The 2008 Financial Crisis
A Wake-up Call for Enterprise Risk Management

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The 2008 Financial Crisis: A Wake-up Call for Enterprise Risk Management

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For years, ordinary investors, encouraged by financial advisors and employers, have relied upon the securities and mutual funds held in their IRA and 401(k) accounts to retire comfortably. But all of that changed over the last 18 months, as the subprime lending crisis evolved into a full market meltdown in the second half of 2008. In short order, nearly all of Wall Street’s major investment firms had either collapsed or suffered staggering losses. Even insurance giant AIG had to secure an emergency loan from the federal government in order to avoid bankruptcy following collateral calls based on the decline of the mortgage securities underlying its credit-default-swap protection products for collateralized-debt obligations, or CDOs.\(^1\) In fact, at the end of 2008, the federal government pledged more money to bail out the financial services industry (as well as other segments of the economy) than it spent on the Louisiana Purchase, the New Deal, the Marshall Plan, the Korean War, the Vietnam War, the Savings and Loan Crisis, Operation Iraqi Freedom, and NASA’s lifetime budget combined.\(^2\)

In the aftermath of such incredible market turmoil, everyday investors are left wondering how the actions taken by mid-level traders in some of the world’s most prestigious financial institutions could cause not only the collapse of companies the likes of Bear Sterns and Lehman Brothers, but a wider market meltdown that has all but obliterated many personal wealth accounts. And they are not alone.

Board members and shareholders alike have expressed their outrage as companies have taken billion-dollar write downs on transactions that were calculated as remote risks in financial models created by prize-winning PhDs. Audit committees are questioning why audit risk assessments, conventional financial controls and corporate compliance activities did not reveal the extent of the potential collapse, particularly with so much emphasis given to Sarbanes-Oxley financial controls and compliance efforts.

Even former Federal Reserve Chairman Alan Greenspan has found himself explaining to congressional members that he did not expect the rapid and steep decline in market values of real estate and securities.\(^3\) After all, historical experience and conventional assumptions made no case for the kind of seismic tumult that rocked the financial markets.

\(^3\) “Greenspan Concedes Error on Regulation,” NYTimes.com, October 24, 2008
\(^6\) “Banks, Not Insurers, Need Tighter U.S. Laws Says Hartwig,” National Underwriter, 11/21/08

Some Say the Financial Crisis is a Failure of Risk Management …

In late 2007, articles in the mainstream media put the blame squarely on poor risk management practices.\(^4\) In mid-2008, as the extent of AIG’s difficulties began to emerge, Maurice “Hank” Greenberg, former chairman and CEO of AIG, blamed AIG’s 2008 financial meltdown on the failure of internal risk management. “Reports indicate that the risk controls my team and I put in place were weakened or eliminated after my retirement,” he wrote in a statement for an October 2008 hearing by the House Committee on Oversight and Government Reform.\(^5\)

In light of so many financial failures, Robert P. Hartwig, president of the Insurance Information Institute, lashed out at current enterprise risk management frameworks when he said that “the financial crisis is the result of a failure of risk management [in the banking and securities markets] on a colossal scale …. We may literally have to tear up the manual of enterprise risk management and start over. How did so many major financial players miss or overlook such huge, systemic exposures?”\(^6\)

In the pursuit of accountability, additional questions continue to be asked: Where were the risk managers? Why did the CFOs and Treasurers not highlight these risks? Where were the internal and external auditors? Why were executives and boards not exercising more oversight? Did the rating agencies fail to adequately understand, assess and report on risks taken by these companies? Where were the regulators? In short, who should have been protecting investors against these unintended consequences?

Was there a risk management failure?
While it is certainly easy—and perhaps even gratifying to some—simply to lay the blame for these failures on risk management, a closer look reveals that these issues did not arise from a failure of risk management as a business discipline.

Rather, the Risk and Insurance Management Society (RIMS) contends that the financial crisis resulted from a system-wide failure to embrace appropriate enterprise risk management behaviors—or attributes—within these distressed organizations.

