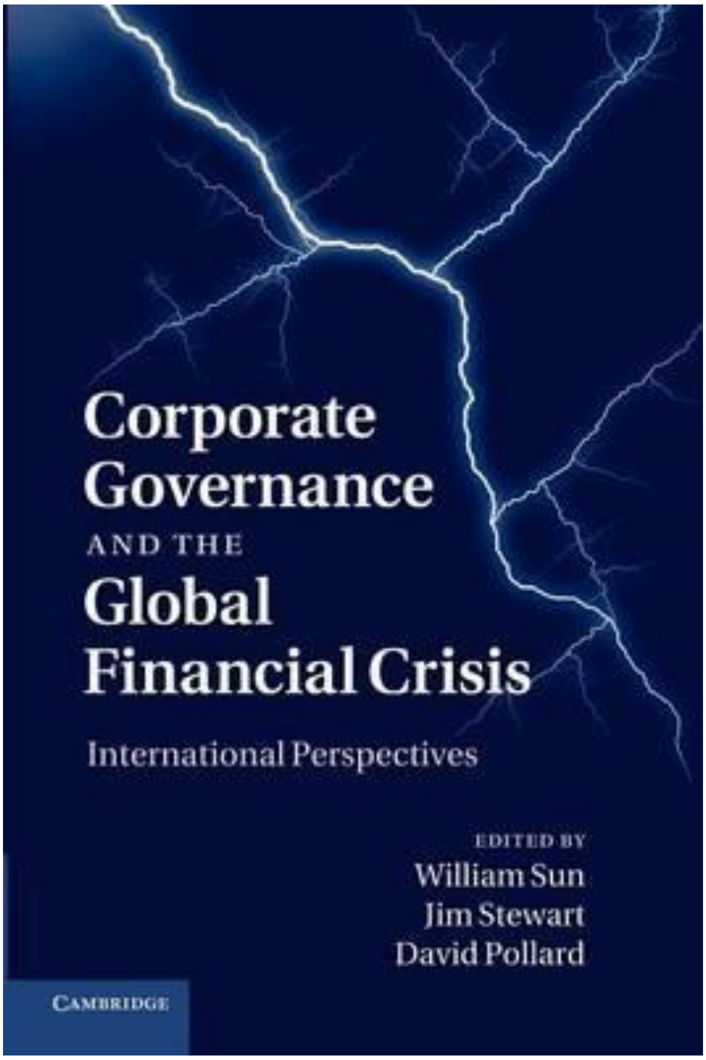
Corporate Governance
AND THE
Global Financial Crisis
International Perspectives
EDITED BY
William Sun
Jim Stewart
David Pollard
CAMBRIDGE

Corporate Governance and the Global Financial Crisis

Over the last two decades there has been a notable increase in the number of corporate governance codes and principles, as well as a range of improvements in structures and mechanisms. Despite this, corporate governance failed to prevent a widespread default of fiduciary duties of corporate boards and managerial responsibilities in the finance industry, which contributed to the 2007–2010 global financial crisis. This book brings together leading scholars from North America, Europe, Asia-Pacific and the Middle East to provide fresh and critical analytical insights on the systemic failures of corporate governance linked to the global financial crisis. Contributors draw from a range of disciplines to demonstrate the severe limitations of the dominant corporate governance framework and its associated market-oriented approach. They provide suggestions on how the governance problems could be tackled to prevent or mitigate any future financial crisis and explore new directions for post-crisis corporate governance research and reforms.

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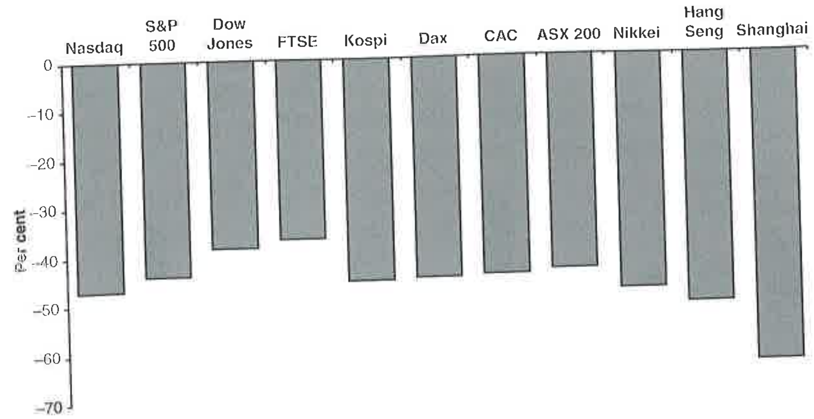
Contents

2 Corporate governance causes of the global financial crisis

THOMAS CLARKE

This chapter seeks to penetrate the catastrophe of the global financial crisis to examine its specifically corporate governance causes. The origins of the crisis in the enthusiasm for deregulation of financial institutions and markets, and the rapid growth of securitization, are explored. The huge explosion of global derivatives is considered as the context in which risk management and corporate governance were abandoned by major financial institutions. The role of the rating agencies and of executive incentives in encouraging rather than managing risk is investigated. Finally, the international effort to coordinate a regulatory response to the crisis is considered.

