ERM and the Failure of Risk Management: An Asian Perspective

Ran Fuchs

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"Risk management is good for us. It saves us capital."
(CFO at a major Asian Bank)

1. Introduction

Now that in many regions of the globe Basel II is fait accompli, risk professionals may feel that the financial world is ready for the ERM challenge. Is this really the case?

The Asian scenery, in which I have worked for over 15 years, paints a different picture altogether; a picture which I believe is relevant to risk professionals wherever they are. In Asian financial institutions risk management as a value-creating business has failed. The fact that over 20 years after risk management practices were first introduced, books, articles and seminars are still devoted to how risk management can pay off, is just a reminder that the market has not yet bought into our vision. The question we all must ask ourselves is why. Is it a problem of proposition or of communication? In other words, is it because we have failed to communicate the business benefits of ERM, or is it because we ourselves are not clear about them?

But why should the Asian scenery be relevant for the rest of us? After all, most American and European risk professionals tend to ignore Asia for its "less-sophisticated" financial environment. However, my experience shows that as the Asian "culturally acceptable" is different to that of the West, Asian institutions can openly exhibit problems and attitudes that in other regions may be buried under the surface. Therefore, getting familiarized with Asian institutions can help us, as risk professionals, unearth problems in our own territories that would otherwise remain hidden. This is particularly important if we believe that ERM should not merely aim at the few that can afford the resources capable of "rocket science," but rather that it should be a tool for every enterprise whatever its business may be.

Because the "scientification" of the language is, in my opinion, one of the main reasons for the failure of risk management as a value-creating business, for this paper, I have chosen the casual style.

2. A Brief History

In the beginning, most financial transactions would take place during senior bank executives' long lunches. Prices were agreed upon by a handshake, and execution could take days. There was no volatility and no reason to be in a hurry. In such an environment, there was little need for any risk management whatsoever.

All this changed when volatility increased, as well as the number and complexity of instruments in banks' portfolios. This called for a new type of analytics that could handle the new instruments, and help to hedge entire portfolios rather than individual transactions. To develop such analytics, mathematicians, physicists and other "rocket scientists" were recruited to join the financial industry in the early- to mid-1980s.

Quantitative methodologies based on sensitivity, hedge equivalent and similar techniques had evolved, and a new class—the "golden boys"—had emerged. As real arbitrages were plentiful and returns were generous, these "wizards" were admired as if

possessing mystical powers. To keep this aura and the generous remuneration (based on returns alone) and to ensure that neither management nor controllers could undermine their activities, the golden boys developed no-communication into an art: jargon and complex use of mathematics became the lingo, and a culture of "if you aren't one of us you can't understand it" was endorsed. A big portion of banks' portfolios was managed by these wizards, without any control whatsoever. However, as long as returns were generous, questions were not asked.

Opportunities for arbitrages, however, disappeared rapidly and were replaced by quantitative pseudo-arbitrages. This led to real risk taking and, inevitably, to losses. Amongst the first of such disasters was an Australian electronic company AWA, which in 1985 lost $30 million in currency trading. This was followed by numerous other disasters, until in the record year 1994, over a dozen fiascos occurred, including a loss of more than $1.5 billion by Orange County and the collapse of Barings Bank.

Many of these losses were the result of "safe" trades, and the financial system learnt, the hard way, that risklessness did not exist in the newly created efficient market. Proper business practices had to replace wizardry, and the business of risk management emerged.

Two alternative paths were open to the new industry:

1. Develop risk management as a proper value-adding business.
2. Convince regulators to force financial institutions, through regulation, to adopt risk management practices.

These two approaches were somewhat mutually exclusive (mainly due to resource and skill constraints), and each would have carried the industry along a different path. The risk management community, at large, chose the regulatory path.

3. The Regulatory Trap

As the numerous financial disasters had made regulators nervous about the increased systemic risk and the stability of the financial system, taking the regulatory approach was the path of least resistance. This path suited an industry that mainly consisted of young, bright quantitative professionals, with little business, sales or marketing experience, and often without true understanding of the overall banking operation.

In hindsight, the regulatory path proved a success, but this success did not come without a price. Because it was the regulators, rather than vendors, who sold risk concepts, the risk management industry—unlike most other similar industries—never learnt to define and communicate its value.

This inability to communicate value effectively was apparent in an internal survey taken across Asia, in which over 80 percent of banks surveyed claimed that because their risk management sole objective was to satisfy regulators, they were not willing to invest more than absolutely necessary to achieve this goal. Admitting this may not be as common in other parts of the world, where questioning the benefits of risk management is often considered "politically incorrect." In private conversations, however, finance professionals (naturally,

outside the risk management profession) have often expressed doubts about whether investing in risk management beyond the minimum necessary is a prudent use of resources.

