treasury secretaries, and so far he has nominated just two. That doesn't mean they will actually get the job; Congress and the media will have you swinging from a lamppost for trivial tax infringements (forgetting to pay a parking fine in 1982?), or even for having once worked on Wall Street.

THE ELEPHANT IN THE BUNKER

What's the best way to assess risk? We often ponder this tricky question, and sometimes like to remind ourselves of the (true) story of the professor of economics at Moscow University in 1941. In December of that year, as the city was subjected to a nightly barrage of shells and bombs from the encircling German armies, the population

decamped into Moscow's well-prepared air raid shelters. All except for the professor, who remained in his apartment, assuring his friends - "there are six million people in Moscow, therefore the risk of a bomb landing on me is statistically insignificant". One night, the professor was seen hurrying down into his local air raid shelter. When asked why he had changed his mind, he said - "there are six million people in Moscow - and one elephant. Last night, they got the elephant!" Which they had: Moscow Zoo's only tusker had sadly taken a direct hit from a Luftwaffe bomb.

BEDTIME READING FROM BEN

It's reassuring to know that the captain charged with keeping USS America off the rocks, Federal Reserve Chairman Ben Bernanke, is also acknowledged as one of the world's leading experts on the history of the Great Depression. He's a bit of an author, too, having written learned papers with snappy titles such as "Is Growth Exogenous? Taking Mankiw, Romer and Weil Seriously." Published by the National Bureau of Economic Research in 2001, if you're anxious to secure a copy. 

Dates for your diary

April	IRML Forums		
<p>Thursday, 16th April 2009 Investment Strategies to Protect Pension Fund Assets. Le Meridien Piccadilly, London http://www.spsconferences.com/conference_details.asp?confid=96</p>	<p>IRML will be holding monthly lunches where a variety of senior level market participants will be invited to discuss risk in an open forum, share their views and concerns and to have an opportunity to hear those of others.</p> <p>If you would be interested in attending any of the forums please R.S.V.P. to grazyna.krauze@irml.net.</p>	<p>24th June 2009 Venue: IRML Offices</p>	<p>21st October 2009 Venue: IRML Offices</p>
<p>Monday 20th April 2009 UCITS in Ireland Radisson SAS, Dublin www.ibc-events.com/ucitsireland</p>		<p>21st July 2009 Venue: IRML Offices</p>	<p>17th November 2009 Venue: IRML Offices</p>
<p>Tuesday 21st April 2009 Risk Management - for 'Sophisticated Funds' Radisson SAS, Dublin www.ibc-events.com/ucitsireland</p>		<p>19th May 2009 Venue: IRML Offices</p>	<p>22nd September 2009 Venue: IRML Offices</p>

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