Additionally, there was an apparent failure to develop and reward internal risk management competencies. From the board room to the trading floor, individuals on the front line who were taking—and trading in—these risks ostensibly were rewarded for short-term profit alone.

Finally, there was a failure to use enterprise risk management to inform management’s decision making for both risk-taking and risk-avoiding decisions.

RIMS believes that several key enterprise risk management behavioral attributes—if designed and implemented comprehensively and systemically—could have identified and mitigated, if not prevented, these losses for many of these entities.

In fact, in certain companies, enterprise risk management did make a difference. Goldman Sachs adjusted its positions in mortgage-backed securities beginning in 2006, differentiating itself from the rest of the market at a time when some might have criticized the move as excessively cautious. David Solomon, Partner and Member of the Management Committee for Goldman Sachs, attributes Goldman Sachs’ risk management competencies (which are consistent with strong governance oversight, reporting, communication and culture) for its resilience in what he describes as “the perfect storm”.7 Enterprise risk management can, and does, help companies perform better and avoid surprises.

Further, there is no “manual of enterprise risk management” to tear up. Risk management is a general term referring to the overall process of addressing risk, not any one particular method for mitigating risk. The term “enterprise risk management” covers risk management in the broadest possible terms, encompassing all forms of risk management activity across the entire organization.8

The Risk and Insurance Management Society (RIMS) does not endorse any one enterprise risk management standard, guideline or framework. Any framework can work effectively for the company using it, if the organization demonstrates competency in seven behavioral attributes:

1. adoption of an ERM-based approach
2. ERM process management
3. risk appetite management
4. root cause discipline
5. uncovering risks
6. performance management, and
7. business resiliency and sustainability.9

There are many ways to implement an enterprise risk management program. The test in the real world is how competent the organization’s risk management practices are, and the degree to which it is instilling risk management behaviors into its culture and management’s decision-making. In short, how mature is the company’s enterprise risk management program and how thoroughly is it practiced at all levels of the organization? So, if the present crisis is not a failure of enterprise risk management, what really failed?

There was an over-reliance on the use of financial models, with the mistaken assumption that the “risk quantifications” (used as predictions) based solely on financial modeling were both reliable and sufficient tools to justify decisions to take risk in the pursuit of profit.

The adage “All models are wrong, but some are useful”10 speaks volumes about the value of models as indicators of volatility and uncertainty—but not of certainty. A number of actuaries, financial managers and consultants regularly advocate a primarily “scientific” and quantifiable approach for enterprise risk management. Certain financial institutions seem to have replaced sound business judgment with this “scientific” approach. Even Warren Buffet, chief executive of Berkshire Hathaway Inc., is skeptical of models, telling PBS interviewer Charlie Rose, “All I can say is, beware of geeks … bearing formulas.”11

Most financial models rely on an expected distribution of losses based upon past experience. Financial institutions expect there will be certain losses, and manage these risks based on mathematical predictions of some moderate deviation from the expected norm. Since the probabilities of greater deviations are commonly believed to be insignificant (and returns often are lucrative), the tails on the financial models generally end up being ignored … and perhaps not fully understood. According to a Wall Street Journal article, AIG said in a 2006 SEC filing that its credit default swaps had never experienced high enough defaults to consider the likelihood of making a payout on its credit-default-swap protection products more than “remote, even in severe recessionary market scenarios”.12

Excessive reliance on models, combined with inadequate understanding of the assumptions underlying the math and lack of attention to the predicted “tail risk”, drove acceptance of risk beyond what the organizations involved could sustain in a worst-case scenario.

Even rating agencies can fall prey to the wrongful assumption that remote risks are so small that they can be excluded from risk analysis. Media reports indicate that in 2007 Citigroup’s mortgage-related securities were “viewed by the rating agencies to have an extremely low probability of default (less than .01%)”.13

Geoff Riddell, chief executive of Zurich Global Corporate, explained in a study published by Zurich Financial Services Group, “The world does not follow a normal distribution and low frequency and high severity events can appear at any time. The discounting of these extremes is very dangerous.”14

Organizations that ignore the worst case scenarios regardless of low probability (the “tail risk” predicted by the models) do so at their own peril. This can be particularly disastrous if the underlying assumptions that are embedded in financial models are accepted without question.