Therefore, shifting the focus to ERM, one of the first questions that the risk management industry must ask itself is whether it wants to tie its future to regulators, or whether ERM is to be promoted as a value-creating practice in its own right. If the latter, a means of communicating merits to non risk-savvy clients must be developed. This question is particularly relevant if ERM is to be promoted to non-banking markets, such as the private equity industry, where regulatory supervision is of lower importance.

4. Why Can't They All See the Value?

There is no doubt that the best financial institutions do leverage on their risk management practices to achieve strategic, tactical and operational advantage. But why can't all institutions see this value and flock to implement ERM? Is it because they do not know what ERM means? Because it's too complicated to comprehend? Or perhaps it is that despite the value ERM may bring, the opportunity cost is too high?

4.1 What Does the Term ERM Mean?

The question of what ERM really means has been around for over a decade, and no clear agreement has ever emerged. To allow effective communication, first and foremost the industry must agree on uniform scope and terminology.

Front office vendors do not need to define what a front office is, but only to demonstrate that their solution is the best value. In contrast, a great deal of time is spent by ERM and risk professionals to educate and convey their view of what they mean by ERM, which too often differs from their audience's understanding and expectations.

If by ERM we mean the aggregation of a specific type of risk across the entire organization, then choosing terms such as *market ERM*, *credit ERM*, etc. may be suitable. If we think of ERM as the aggregated risk across all risk types, why don't we use a term like *aggregated ERM*? But then again, can aggregated ERM cover all types of risk—what about legal risk, for instance? In addition, should we use a special term for risk management that covers liabilities, such as enterprise asset liability risk management (EALRM)?

For some, this may seem like a hair-splitting exercise and a total waste of time. But standards and uniform terminology create markets. This is the reason that we do not need to go to a course every time we buy a mobile phone. It is the reason we can buy a computer from one vendor, a printer from another and software from a third, and fit them all together. Without this flexibility, the computer industry would not have been what it is today.

But the risk management industry still follows the IBM model of the '70s. Just like the old IBM, risk vendors are avoiding uniform standards in an attempt to create captive clients: that is, buying an initial product ties clients to the vendor forever. Each captive client is a win to a company, but a loss to the industry as a whole.

Common standards allowed other vendors to enter and innovate in the IBM space. This created the "computer for every purpose" market, which, in turn, led to the explosion of the entire computer industry. Hence, it's not surprising that nearly every industry has established forums that agree on common standards and terminology.

Basel II has somewhat delayed the need for a risk management industry body. But if we are not to rely on regulators forever, the industry must create its own forums. Can PRMIA become this body?

4.2 Is ERM Too Complicated for the Average Business Executive?

Let's admit it; in recent years the complexity of risk management concepts has increased to an extent that it has truly become the realm of the rocket scientist, outside the understanding of the ordinary business person. For example, we all know that auto-correlations can distort results, but how can anyone explain to a non-mathematician the dollar value of a model that eliminates auto-correlation? Can we expect the average business person to sign the check for such an improved model, for which he or she cannot quantify the benefits?

As a comparison, let's look again at the computer industry. There was never a question about the usefulness or value of computers. However, since their invention in the early 1940s, computers were too complicated to use by anyone but the expert. And as the skills required were rare, the market had a limited growth potential.

It was when the idea of building computers for everyone came about—over 40 years later—that the mass computer market was created. It wasn't that computers got less sophisticated, but rather the appearance of simplicity, and the unveiling of the mystery associated with them that did the trick. Can ERM do the same? After all, in principle, it can be the tool for every business, if only it were easy to use and came at the right price.

For example, if Web browser producers were to provide their browsers as *software applications, which by using HTTP protocol locate and access servers that support documents formatted in the HTML mark-up language, and graphically display their content together with the contents of any other linked documents*, browser users would have been few and far between. But this is exactly how the risk industry markets its concepts.

To expand on the above example, most users choose browsers because of features such as speed, quality of image or security, and not, for instance, because of the algorithms used to parse XML. Yet, for too long the risk industry has focused on what is sophisticated, rather than on what can be made useful by simplicity. How many times have I participated in discussions about interpolation methodologies, random number generators or rounding conventions? All of which are interesting academically and may be important from a development point of view, but how much value do they really bring to the average business person in most organizations?

If ERM is to become a standard methodology, its value must be apparent, and the elevator test is the way to check it. If we can't explain to a CEO of a potential client within a 30-second elevator ride why he or she should be implementing ERM, then our proposition is not good enough. What should our 30-second proposition be? Will it be about better

allocation of capital, better performance measurement, decision making, reduced volatility of income statement and B/S? Can we honestly define such a proposition in a way that will be both attractive and accurate?

4.3 Opportunity Cost

Even if the concepts and value of ERM were obvious to all, would implementing ERM be an efficient use of organizations' resources? If the expenditure on Basel II projects is any indication for the cost of ERM projects (Asian banks' average was about $100 million), don't banks have more profitable ways to invest such amounts? As expressed by a bank's senior executive: "Why should I invest much in market discipline and transparency (Pillar III) when I can get more favourable results with a traditional, well-tested marketing campaign?"

