

## PricewaterhouseCoopers Global FS e-briefing programme

As the dynamics of the market and competitive environment for the financial services sector increase in their complexity, being able to plot the right course for continued success becomes harder. Being able to identify and adapt to the new challenges are a key success factor for the leaders of tomorrow. As such, PricewaterhouseCoopers has developed a global programme of e-briefings aimed at addressing the key strategic issues facing our industry, with the emphasis on drawing conclusions about best practice and future trends.

Working with the Economist Intelligence Unit we have already published three reports:

- Wealth management at a crossroads – Serving today's consumer
- Economic Capital: At the heart of managing risk and value, and
- Taming uncertainty: Risk management for the entire enterprise.

This special risk management survey is a follow-up to Taming uncertainty: Risk management for the entire enterprise.

I am confident that you will find this survey thought provoking and insightful and if you would like to discuss any of the issues raised in more detail please speak with your usual contact at PricewaterhouseCoopers.

As with all of our publications we would also appreciate your feedback on this survey as this helps us to ensure that we are addressing those issues that you are most focused on.

**Jeremy Scott**

*Chairman, Global Financial Services Group*

## Introduction

Uncertainty is the defining characteristic of the current business environment, and risk is its shadow. From financial market volatility to corporate governance scandals, geopolitical upheavals to regulatory change, global financial services institutions face a formidable array of challenges. A world-class risk management framework will understand and address them all.

That was the conclusion of *Taming uncertainty: Risk management for the entire enterprise*, launched in July 2002. The e-briefing was based on extensive interviews with senior representatives of major financial services institutions as well as the initial results of a survey of enterprise risk management among 14 of the world's leading financial services organisations. The survey was carried out in June 2002 and respondents included a heavy preponderance of chief risk officers. This paper presents the final results of that survey.

### Becoming world-class

In the Taming uncertainty e-briefing, we identified ten attributes of a world-class risk management culture. The final survey results that we report in this paper show that many leading financial services institutions already have acquired some of these attributes, but that even those well-run organisations have significant opportunity for further improvement.

For reference, the complete list of attributes is overleaf:

## Ten attributes of a world-class risk management culture

- 1 Equal attention is paid to both quantifiable and unquantifiable risks.** The temptation to ignore risks that cannot be quantified, such as reputational risk, is avoided. Reputation protection is one of five risk factors on UBS's risk charter, for instance.
- 2 Risks are identified, reported and quantified to the greatest possible extent.** This means setting up extensive historical risk and loss databases, and identifying risks precisely rather than burying them into general categories such as credit and operational losses.
- 3 An awareness of risk pervades the enterprise.** Performance measurement and pricing are risk-adjusted. Pay structures also reflect risk management priorities – compensation schemes encourage risk-taking behaviour that is aligned with risk appetite. Risk-adjusted forecasts and returns give shareholders and analysts a full understanding of the risks being run.
- 4 Risk management is everyone's responsibility.** Risk is not fragmented into compartments and silos – risk management shouldn't be either. People from IT, legal, compliance and even communications departments are involved in decision-making to inform senior managers of non-financial risks associated with the launch of new businesses and products.
- 5 Risk managers have teeth.** Everyone involved in monitoring risk, even non-financial risk, has a power of veto over new projects they consider too risky. Equally, the chief risk officer has the power to drive the risk awareness and management agenda.
- 6 The enterprise avoids products and businesses it doesn't understand.** Proper risk management depends on knowing enough to comprehend the dangers that are faced. A product or a business that is delivering outstanding growth but is too complex for management to understand is a risk too far. Put another way, if you don't understand it, don't do it.
- 7 Uncertainty is accepted.** Companies like Shell use scenario planning to make sure their strategy embraces uncertainty, not hides or eliminates it. Rather than basing strategy around fixed assumptions, leading risk managers try to factor all possible developments into decision-making.
- 8 Risk managers are monitored.** Risk management is too important to be left to risk managers alone. Internal audit procedures ensure that systems are running properly and the right results are being achieved.
- 9 Risk management delivers value.** It is not designed to stop people from taking risks but rather to create value, by enhancing the chances of a project or product succeeding and by enabling managers and shareholders to understand the level of risk they run and to manage accordingly.
- 10 The risk culture is defined and enshrined.** The enterprise's risk appetite is clearly and widely understood. Whether a company's culture is entrepreneurial or conservative, risk management is aligned with that culture to give managers and employees the requisite freedom of manoeuvre.

