Comment

ERM: A strategic tool for hedging performance disruptions

Received: 1st May, 2008

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Abstract Risk management within financial services firms traditionally has been viewed as a control and reactive function, divorced to a large extent from the strategic decision-making process. In the wake of the current economic crisis, this paper highlights the key components necessary for building a robust enterprise risk management framework and argues that such a process creates for an institution a strategic hedge against performance disruptions.

Keywords: *ERM, risk, management, strategic, performance, hedging, financial turbulence*

INTRODUCTION

Financial institutions and banks in particular have for years exercised some form of enterprise risk management (ERM). In fact, a number of these institutions are proud of their practices and believe in the philosophy that if 'it isn't broken don't touch it'. Others almost arrogantly flaunt the skills of their frontline 'risk managers' (the business heads and traders). Why then have the last few months (and there are more to come over the next few months) seen staggering losses at Merrill, Citigroup, UBS, Northern Rock and Société Générale, to name a few?

The way these large diversified banking institutions have had to raise emergency capital through the current turmoil (Société Générale raised €5.5bn at a 39 per cent discount to the previous day's close — see Figure 1) to provide a sense of immunity against their severe losses is akin to a physician treating the symptoms of a disease rather than the disease itself.

Why are these institutions announcing multi-billion-dollar write-downs of their subprime and collateralised debt obligation (CDO) related assets, causing an earthquake-like effect on stakeholder confidence?

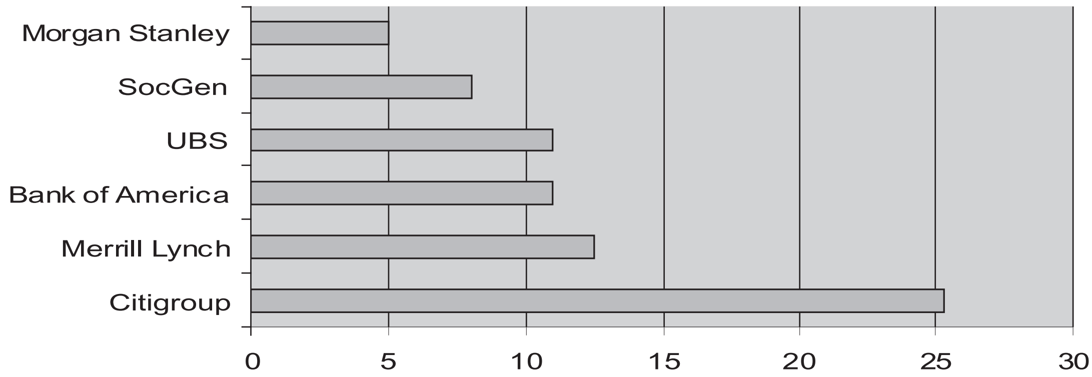

Figure 1: Total equity and hybrid equity raised since September 2007 ($bn)
Source: *Financial Times*, 12th February, 2008

The short answer is that there is a malfunctioning of risk management practices at the heart of the current financial turbulence and crisis, even though some of the largest financial institutions may vehemently deny it. So what does a malfunctioning of the risk management process mean? This paper answers this question by highlighting some of the key elements of a sound ERM process and asserting that the effective functioning of such a process within an organisation tends to shorten the disruption profile stemming from systemic events, leading to a reduction in the volatility of the institution's performance.

KEY ELEMENTS OF A SOUND ERM FRAMEWORK

Putting in place chief risk officers, as did Merrill and Bear Stearns, addresses only part of the problem in terms of the deficiencies that exist with risk management practices within a number of financial institutions. Given the type of business conducted by these institutions, one would expect them to have a more mature process for managing their risk/reward profiles. Yet the contrary is repeatedly observed. Many institutions have continued to employ the risk management processes with which they are familiar (whether informal or structured) while expecting a different result each time — this is precisely what Einstein defined as 'insanity'. The inertia to constantly adapt to the changing environment leads many institutions to the brink of disaster or even beyond. It is this traditional mode of thinking about the value of risk management that resides within the mindset of boards and senior management that needs to be reframed. First, however, it is critical for organisations to understand that establishing robust and flexible ERM practices is an evolutionary rather than a revolutionary process. It is not surprising to see that some financial institutions have been building integral ERM practices over several years, believing in the philosophy that truly flexible risk management practices evolve with the organisation and are not static structures.