For me, as a risk professional, it was an eye-opening question. After all, we can all calculate ROI in front office and back office systems (albeit in hindsight), but can we do it for risk management? Shouldn't we, as a quantitative discipline, be able to quantify the ROI and compare it to alternative investments? It is not a secret that some big investments in risk management did not prevent financial disasters, and thus led to negative ROIs. Can we produce reliable information on average, common or median returns, and what is the value of the investment to shareholders?

But it is not only the cost for the organizations that needs to be taken into consideration; the opportunity cost for the individual must also be considered. In an environment where the expected service period of a CEO, CFO and other executives is shorter than that of most ERM implementations, what motivation should an individual have to endorse such projects? Unless ERM is broken into smaller and quicker value-creating milestones, it is unlikely to ever become an attractive endeavor.

5. Some Open Questions

Once Basel II projects subside, banks are likely to take one of two opposing approaches: Either they will try to leverage on their compliance projects, or they might feel that as Basel II-related projects have already consumed vast resources, it would be better to free these resources for other vital tasks.

Naturally, as an industry, our aim is to ensure that more banks, including the smaller and less advanced, will choose the first alternative. Smaller organisations, however, tend to demand breadth rather than depth of functionality, and are therefore likely to expect answers to questions that so far we have mostly ignored. Some of these questions may already have satisfactory answers; some might need further research. None can be considered outside our scope.

1. **Risk appetite**. Risk management can be viewed as the optimization of the utilized risk in relation to the organization's risk appetite. Most work in the last few years has focused on the utilised risk. However, without a methodology to define risk appetite as a function of culture and business objectives, what are we to optimize against?

In addition, research has shown that if given a choice between winning $50 at 100 percent probability and winning $100 at 50 percent probability, the majority will choose the former. Although the math is identical, the latter will be chosen if, in our example, winning is replaced by losing. This asymmetry is crucial for decision making, and is recognized in fields such as utility theory. However, without taking it into consideration in our risk models, can we expect risk-based decision making to reflect our business preferences?

2. **Capital allocation**. Allocating capital based on risk contribution is practical as long as the allocated amount is small relative to the overall capital. That is, in the 80-20 framework, risk methodologies have established the 20. But is the 80 outside our scope? Developing appropriate techniques is crucial if ERM is to be useful for analyzing decisions that involve substantial portion of the capital, such as take-overs, M&As, private equities, as well as most decisions in low-capitalized companies.

   Also, once capital is allocated, risk management does not provide answers as to how often it needs to be readjusted. In the ideal risk world, balancing should be done continuously. In the real business world, on the other hand, the cost of transactions is often prohibitive, and can turn good concepts into bad business.

3. **Credit rating.** Could ERM prevent or reduce the probability of financial disasters? Could ERM, or any future version of it, have prevented fiascos such as Enron, NAB or Barings? Would it have reduced losses after the Russian crisis or September 11? Would adding these events to our risk database help prevent future disasters? In other words, how can we use our ERM practices to improve our own credit rating, and our counterparts' ERM to improve our credit control?

4. **Liabilities**. Indeed, what about liabilities? How will they be integrated into banks', insurers' or asset managers' ERM in a uniform, business-relevant framework?

5. **The crystal ball**. There is little doubt that, implicitly or explicitly, the past is relevant for the future. In technical analysis—an art mostly shunned by risk professionals as unscientific—the relationship is explicit. However, in most risk management methodologies (statistical/stochastic in nature), the theoretical justification for moving from ex-post to ex-ante is not well defined and often ignored.

   While we may argue that under "ordinary" conditions Markov Chains and Random Walk can bridge the gap, they are of limited use when it really matters (e.g., catastrophic events or when relevant data is limited, such as in operational risk.) Forcing these methods to handle situations they are not designed for is unlikely to yield desired results, and hence new families of methodologies should be explored. Such methodologies may already be available in fields like engineering and manufacturing, for which direct historical data is of little relevance or does not exist at all.

6. Conclusion

Risk management is an extremely useful way of thinking, especially when it is part of the overall organizational culture, when every business decision is looked upon from a

viewpoint of balance between profit against expected and unexpected risks. This is the ultimate ERM, but it is not what we, the risk industry, typically define as ERM. As an industry, we can either educate the market to see risk the way we do, or expand our own definitions and methodologies. Preferably we can achieve the two together.

The risk management industry has never created its own IBM, Microsoft or Sony, and maybe never will. But there is no reason why we, as an industry, cannot aim to create a market in which "every company needs ERM." A consortium or an industry body that defines standards, supports research, promotes the industry outside its traditional strongholds and educates and trains the market is a step towards achieving this goal.