The apparent ascendancy of Anglo-American markets and governance institutions was profoundly questioned by the scale and contagion of the 2008 global financial crisis. 'America's financial institutions have not managed risk; they have created it' (Stiglitz, 2008). The crisis was initiated by falling house prices and rising mortgage default rates in the highly inflated US housing market. A severe credit crisis developed through 2007 into 2008 as financial institutions became fearful of the potential scale of the subprime mortgages concealed in the securities they had bought. As a result, banks refused to lend to each other because of increased counterparty risk that other banks might default. A solvency crisis ensued as banks were slow to admit to the great holes in their accounts that the subprime mortgages had caused (partly because they were themselves unaware of the seriousness of the problem) and the difficulty in raising capital to restore their balance sheets. As an increasing number of financial institutions collapsed in the United States, the UK and Europe, successive government efforts to rescue individual institutions, and to offer general support for the financial system, did not succeed in restoring confidence as markets continued in free-fall, with stock exchanges across the world losing almost half their value (Figure 2.1).



Source: Stock exchanges

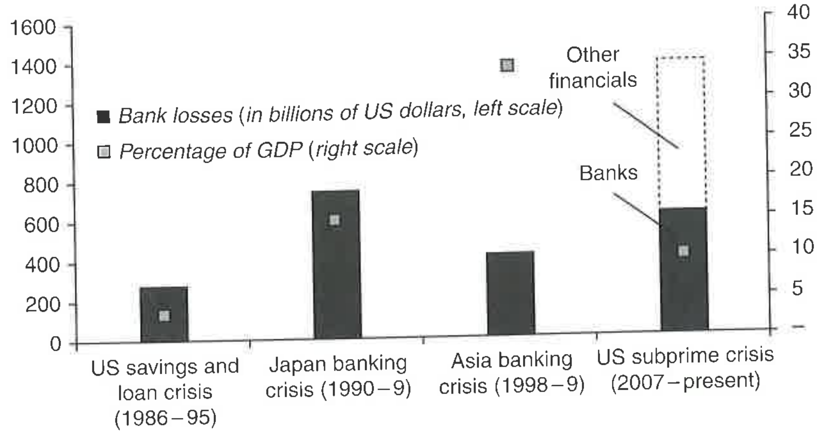
Figure 2.1 Collapsing stock exchanges in 2008 global financial crisis (year to December 2008)

Financial insecurity rapidly became contagious internationally as fears of a global economic recession became widespread and stock markets around the world crashed. This financial crisis was larger in scale than any crisis since the 1930s Great Depression, involving bank losses conservatively estimated in October 2008 by the IMF (2008) as potentially $1,400 billion dollars, eclipsing earlier crises in Asia, Japan and the United States (Figure 2.2). Martin Wolf was quick to realize the implications of the crisis, as he put it in the *Financial Times* (5 September 2007):

> We are living through the first crisis of the brave new world of securitised financial markets. It is too early to tell how economically important the upheaval will prove. But nobody can doubt its significance for the financial system. Its origins lie with credit expansion and financial innovations in the US itself. It cannot be blamed on 'crony capitalism' in peripheral economies, but rather on responsibility in the core of the world economy.

Origins of the crisis

In the cyclical way markets work, the origins of the 2008 financial crisis may be found in the solutions to the previous market crisis. The US Federal Reserve, under the sage Alan Greenspan, responded to the collapse of confidence caused by the dot-com disaster and Enron failures in 2001/2 by reducing US interest rates to 1 per cent, their



Note: US subprime costs represent staff estimates of losses on banks and other financial institutions. All costs are in real 2007 dollars. Asia includes Indonesia, Malaysia, Korea, the Philippines and Thailand.
Sources: World Bank; IMF staff estimates.

Figure 2.2 Comparison of international financial crises

lowest in forty-five years, flooding the market with cheap credit to jump-start the economy back into life. US business did recover faster than expected, but the cheap credit had washed into the financial services and housing sectors, producing the largest speculative bubbles ever witnessed in the American economy (Fleckenstein, 2008). The scene was set by the 1999 dismantling of the 1932 Glass-Steagall Act which had separated commercial banking from investment banking and insurance services, opening the way for a consolidation of the vastly expanding and increasingly competitive US financial services industry. Phillips (2008, p. 5) describes this as a 'burgeoning debt and credit complex': 'Vendors of credit cards, issuers of mortgages and bonds, architects of asset-backed securities and structured investment vehicles – occupied the leading edge. The behemoth financial conglomerates, Citigroup, JP Morgan Chase et al., were liberated in 1999 for the first time since the 1930s to marshal banking, insurance, securities, and real estate under a single, vaulting institutional roof.'