## Attribute 1

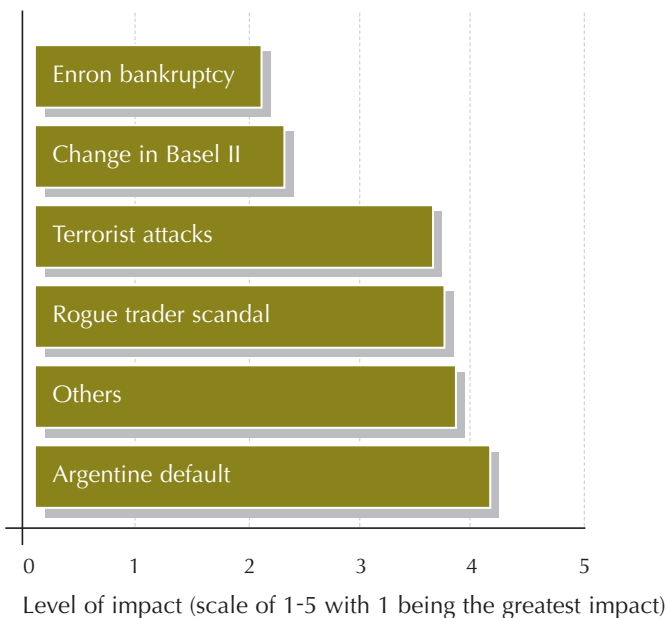
### Equal attention is paid to both quantifiable and unquantifiable risks.

The responses to the survey supported our view that financial services institutions need to include non-quantifiable risks as well as quantifiable ones in their consideration and management of enterprise risk. In a number of respondent organisations, compensation structures have been adjusted so that they are aligned with progress attained in reaching the institution’s strategic objectives rather than simply linked to current financial results.

Processes such as product approvals have been tightened up in almost half the organisations surveyed as part of a risk-management programme. Asked what were the risks facing institutions as they sought to maintain a global capability for their clients, more respondents picked compliance with local regulations than any other answer. None of these areas – compensation, product development and compliance – lend themselves to measurement and quantification, yet all are gradually coming within the orbit of risk managers.

That’s hardly surprising given events of the past year. Asked to identify the external events that have the greatest impact on their risk management programmes over the past year, respondents picked the Enron bankruptcy, followed by delays in Basel II implementation, followed by the September 11th terrorist attacks. Each of these events raise concerns, such as reputational risk, compliance risk and security risk, that are at least harder, if not impossible, to quantify than more familiar sources of risk.

Factors Impacting Risk Management Programme



Source: PricewaterhouseCoopers 2002

Credit and market risk nevertheless remain the top two areas of focus for our survey group, just as they were when we asked them in 2001. Looking at risk in terms of the impact of loss, the respondents' list of priorities makes perfect sense. Credit risk is something every lending institution will experience in their normal activities, after all. But if the past 12 months have taught us anything, it is that high-impact, low-probability events do happen.

Respondents' awareness of other sources of downside risk is consequently on the rise – issues that scored higher (though placed the same) than a year ago included business continuity planning and rogue trader risk. Perhaps more surprisingly, given the acknowledged impact of Enron, the restatement of financial results continued to rank well down the list.

Enterprise risk management programme priority (2001 ranking in parentheses)

- 1 Credit (1)
- 2 Market (2)
- 3 Operational (3)
- 4 Treasury/Liquidity Planning (4)
- 5 Changing Regulations (5)
- 6 Insurance/Business Continuity (6)
- 7 Rogue Trader/Fraud (8)
- 8 E-business Security (7)
- 9 Sovereign/Political (10)
- 10 Key Person Retention (9)
- 11 Restatement of Financial Results (11)
- 12 Pension Surplus (12)