Mr. Riddell adds, “You have to apply common sense and ask does this scenario make sense. Quantitative tools are essential but not sufficient.”15

Just as a doctor may miss an important medical diagnosis based solely on reading a patient’s heart rate and blood pressure, financial modeling can raise important issues, but entirely miss other areas that present equal or more serious consequences.

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12 Ibid.
15 Ibid.
There was an over-reliance on compliance and controls to protect assets, with the mistaken assumption that historic controls and monitoring a few key metrics are enough to change human behavior.

Obviously, compliance activities and controls application have a crucial role to play in an enterprise risk management context. The danger comes from the misguided belief that compliance with regulations and implementing controls based on various and sometimes disparate standards somehow equals effective enterprise risk management.

Standard and Poor’s has been quite clear in its communications that, in assessing an organization’s enterprise risk management capabilities, it is not looking for enterprise risk management to be solely about meeting compliance and/or disclosure requirements, nor is it expecting that enterprise risk management will be a replacement for internal controls. Simply instituting monitored compliance programs doesn’t address emerging risks, nor do such programs take into account an organization’s unique circumstances, nor the impact that risk considerations have on the key strategic and operational decisions it faces.

Controls typically are based on standards or regulatory guidance. Standards are a collection of best practices and guidelines, which are developed collaboratively. Standards, and thus controls, evolve over time based on experience. Standards development organizations recognize that existing controls may not be adequate, therefore requiring that they be expanded or modified periodically. Controls do not evolve in scope or speed to keep up with the new risks being taken. Reliance on controls is largely a post-action proposition. Consequently, controls-based metrics also lag behavior.

So, why do organizations so often intermix or confuse risk assessments with controls gap assessments? Perhaps, organizations wrongly conclude that if they are meeting compliance requirements, they are practicing effective enterprise risk management. Some of this confusion results from auditing perspectives that concentrate on controls as the keystone of enterprise risk management. Controls traditionally have been thought to provide "... reasonable assurance to an entity’s management and board of directors" that the risks of the organization indeed are being effectively identified and managed. Controls and metrics using historic data are not designed to be predictive of emerging or future risks. Controls are vitally important, but they are also inadequate for such assurance.

There was a failure to properly understand, define, articulate, communicate and monitor risk tolerances, with the mistaken assumption that everyone understands how much risk the organization is willing to take.

Cars have speedometers and brakes for a reason. Credit cards have spending limits. Why? Because without them, the risks taken by the driver or shopper(s) could prove to be disastrous. Similarly, organizations need to apply the "brakes" when risks have the potential of careening an organization out of control with ruinous results.

A 2006 Conference Board study found that 54% of the Fortune 100 directors it surveyed understood their company’s risk tolerance. Since nearly half of the directors did not know, is it appropriate for shareholders to assume that either these board members were uninformed, or that management hadn’t established risk tolerance levels? Given the current economic crisis, should the following board question “Do you understand management’s risk tolerance level?” be supplemented with “How has that level been communicated, controlled, and monitored within the organization?” One can only speculate that if a fully understood risk tolerance level had been imposed by all financial institutions on their respective mortgage securities exposures and the marketing of collateralized debt obligations (regardless of probability metrics), the current crisis may have been mitigated to a large extent, if not prevented altogether.

It is not surprising that risk appetite management, which includes setting appropriate risk tolerance levels, was one of the three least mature competencies revealed by RIMS State of ERM Report 2008.