In this newly emboldened finance sector the name of the game was *leverage* – the capacity to access vast amounts of credit cheaply to take over businesses and to do deals. Wall Street investment banks and hedge funds flourished with their new-found access to cheap credit. Exotic financial instruments were devised and marketed

internationally: futures, options and swaps evolved into collateralized debt obligations (CDOs), credit default swaps (CDSs) and many other acronyms, all of which packaged vast amounts of debt to be traded on the securities markets. Abandoning their traditional financial conservatism, banks looked beyond taking deposits and lending to the new businesses of wealth management, and eagerly adopted new instruments and business models. As the IMF put it:

> Banking systems in the major countries have gone through a process of disintermediation – that is, a greater share of financial intermediation is now taking place through tradable securities (rather than bank loans and deposits) . . . Banks have increasingly moved financial risks (especially credit risks) off their balance sheets and into securities markets – for example, by pooling and converting assets into tradable securities and entering into interest rate swaps and other derivatives transactions – in response both to regulatory incentives such as capital requirements and to internal incentives to improve risk-adjusted returns on capital for shareholders and to be more competitive . . . Securitization makes the pricing and allocation of capital more efficient because changes in financial risks are reflected much more quickly in asset prices and flows than on bank balance sheets. The downside is that markets have become more volatile, and this volatility could pose a threat to financial stability. (IMF, 2002, p. 3)

Global derivatives markets

As the new financial instruments were developed and marketed, the securities markets grew massively in the 2000s, dwarfing the growth of the real economy. For example, according to the Bank of International Settlements, the global derivatives markets grew at the rate of 32 per cent per annum from 1990, and the notional amount of derivatives reached $106 trillion by 2002, $477 trillion by 2006, and exceeded $531 trillion by 2008 (though gross market value is a small fraction of this) (McKinsey & Company, 2008, p. 20). The supposed purpose of this increasingly massive exercise was to hedge risk and add liquidity to the financial system. Derivatives allow financial institutions and corporations to take greater and more complex risks such as issuing more mortgages and corporate debt, because they may protect debt holders against losses. Since derivatives contracts are widely traded, risk may be further limited, though this increases the number of parties exposed if defaults occur.

> Complex derivatives were at the heart of the credit market turmoil that rippled through financial markets in 2007, raising concerns about the financial players' abilities to manage risk as capital markets rapidly evolve. Unlike equities, debt securities and bank deposits, which represent financial claims against future earnings by households and companies, derivatives are risk-shifting agreements among financial market participants. (McKinsey & Company, 2008, p. 20)

Because of this fundamental difference and indeterminacy McKinsey did not include derivatives in their calculation of the value of global financial assets, an indication of the ephemeral quality of derivatives. Yet derivatives certainly have their defenders who claim they make an essential contribution to international liquidity. A riveting analysis of the legacy of the former Chairman of the Federal Reserve in *The New York Times*, detailed how Alan Greenspan defended derivatives markets as an innovation helping to develop and stabilize the international financial system: 'Not only have individual financial institutions become less vulnerable to shocks from underlying risk factors, but also the financial system as a whole has become more resilient.' Others were less sanguine, and both George Soros and Warren Buffett avoided investing in derivatives contracts because of their impenetrable complexity. Buffett described derivatives in 2003 as 'financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal', and pointed out that collateralized debt obligation contracts could stretch to 750,000 pages of impenetrable (and presumably unread) text (*The New York Times*, 8 October 2008).

Greenspan was sceptical about successive legislative efforts to regulate derivatives in the 1990s. Charles A. Bowsher, Head of the General Accounting Office, commenting on a report to Congress identifying significant weaknesses in the regulatory oversight of derivatives, said in testimony to the House Sub-Committee on Telecommunications and Finance in 1994: 'The sudden failure or abrupt withdrawal from trading of any of these large U.S. dealers could cause liquidity problems in the markets and could also pose risks to others, including federally insured banks and the financial system as a whole. In some cases intervention has and could result in a financial bailout paid for or guaranteed by taxpayers.' In his testimony at the time, Greenspan was reassuring: 'Risks in financial markets, including derivatives markets, are being regulated by private parties. There is nothing involved in federal regulation per se which makes it superior to market regulation', though he did accept derivatives could amplify crises because they connect together financial institutions: 'The very efficiency that is involved here means that if a crisis were to occur, that that crisis is transmitted at a far faster pace and with some greater virulence.' When the Commodity Futures Trading Commission, the federal agency which regulates options and futures trading examined derivatives regulation in 1997, the head of the Commission, Brooksley E. Born, said in testimony to Congress that such opaque trading might 'threaten our regulated markets or, indeed, our economy without any federal agency knowing about it', but she was chastised for taking steps that would lead to a financial crisis by Treasury officials (*The New York Times*, 8 October 2008). The explosive potential of derivatives was always present, as the implosion of the hedge fund Long Term Capital Management (LTCM) in 1998 revealed. With equity of $4.72 billion and debt of $124 billion LTCM had managed to secure off-balance sheet derivative positions of $1.29 trillion (mostly in interest rate swaps). The rescue of LTCM by a consortium of banks led by the Federal Reserve Bank of New York, in order to maintain the integrity of the financial system, was a harbinger of how a decade later on massive systemic financial risk-taking would be rescued by governments after the event, rather than regulated by governments before the event.