RISK GOVERNANCE

The first steps towards this understanding start with a true and sincere commitment by the board and senior management to have a solid and robust ERM framework that can allow for better identification, measurement, monitoring and disclosure of the threats and opportunities that these institutions face. In other words, it calls for initiating a *cultural change* among senior management as regards understanding and optimising their inter-temporal risk and opportunity profile across the business units of their organisations. This may involve establishing processes that reach their full potential and provide an effective benefit only after several months of being active.

A number of organisations such as APRA, BIS, COSO and Standard & Poor's have articulated the importance of well-considered risk management and risk governance practices. A key component that lies at the heart of the evaluation process is an assessment of the *risk governance* framework within the institution. Samanta *et al.*[1,2] provide a framework structured around policy, infrastructure and methodology that could be employed by financial institutions to conduct a self-assessment or gap analysis on the integrity of their risk management processes. If an institution takes the view that its risk management capabilities and practices represent the most prospective strategic tool in its repository of decision-making levers, then clearly it needs to establish a framework for articulating its strategy and risk appetite,[3] risk aggregation and disclosure, and its processes for human capital formation and talent management.

RISK COMMUNICATION

A second element in establishing a robust ERM practice includes an understanding and evaluation of the non-financial risks such as technology, the integrity of the institution's disaster recovery and business continuity/resilience plans and human resource management process. A tangible benefit of this structured format of analysis is that it provides the institution with a more consistent framework to evaluate its non-financial exposure profile across the businesses and organisation.

Following this, the institution is then in a position to create a balanced scorecard framework, and establish key performance and risk indicators, thus positioning it to proactively manage and communicate that exposure to its key constituents. Clearly, this process will draw on thoughtful subjective judgment and precludes the implication that the magnitude and timing of an institution's next loss is predictable. It does however provide an institution with risk insight, thereby strengthening its ability and resilience to handle a negatively impacting event when it does occur. A robust risk management structure enhances the firm's capacity to be alert to the birth of a 'black swan'[4] and contracts the time component of the firm's disruption profile (see Figure 2).

RISK ACUMEN

The third component to building a flexible and robust ERM framework rests on the development of meaningful risk metrics. These measures could be quantitative or qualitative but should provide insight into the opportunities and threats that face the institution. Performance measures tend to drive behaviour patterns which will then define the risk culture of the organisation; as such, they require thoughtful construction.

Financial institutions are well versed in the pros and cons of VaR as an aggregate measure of risk. Yet outside of scenario analysis, few in the area of