16 "S&P’s Approach to Including ERM in Corporate Credit Ratings", Terry Pratt, Standards and Poor’s, RIMS ERM Summit November 6, 2008
17 “Enterprise Risk Management-Integrated Framework-Executive Summary”, Committee of Sponsoring Organizations of the Treadway Commission, September 2004
At a minimum, organizations need some sort of mechanism to “apply the brakes” once certain thresholds are about to be exceeded. Goldman Sachs, for example, limits its risk thresholds to levels that are expected to be breached, “forcing conversation” and escalation.20

Recognizing that hedging does not fully transfer a risk actually should create even more diligence in working through—and escalating—potential worst-case scenarios. While risk transfer certainly is a widely accepted risk management option, presumably bundling and transferring all of the risk potentially creates its own problems. In particular, counterparties need to spend considerable time understanding these more complex, difficult risks and how they might inter-relate. When an organization doesn’t retain some “skin in the game”, moral hazards can be created. By way of example, insurance underwriters recognized long ago that effective risk management is driven when the interests of the insured and the insurance company are “aligned” through deductibles, retentions or coinsurance provisions.

Senior leadership may sponsor the development of an enterprise risk management program, but that is not enough for its foundational principles to take root and flourish. Behavior at the highest levels of the organization, at the parent and subsidiary level reinforced through risk-performance measurement, builds a culture of risk-adjusted decision-making throughout an organization. The techniques and methodology must be used comprehensively at every level of the enterprise.

Enterprise risk management is not a panacea for all of the uncertainties facing companies. Nor is it a guarantee that bad things will never happen. After all, organizations cannot create and capture value without assuming some level of risk.

Nevertheless, merely implementing a risk management process across an enterprise clearly is not enough. RIMS State of ERM Report 2008 found that organizations seeking better performance need to broaden and deepen their programs to mature in the competency drivers that support front-line risk ownership, linkage and governance oversight.21 Oversight includes risk practitioner access to higher levels in the organization when significant risks are not being properly addressed.

Humans are conditioned to anchor beliefs based on past experience and what they know. Medical practitioners have a favorite saying for explaining misdiagnoses, “What we think are horses’ hooves actually turns out to be a zebra.” The same malady befalls risk practitioners, at times. An enlightening example can be found in a New York Times article in which Citigroup CFO Gary L. Crittenden admits misreading the credit risk of collateralized debt obligation securities. “We had a market-risk lens looking at those products, not the credit-risk lens looking at those products,” Crittenden said, “when it in fact was a credit event.” As a result, Citigroup was caught off guard by its own practices.22

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Even so, risk management warnings ultimately can be ignored or dismissed by management. In speaking of the failures at Fannie Mae and Freddie Mac, Rep. Henry Waxman, chairman of the House Oversight and Government Reform Committee, said “Their own risk managers raised warning after warning about the dangers of investing heavily in the subprime and alternative mortgage market. But these warnings were ignored” by the two chief executives.23 This example illustrates an enterprise risk management governance failure that prevented a direct connection between the risk management function and the persons responsible for monitoring the adherence to risk management principles, including risk tolerance limits. It is a problem we have seen in the past with failed governance oversight in companies such as Enron and Citigroup.24 In all of these cases, the persons responsible for putting on the brakes (the Board, the Risk Committee, et al.) were not getting the message directly from those sounding the alarms. With no governance structure segregating management risk oversight responsibilities from operational results, and no authorized escalation avenues, the risk management function can too easily be disregarded, despite the wisdom of its warnings—especially when it can be so neatly compartmentalized into a particular silo to be overlooked, ignored or forgotten.

What Can We Learn from the Financial Crisis?

The first lesson is to better understand expected and desired outcomes and to design the organization’s enterprise risk management program accordingly. Determine whether the organization is mainly concerned with the downside protection (resiliency), upside opportunity (sustainability) or some combination of both. If emerging risks are to be cared for, what needs to be in place? Keep in mind that if the organization’s focus is compliance-based, it will produce a compliance-based outcome.

Second, it is important to realize that merely implementing an enterprise risk management program is not enough. The key to successful enterprise risk management practices depends on the behavioral attributes of the organization at all levels. The organizational competencies identified as least mature from the RIMS State of ERM Report 2008, based on responses from 564 companies globally, provides an insightful view into areas for the opportunity of greatest organizational improvement.25 These least mature attributes include risk appetite and risk tolerance, root cause discipline, and performance management.