The corporate governance causes of the crisis

The explanation of why investment banks and other financial institutions took such spectacular risks with extremely leveraged positions on many securities and derivatives, and the risk management, governance and ethical environment that allowed such conduct to take place, is worth detailed analysis. Nobody imagined the scale of the tragedy that befell Wall Street's leading investment banks. 'Wall Street: RIP', pronounced *The New York Times* (28 September 2008). 'A world of big egos. A world where people love to roll the dice with borrowed money, of tightwire trading, propelled by computers . . . that world is largely coming to an end.' Replacing the triumphal past was disillusion and disorientation: 'Enthusiasm was gone from Wall Street yesterday, replaced by a febrile uncertainty and a foreboding that 2008 might turn into 1929' (*Times Online*, 1 October 2008). No one had imagined this all could happen this quickly, or could anticipate when it might end. Before the end of October 2008 more than half a trillion dollars had been lost in subprime investments by major international banks (Table 2.1).

Table 2.1 *Subprime losses by international banks October 2008*

	Company	Country	($US bn)
1	Citigroup	US	66.6
2	Merrill Lynch	US	54.6
3	Wachovia	US	52.7
4	Washington Mutual	US	45.6
5	UBS	Switzerland	44.2
6	HSBC	UK	27.4
7	Bank of America	US	21.2
8	JP Morgan Chase	US	18.8
9	Lehman Brothers	US	18.2
10	AIG	US	16.8
11	Royal Bank of Scotland	UK	16.5
12	Morgan Stanley	US	15.7
13	IKB Deutsche	Germany	14.7
14	Fannie Mae	US	12.7
15	Deutsche Bank	Germany	11.4
16	Ambac	US	10.3
17	Wells Fargo	US	10
18	MBIA Inc	US	9.4
19	Barclays	UK	9.2
20	Credit Agricole	France	8.6
21	Credit Suisse	Switzerland	8.1
22	HBOS	UK	7.5
23	Canadian Imperial Bank of Commerce	Canada	7.1
24	Fortis	Belgium/Netherlands	6.9
25	Bayerische Landesbank	Germany	6.7
26	Freddie Mac	US	6.7
27	ING	Netherlands	6.5
28	Société Générale	France	6.4
29	Mizuho Financial Group	Japan	6.2
30	Dresdner Bank	Germany	5
31	Bear Sterns	US	3.4
32	WestLB	Germany	3.1
33	BNP Paribas	France	2.7
34	UniCredit	Italy	2.7
35	Lloyds TSB	UK	2.6
36	Nomura Holdings	Japan	2.5
37	DZ Bank	Germany	2
38	Natixis	France	2
39	Swiss Re	Switzerland	1.8

Table 2.1 (*cont.*)

	Company	Country	($US bn)
40	HSH Nordbank	Germany	1.7
41	LBBW	Germany	1.7
42	Commerzbank	Germany	1.2
43	Mitsubishi UFJ	Japan	1.2
44	Sumitomo	Japan	1.2
45	AXA	France	1.1
Total losses			582.60

Sources: Individual banks; central banks.

Masters of the Universe

Each financial boom is associated not only with reckless risk-taking and wildly inflated rewards, but an indulgent culture proclaiming the new Masters of the Universe. Tom Wolfe coined this phrase (based on a children's comic book) for financial *parvenus* in the middle of the 1987 boom in his book *The Bonfire of the Vanities*.[1] The hubris returned a decade later with the NASDAQ boom, and the posturing of the executives of Enron, Worldcom and other companies who, in strenuous self-promotion, declared they were leading the best companies in the world, before they ran out of funds and then ran out of hype as they faced the courts. With the recovery of US financial markets after the Enron debacle, the explosion of financial innovation gave the world a new breed of Masters of the Universe in the derivatives dealers and hedge fund managers who manipulated trillions of dollars, while charging immense fees. This long financial boom of recent years saw the culture of financial excess permeate through swathes of the rich industrial countries as people were encouraged to live on debt with escalating mortgages and multiplying credit cards.

Symptomatic of the humiliating fall from assumed greatness was the end of Lehman Brothers, a 158-year-old Wall Street institution forced into bankruptcy by an incapacity to face reality. Lehman's had failed before in 1984, selling itself to American Express at a discount price (Auletta, 1986). The Chairman at the time, Lewis L. Glucksman, said, 'We never made a culture where people were concerned with the firm and not just each other. We had a level of greed here and personal selfishness that was disgraceful' (*The New York Times*, 19 January 1986). Later Richard S. Fuld became Chief Executive, returning Lehman's back to being an independent bank in 1994. Lehman's was the fourth largest investment bank on Wall Street and was a self-proclaimed 'innovator in global finance'.