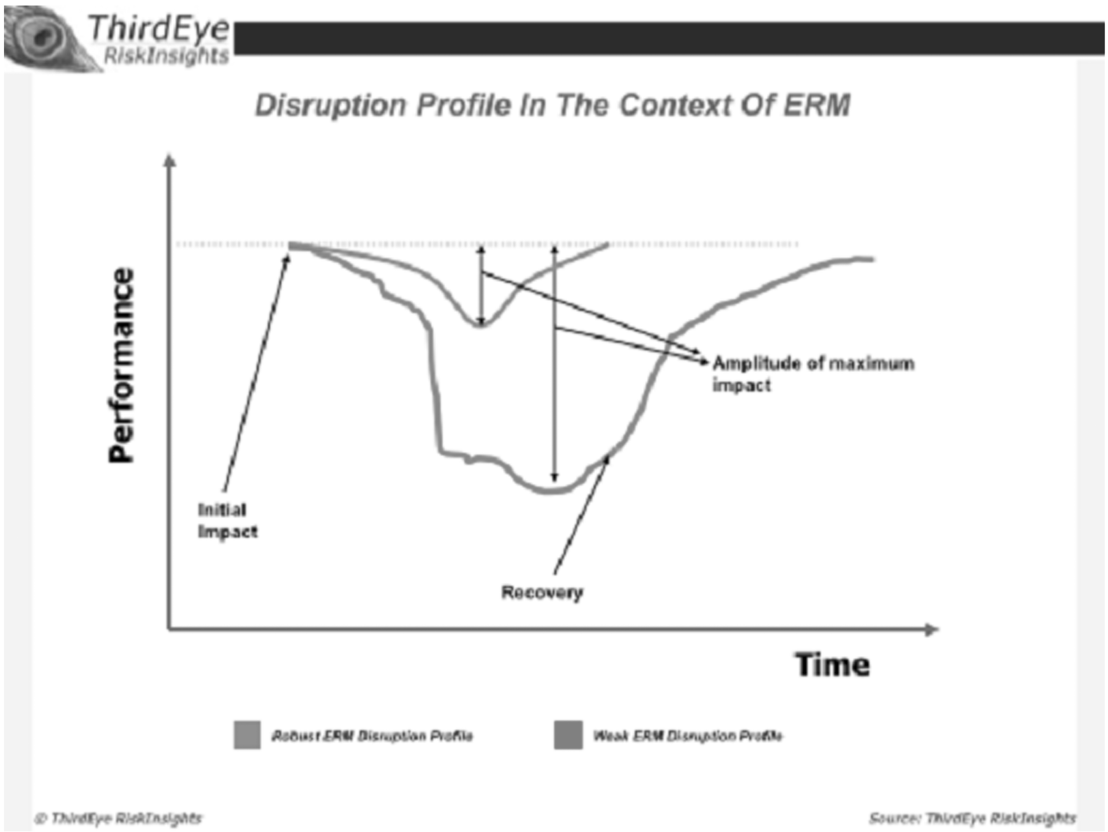

Figure 2: Disruption profile

market risk have begun to look beyond VaR.[5,6] Robust stress-testing, scenario analysis and economic capital measurement are all fundamental to this element of the ERM process.

LESSON LEARNED FROM THE CURRENT FINANCIAL MARKETS TURMOIL AND YET MORE TO COME

The current turmoil stemming from the subprime crisis within the financial services sector and its yet-to-be-played-out ripple effects on other industries provides corporate captains with a field of opportunities to develop insightful risk management strategies for their organisations.

The cause of this crisis can be grouped into a few broad categories, all of which link back to the fundamental elements (or lack thereof) of a resilient and flexible ERM structure, such as described in the sections above. Armoured with the clarity of hindsight it can be argued that the current debacle within the financial services industry may have stemmed from a combination of some or all of the following:

- misalignment of incentives and compensation;
- ineffective communication channels;
- misperceptions regarding the degree and quality of risk transfer;
- lack of tempering quantitative modelling outputs with qualitative judgment;
- brittle or inadequate technology.

Each of these individually or in

aggregate leads to an inarticulate description and a misperception of the institution's potential risk appetite. This misconceived risk appetite, when coupled with the firm's strategy and penchant for tactical performance enhancement, acts as an incubator for potential 'black swans', with ripple impacts that can only be understood as they unravel. Under such conditions, the lack of a robust ERM framework further amplifies the distortion profile of the institution.

The losses at Société Générale, while clearly related to the trading operations, underscore a combination of the lack of effective communication channels and brittle security measures around their trading processes. Another example of ineffective risk management practices within the trading operations is the lack of a robust structure around the new product approval process. Similarly, a number of institutions affected by the subprime mess have been identified as having loosened their underwriting practices. The lack of a strong new product approval (NPA) process within the trading operation or lax underwriting practices results in a fuzzy articulation of the risk appetite, thereby creating the potential for reputation risk, litigation charges and significant write-downs.

In the same token, one should not lose sight of some of the stronger ERM practices that have been observed at ANZ, Goldman Sachs and Barclays and, despite its demise, Lehman as well. It is not surprising to attribute their robust risk management disciplines as having played a dominant role to help steer them through this market turbulence — relatively successfully compared with some of their peers. During turbulent times, strong ERM practices tend to facilitate institutions with the ability to act quickly, thereby reducing both the amplification of the distortion and the time to recovery (see Figure 2).