Additionally, the individual skills of those responsible for leading the risk activities within an organization provide insight into the competencies needed to drive a sustainable risk program. The graphic on this page illustrates the broad suite of skills needed for sound risk management. The enterprise risk manager will need to pay special attention to developing leadership skills, strategic thinking, ethical judgment, innovative decision-making and communication, to name a few.

23 “Former Fannie Mae, Freddie Mac Executives Ignored Warnings,” Associated Press, December 9, 2008
Enterprise risk management must be part of the culture—accepted, expected and practiced at the highest levels and down through the organization—if it is to help the organization make better risk-adjusted decisions.

In RIMS State of ERM Report 2008, mature programs exhibit three foundational capabilities: front-line risk participation, linkage between risk and objectives, and governance oversight. While all three are important, the first has special significance, as it was highlighted as the one driver out of a possible 25 ("extensive involvement in ERM by front-line management at all levels") that was most highly correlated with higher credit ratings and the ability to sustain better performance.

These findings contradict the notion that effective enterprise risk management can be achieved simply through a top-down implementation. Rather, enterprise risk management is most effective when it spurs a change in how everyone in the organization thinks about, and acts upon, the risks to the organization.

RIMS believes that the 2008 financial crisis is a call to action for enterprise risk management to demonstrate its value. It requires practitioners to exhibit the personal characteristics referenced earlier—leadership, ethical decision making and a strategic point of view. But it also requires a certain degree of courage in cases where a company’s culture is not yet ready to embrace ERM fully. As Chris Duncan, former Chief Risk Officer of Delta Airlines, said in a November 2008 editorial, “… for ERM to be effective, occasionally one does have to swim against the tide and run the risk of getting eaten by the sharks.”

Ultimately, when we look for a cause of the current financial crisis, it is critical to remember that organizations failed to do a number of things:

a) truly adopt an enterprise risk management culture
b) embrace and demonstrate appropriate enterprise risk management behaviors, or attributes
c) develop and reward internal risk management competencies, and
d) use enterprise risk management to inform management decision-making in both taking and avoiding risks.

Enterprise risk management—to be effective—must fundamentally change the way organizations think about risk. When enterprise risk management becomes part of the DNA of a company’s culture, the warning signs of a market gone astray cannot go unseen so easily. When every employee is part of a larger risk management process, companies can be much more resilient in the face of risks. It is an important lesson to learn now, before the cycle renews itself and businesses find themselves facing the next cycle of business failures, lapses in risk management and shortcomings in governance. The cycle does not have to repeat itself as it always has in the past. Enterprise risk management is an important key to preventing it.

Enterprise risk management, when designed and implemented comprehensively and systematically, can change future outcomes. When it is practiced fully, enterprise risk management does not just help protect businesses from setbacks, it enables better overall business performance. With that in mind, and with so much economic uncertainty on the horizon, now is the perfect opportunity for organizations to use the many strengths of a solid enterprise risk management program to their advantage. Moreover, the Risk and Insurance Management Society, as a leading advocate of enterprise risk management, is uniquely positioned to help drive leadership competencies in enterprise risk management.

26 “Where Was ERM?” by Christopher Duncan, November 2008, IRMI.com
About the Risk and Insurance Management Society, Inc.
The Risk and Insurance Management Society, Inc. (RIMS) is a not-for-profit organization dedicated to advancing the practice of risk management. Founded in 1950, RIMS represents some 4,000 industrial, service, nonprofit, charitable and government entities. The Society serves more than 10,500 risk management professionals around the world.

About the ERM Center of Excellence
RIMS ERM Center of Excellence is the risk professional’s source for news, tools and peer-to-peer networking on everything related to Enterprise Risk Management. Whether you are initiating an ERM program within your organization, in the implementation phase or streamlining processes, in RIMS ERM Center of Excellence you will gain access to the key information and connect with the risk practitioners that will put you on the road to ERM success.

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