As the Wall Street investment banks stumbled, Fuld had dinner with Henry Paulson in April 2008 and came away thinking Lehman's had a 'huge brand' with the US Treasury. The announcement of a first quarter 2008 loss of $2.8 million and a larger second quarter loss of $3.9 billion exposed the weaknesses in Lehman's position. As Fuld cast about for a white knight to invest in the firm in the United States, Europe and among Asian sovereign wealth funds, Lehman's was publicly presenting a rosy view of its future. After the company collapsed, three separate federal investigations began into the conduct of Lehman's in the final months, and Fuld was hauled in front of the US Congress House of Representatives oversight committee. Democratic congressman John Sarbanes, referring to a June 2008 statement in which Fuld insisted the company's liquidity was strong, said, 'Either he has lost all perspective and is completely clueless or he is quite savvy and deceiving people' (*Financial Times*; *The New York Times*, 6 October 2008).

Deregulation

Financial institutions are critical to the operation of any economy, and traditionally subject to a framework of firm regulation, however as the financialization of the US and international economy proceeded, paradoxically the regulatory touch lightened considerably. In the words of one US finance expert in the years before the crisis:

> We were developing a system of very large, highly levered, undercapitalized financial institutions – including the investment banks, some large money centre banks, the insurance companies with large derivative books and the government-sponsored entities . . . Regulators believe that all of these are too big to fail and would bail them out if necessary. The owners, employees and creditors of these institutions are rewarded when they succeed, but it is all of us – the taxpayers – who are left on the hook if they fail. This is called private profits and socialized risk. Heads, I win. Tails, you lose. It is a reverse Robin Hood system. (Einhorn, 2008a, pp. 16–17)

The abolition of the Glass-Steagall Act in 1999 paved the way for a regulatory loosening of the US financial system, enhanced in 2004 by a new SEC rule intended to reduce regulatory costs for broker-dealers that were part of consolidated supervised entities. Essentially this involved large broker-dealers using their own risk-management practices for regulatory purposes, enabling a lowering of their capital requirements (the core capital which a bank is required to hold to support its risk-taking activities, which normally includes share capital, share premium and retained earnings). In addition the SEC amended the definition of net capital to include securities for which there was no ready market, and to include hybrid capital instruments and certain deferred tax assets, reducing the amount of capital required to engage in high risk activities. Finally the rule eased the calculations of counterparty risk, maximum potential exposures and margin lending, and allowed broker-dealers to assign their own credit ratings to unrated companies. Einhorn comments on this regulatory capitulation of the SEC: 'Large broker-dealers convinced the regulators that the dealers could better measure their own risks, and with fancy math, they attempted to show that they could support more risk with less capital. I suspect that the SEC took the point of view that these were all large, well-capitalized institutions, with smart, sophisticated risk managers who had no incentive to try to fail. Consequently, they gave the industry the benefit of the doubt' (2008a, p. 16).

Rating agencies

As international financial markets have expanded, the role of the credit rating agencies (CRAs) has proved critical. The International Organization of Securities Commissions (IOSCO) claims that

> CRAs assess the credit risk of corporate or government borrowers and issuers of fixed-income securities. CRAs attempt to make sense of the vast amount of information available regarding an issuer or borrower, its market and its economic circumstances in order to give investors and lenders a better understanding of the risks they face when lending to a particular borrower or when purchasing an issuer's fixed-income securities. A credit rating, typically, is a CRA's opinion of how likely an issuer is to repay, in a timely fashion, a particular debt or financial obligation, or its debts generally. (2003, p. 1)

Yet the question asked by everybody when the financial crisis erupted was how could asset-backed securities containing subprime mortgages and other high risk debt possibly be given AA credit ratings by Standard and Poor's or Moody's?

The answer was again that financial innovation had outpaced regulatory prowess. The rating agencies, instead of monitoring rigorously the growth of financial markets and instruments, had become junior partners in this enterprise. Coffee (2006) in his critique of the failure of the gatekeeper professions in US corporate governance, including auditors, corporate lawyers and securities analysts, raises the following issues regarding rating agencies:

Concentration

Given the immense capacity of the rating agencies to influence the fortunes of financial institutions and instruments in terms of the public perception of risk, they have maintained a highly profitable duopoly with Standard and Poor's Ratings Services and Moody's Investor Services, only recently joined by Fitch Investor Services for specialised submarkets. The SEC has supported this entrenched market position, reinforced by a reputational capital only now being challenged.

Conflicts of interest

Traditionally the rating agencies rated thousands of clients in the corporate debt business with little chance of being captured by single clients. However, as the importance of the structured debt market grew, there were only a few investment banks active but the scale of the market grew exponentially. From the 1970s the rating agencies business changed from their revenue coming from subscribers for their ratings services, to their revenue coming from the issuers of debt products, creating a context for capture by clients' interests.