There is much to be learned from the process that ANZ and a few others have established in articulating their risk appetite. It is critical to ensure that the greed to capture market share (resulting from a misalignment of incentives and compensation and/or a misperception of the degree and quality of the risk transfer through securitisations), as was the case at some of the institutions affected by the subprime crisis, does not interfere with the risk appetite of the firm. Establishing a process that clearly articulates the risk appetite and its linkages to the aggregate strategy of the institution takes time. It involves an intricate understanding of how specific events may affect earnings, revenues, critical headcount and capital over a 3–4-year horizon with a strategy to act quickly and effectively from a tactical standpoint when conditions and assumptions change abruptly. But to be in a position to do this, these institutions strongly believed (and implemented such a culture) that the risk function adds value and is a strategic partner to the business and the organisation as a whole, and is expected to be proactive in the organisation's decision-making processes. These institutions have established a risk culture where everyone is a 'star trader', not just a single individual.

Developing strong ERM practices is certainly not a 'magic bullet' that perfectly cuts to the heart of any impending disaster. It would be naïve to portray ERM as a fraud-detecting apparatus, or a scanner that can identify and analyse the DNA of individual behaviour. ERM is *not* and never will be designed to predict fraud, whether it be accounting, on the trading floor or in the execution of lending practices, all of which appear to have in some part contributed to the current crisis. Just as a physician's prognosis may turn out to be incorrect, so also robust ERM practices may not assist an institution in narrowing the amplitude of its distortion profile. Why? Simply because both involve an element of human judgment, which by its very nature is subject to error.

Similarly, the quantitative technology underlying asset securitisations (including CDOs, CDO-squared, etc) and the capital adequacy models of Basel are clearly not in themselves flawed engines, but are most effective when complemented by robust inputs and sound qualitative judgement, just as is a Ferrari. The true value and effectiveness of the (quantitative) output they generate lies in the integrity of the fuel (the data) that they are fed and an overlay of qualitative/human judgment. Clearly, as new information becomes available and the economic environment and technology change, these engines get fine-tuned, as does the element of human judgment in the form of an iterative cycle, to become even more efficient decision tools. ERM as a hedging apparatus against performance distortions should be subject to the very same iterative dynamics of refinement and fine-tuning.

Sound ERM practices will always include an ongoing reassessment. 'How can the process be made better and more effective?' is a question that boards and senior management should constantly ask. Organisations can always learn from what is happening in the markets in order to refine their processes. As everyone is aware that tomorrow's issues will not necessarily be the same as today's, it is critical to build robust ERM processes to assist institutions with proactively identifying and optimising their emerging threats and opportunities.

References

1 Samanta, P., Azarchs, T. and Martinez, J. (2004) 'The PIM Approach to Assessing the TRM Practices of Financial Institutions', Standard and Poor's, a division of the McGraw-Hill Companies, Inc., New York, NY.
2 Samanta, P., Barnes, R. and Puccia, M. (2006) 'Assessing Enterprise Risk Management Practices of Financial Institutions', Standard and Poor's, a division of the McGraw-Hill Companies, Inc., New York, NY.
3 Samanta, P., Ingram, D. and Barnes, R. (2006) 'Evaluating Risk Appetite: A Fundamental Process of Enterprise Risk Management', Standard and Poor's, a division of the McGraw-Hill Companies, Inc., New York, NY.
4 Taleb, N. N. (2007) 'The Black Swan', Penguin, London.
5 Artzner, P., Delbaen, F., Eber, J.-M. and Heath, D. (1997) 'Thinking Coherently', *RISK*, Vol. 10, pp. 68–71.
6 Samanta, P., Azarchs, T. and Hill, N. (2005) 'Chasing Their Tails: Banks Look Beyond Value-At-Risk', Standard and Poor's, a division of the McGraw-Hill Companies, Inc., New York, NY.