Complex financial products

Rating corporate debt utilizing corporate financial history and audited financial statements is less difficult than complex structured finance products issued by investment banks. Understanding the nature of the underlying assets and cash flows generated by these assets, and the risks involved over time, is a major undertaking. The rating agencies deny any obligation to do due diligence on the portfolio backing structured finance products.

Timing and relevance

Even if the rating agencies were close in their original rating, they do not review how a debt product may change over time in different market conditions, and rating agencies were slow to downgrade subprime asset backed securities (Coffee, 2006; Scott 2008, pp. 23–4).

The rating agencies believed in the investment banks of Wall Street, and in their risk controls, and assumed that 'everything was hedged'. Though the CRAs do have the power to review non-public information to assess the creditworthiness of institutions and securities, they did not have the inclination, manpower or skills to do this thoroughly in all cases, and they did not get paid until they gave a rating.

> The market perceives the rating agencies to be doing much more than they actually do. The agencies themselves don't directly misinform the market, but they don't disabuse the market of misperceptions – often spread by the rated entities – that the agencies do more than they actually do. This creates a false sense of security, and in times of stress, this actually makes the problems worse. Had the credit rating agencies been doing a reasonable job of disciplining the investment banks – which unfortunately happen to bring the rating agencies lots of other business – then the banks may have been prevented from taking excess risk and the current crisis might have been averted. (Einhorn, 2008a, p. 13)

Risk management

Financial businesses' activities in rapidly changing markets are highly sensitive to variance, and it might be expected that as the financial services industries have grown inexorably and financial products have become more complex, the sophistication of risk management techniques will have developed in parallel. However the reality is that innovation in financial products has far exceeded the capacity of risk management measurement and monitoring tools to gauge risk. The most widely employed risk management tool is value-at-risk (VaR), which measures how much a portfolio stands to make or lose in 99 per cent of the days. But as Einhorn argues, this measure ignores what might happen at the moment of greatest risk:

> A risk manager's job is to worry about whether the bank is putting itself at risk in the unusual times – or, in statistical terms, in the tails of distribution. Yet, VaR ignores what happens in the tails. It specifically cuts them off.

> A 99 per cent VaR calculation does not evaluate what happens in the last 1 per cent. This, in my view, makes VaR relatively useless as a risk management tool and potentially catastrophic when its use creates a false sense of security among senior managers and watchdogs. This is like an airbag that works all the time, except when you have a car accident. By ignoring the tails, VaR creates an incentive to take excessive but remote risks. (Einhorn, 2008a, p. 11)

Yet VaR was the tool international finance industries relied upon in transactions involving billions of dollars. For example UBS was the European bank with the largest losses from the crisis, involving the Swiss government and central bank providing an aid package of $59.2 billion to take risky debt securities from its balance sheet. In a report to shareholders published in April 2008, UBS laid bare the risk management failings that had led to such immense losses (though wealthy clients continued to desert the bank in droves, withdrawing $58 billion in the third quarter of 2008). The report highlights in worrying detail the incomplete risk control methodologies, with market risk control (MRC) placing considerable reliance on VaR and stress limits to control the risks of the business, without implementing additional risk methodologies, or aggregating notional limits even when losses were made (2008a, p. 13):

(1) Mortgage portfolio trades were certified by the UBS investment bank's quantitative risk control: '[B]ut with the benefit of hindsight appears not to have been subject to sufficiently robust stress testing. Further, the collateralised debt obligation desk did not carry out sufficient fundamental analysis as market conditions deteriorated . . .' (2008a, p. 30).

(2) With regard to asset-backed securities trading, also, there were incomplete risk control methodologies. 'There was considerable reliance on AA/AAA ratings and sector concentration limits which did not take into account the fact that more than 95 per cent of the asset backed securities trading portfolio was referencing US underlying assets (i.e. mortgage loans, auto loans, credit card debt etc)' (2008a, p. 32).

(3) In fixed income there was a growth orientation: 'The investment bank was focused on the maximisation of revenue. There appears to have been a lack of challenge on the risk and reward to business area plans within the investment bank at a senior level. UBS's review suggests an asymmetric focus in the investment bank senior management meetings on revenue and profit and loss, especially when compared to discussion of risk issues. Business-peer challenge was not a routine practice in those meetings . . . Inappropriate risk metrics were used in strategic planning and assessment. Investment Bank planning relied on VaR, which appears as the key risk parameter in the planning process. When the market dislocation unfolded, it became apparent that this risk measure methodology had not appropriately captured the risk inherent in the business having subprime exposures' (2008, p. 34).

(4) With regard to UBS group governance there was: '[F]ailure to demand a holistic assessment. Whilst group senior management was alert to the general issues concerning the deteriorating US housing market, they did not demand a holistic presentation of UBS's exposure to securities referencing US real estate assets before July 2007, even though such an assessment may have been warranted earlier in view of the size of UBS's real estate assets' (2008, p. 35).

(5) The report concluded with reference to risk control that there was over-reliance on VaR and stress: 'MRC relied on VaR and stress numbers, even though delinquency rates were increasing and origination standards were falling in the US mortgage market. It continued to do so throughout the build-up of significant positions in subprime assets that were only partially hedged. Presentations of MRC to UBS's senior governance bodies did not provide adequate granularity of subprime positions UBS held in its various businesses. No warnings were given to group senior management about the limitations of the presented numbers or the need to look at the broader contextual framework and the findings were not challenged with perseverance' (2008, p. 39).

(6) Finally the report condemned the lack of independence and healthy scepticism in UBS governance: 'Fundamental analysis of the subprime market seems to have been generally based on the business view and less on MRC's independent assessment. In particular there is no indication that MRC was seeking views from other sources than business . . . Further, risk systems and infrastructure were not improved because of a willingness by the risk function to support growth' (2008, pp. 39–40).

Incentivization

The final and most critical part of the explanation of why investment banks and other financial institutions took such extreme risks with highly leveraged positions in complex securities, neglecting risk management, governance principles, and often basic business ethics, was that *they were highly incentivized to do so*. Massively incentivized irresponsibility became the operating compensation norm in the financial community, as banks and fringe financial institutions chased the super profits available as global financial markets expanded exponentially.

> The management teams at the investment banks did exactly what they were incentivized to do: maximize employee compensation. Investment banks pay out 50% of revenues as compensation. So, more leverage means more revenues, which means more compensation. In good times, once they pay out the compensation, overhead and taxes, only a fraction of the incremental revenues fall to the bottom line for shareholders. The banks have done a wonderful job at public relations. Everyone knows about the 20% incentive fees in the hedge fund and private equity industry. Nobody talks about the investment banks' 50% compensation structures, which have no high-water mark and actually are exceeded in difficult times in order to retain talent. (Einhorn, 2008a, p. 11)

The report on the vast write-downs at UBS examines how the compensation structure directly generated the behaviour which caused the losses, as staff were motivated to utilize the low cost of funding to invest in subprime positions.

> Employee incentivization arrangements did not differentiate between return generated by skill in creating additional returns versus returns made from exploiting UBS's comparatively low cost of funding in what were essentially carry trades . . . The relatively high yield attributable to subprime made this asset class an attractive long position for carry trades. Further, the UBS funding framework amplified the incentives to pursue compensation through profitable carry trades. The compensation structure generally made little recognition of risk issues or adjustment for risk/other qualitative indicators (e.g., for group internal audit ratings, operational risk indicators, compliance issues etc.). (Einhorn, 2008a)

As a result there were insufficient incentives to protect the UBS franchise for the longer term; 'it remains the case that bonus payments for successful and senior international business fixed income traders,

including those in the businesses holding subprime positions were significant. Essentially, bonuses were measured against gross revenue after personnel costs, with no formal account taken of the quality and sustainability of those earnings' (2008a, p. 42).

Regulation and governance of financial institutions

While the accumulated cost of the global financial crisis was being realized, the commitment to establish a new international financial regulatory framework increased. As the costs of all forms of intervention to alleviate the crisis by the US government ballooned out to $7.7 trillion (including credit discounts, credit extensions, securities lending, term auction facilities, portfolio funding, money market funding, TARP, assistance to specific institutions, economic stimulus packages and homeowner assistance), the general market assistance and specific rescue packages for individual financial institutions amounted to almost $11 trillion worldwide by October 2008 (Table 2.2). While these funds could be regarded as a temporary investment in the financial economy, with the hope of recouping much of the funds back at a later stage, this was an optimistic view when the crisis spread to other sectors of the economy. As the financial crisis impacted upon the real economy the fears of a prolonged recession grew, with US industrial production falling further than it had for over thirty years, and, for example, the US automotive industry becoming increasingly precarious, announcing further major redundancies and looking for support from the federal government (including support from the assistance intended for financial institutions, since the automotive companies had also become finance companies). The International Labour Organization in Geneva estimated that up to twenty million people in the world would lose their employment as a consequence of the financial crisis, and that for the first time in a decade the global total of unemployed would be above 200 million (*Associated Press*, 21 October 2008). The prospect of the whole world falling into recession at the same time became possible, something not witnessed since the 1930s.

There was a widespread sense that this regulatory failure of financial markets could not be allowed to occur again. The Chancellor of Germany, usually a stalwart ally of President Bush, derided the lack of regulation which, in her view, allowed the financial crisis to erupt in the United States and seep inexorably towards Europe. She reminded

Table 2.2 *Government support for global financial crisis 2008*

	$US
Europe	1.8 trillion
UK	856 billion
US	7.74 trillion
Sweden	205 billion
South Korea	130 billion
Australia	10.4 billion
Rest of the world	105.12 billion
Total	10.85 trillion

Source: Compiled from: BBC, 'Credit crisis: world in turmoil', available at http://news.bbc.co.uk/2/hi/business/7654647.stm and IMF, 'Global financial stability report', October 2008, available at www.imf.org/external/pubs/ft/gfsr/2008/02/ index.htm.

the German public that the United States and Britain rejected her proposals in 2007 for regulating international hedge funds and bond ratings agencies. 'It was said for a long time, "Let the markets take care of themselves",' Merkel commented. 'Now,' she added, 'even America and Britain are saying, "Yes, we need more transparency, we need better standards."' Germany's finance minister, Peer Steinbrueck, said that the 'Anglo-Saxon' capitalist system had run its course and that 'new rules of the road' are needed, including greater global regulation of capital markets (*The Washington Post*, 28 September 2008). Gordon Brown and Nicolas Sarkozy called for a Bretton Woods agreement for the twenty-first century, aimed at rebuilding the international financial system. Though the economic summit meeting of leaders of the G20 countries was arranged for Washington in November 2008, it was clear George Bush would not be taking the lead in this initiative. Yet something of a sea-change was occurring in US domestic politics in response to the financial crisis and with the sweeping election to the US presidency of Barack Obama. The experience of Congress and the White House equivocating about a rescue package of buying securities had made a deeply unfavourable impression on the US public. The UK government had recognized the deeper problem of a lack of confidence in the banks themselves, which was resolved by governments becoming the investor of last resort and

the guarantor of loans between banks, and it was the adoption of a similar strategy by the US government that finally staunched the panic on Wall Street. As Andrew Moravcsik, professor of politics and international affairs at Princeton University, suggested, 'Americans, especially conservatives, have a particular view of Europe as over-regulated, therefore suffering from weak growth and Euro-sclerosis. This could change that view and create more respect for the European view of regulation more generally' (*Australian Financial Review*, 20 October 2008).

A problem in devising a new financial regulatory architecture was that Bretton Woods in 1944, though it established the International Monetary Fund and the World Bank, was essentially dealing with national financial markets. Digital and interconnected global financial markets presented a much bigger challenge. A series of measures was proposed by Gordon Brown:

(1) Improving risk disclosure by financial institutions was fundamental, together with stricter rules on bank liquidity and leveraging.
(2) Ensuring banks take bigger stakes in any loans they pass on to others through securitization might constrain irresponsible innovations.
(3) Establishing a central clearing house for complex derivatives could help to discipline their use.
(4) Increased supervision and regulation might include new standards for off-balance sheet accounting, and supervision of the largest international banks and insurance companies.
(5) Reforming executive compensation structures that encouraged excessive risk-taking and aligning reward with long-term value creation was another imperative.
(6) Finally a capacity to police the potential for future dangers to the international economy and the means of cooperation for future crises were important (*The Times*, 16 October 2008).

These principles for reforming international financial markets were broadly supported in Europe, and had public resonance in the United States where it was argued the rapid expansion of unregulated financial institutions and instruments from hedge funds to credit default swaps should be contained by extending financial reserve requirements, limiting leveraging and ensuring trading occurred on public exchanges (*The Wall Street Journal*, 25 July 2008; IPS 2008). With the international financial community still in a state of profound shock, and heavily dependent upon state aid, any protests about the dangers of over-regulation were muted. Adair Turner, head of the Financial Services Authority (FSA) in the UK (responsible for regulating financial institutions), commented:

If a year and a half ago, the FSA had wanted higher capital adequacy, more information on liquidity, had said it was worried about the business models at Bradford & Bingley and Northern Rock, and had wanted to ask questions about remuneration, the fact is that we would have been strongly criticized for harming the competitiveness of the City of London, red tape, and over-regulation. We are now in a different environment. We shouldn't regulate for its own sake, but over-regulation and red tape has been used as a polemical bludgeon. We have probably been over-deferential to that rhetoric. (*The Guardian*, 16 October 2008)

However the question is: will the deference of regulators return when financial markets recover, and financial institutions and markets are free again to pursue their self-interest? An early indication of how entrenched the irresponsibility of the financial sector had become was the astonishing news that the surviving US financial institutions were preparing to pay end of year executive bonuses approximately equivalent to the billions of dollars of aid they had just received from Congress. While the US economy was collapsing around them, and the US public were becoming increasingly concerned how they might survive a severe recession, the executives of major banks seemed focused primarily on maintaining their bonuses.

Note

1. Oliver Stone's iconic movie *Wall Street*, set in this period, was supposed to be about crime and punishment on Wall Street, but Michael Douglas, playing the ruthless takeover magnate Gordon Gekko, who won an Oscar for his 'Greed is Good' speech, now cannot have breakfast in New York without being approached by young men saying it was seeing the movie that made them want to become Wall Street traders.

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