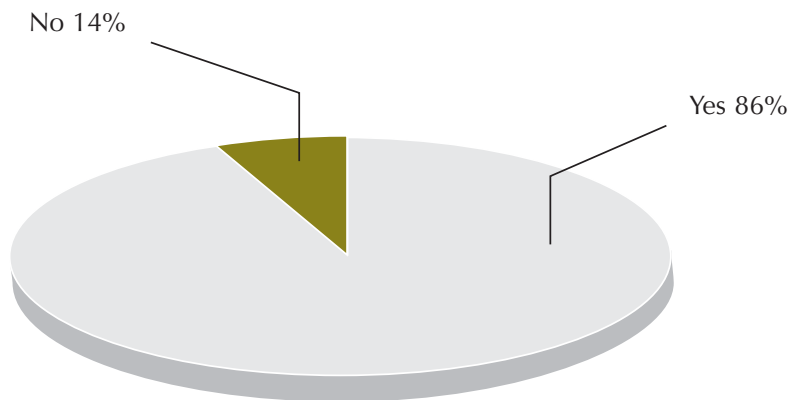
## Attribute 2

### Risks are identified, reported and quantified to the greatest possible extent.

The survey group comprises institutions that are in the vanguard of quantification. Only 15% of all respondents have systems that are not powerful/fast enough to perform desired risk calculation with sufficient timeliness and frequency. Almost half of the group are assessing their performance on the basis of risk-adjusted capital (or economic capital).

But the respondents indicate that there is still room for improvement. While the majority of respondents (57%) were satisfied with their product-specific risk measurement tools and the technology that powers them, that still leaves a very substantial minority who are dissatisfied.

Does your organisation believe that a broader, more accurate risk aggregation across diverse portfolios and business lines is an area for risk quantification tool improvement?



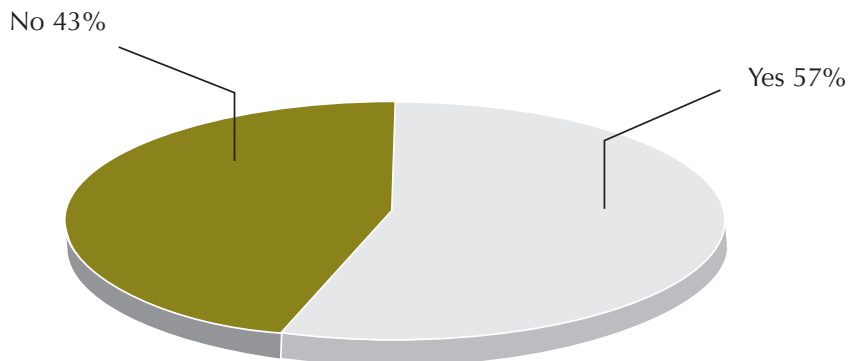
Source: PricewaterhouseCoopers 2002

The biggest challenge confronting respondents in terms of the risk management infrastructure is aggregation across different categories of risk. Disturbingly, basic systems and data aggregation shortcomings persist for a large proportion of respondents. For example, virtually all respondents (93%) stated that integrating legacy systems and databases remains a pressing challenge.

With the eventual implementation of Basel II, which will require banks to put aside capital to cover operational risk, acting as an added spur for institutions to tighten up their risk management systems, we conclude that over the next two to four years, we will see increased resources devoted to redesigning and rebuilding institutions' systems and data management infrastructure.

*'Quantification of risk has come an awfully long way over the past decade', says Hans-Kristian Bryn, a partner at PricewaterhouseCoopers. 'But drawing a complete picture of risk appetite and exposure at the group level is clearly a daunting task even for pioneering institutions.'*

Are you generally satisfied with your tools for risk measurement and risk quantification?



Source: PricewaterhouseCoopers 2002

## Attribute 3

**An awareness of risk pervades the enterprise.**

The importance of establishing a 'risk-aware' culture is not to be underestimated. The goals of holistic risk management need to be embodied – and enforced – in concrete processes that ultimately are connected to performance and reward measurements.

Our respondents agree. Nearly 70% of respondents indicated that their institutions have rolled out new training and risk awareness programmes. A more gradual but still discernible move towards formulating compensation policies that encourage sound risk-taking and reward risk-adjusted performance is also under way. Forty six percent of respondents assess performance on a measure of risk-adjusted capital; 31% attribute separate costs of equity to products and business lines based on their particular risk profiles; and 23% reduce potential bonus compensations for violating loan limits or compliance rules.

## Attribute 4

**Risk management is everyone's responsibility.**

Ensuring that risk is not fragmented into company or divisional silos is a critical element of diffusing responsibility for, and promoting awareness of, risk across the entire enterprise. Yet as we have seen, aggregation is an area that continues to cause respondents difficulty. One respondent said that achieving 100% reliability in aggregating all exposures to a 'single name' is a top priority for that institution. Without that kind of knowledge, fully accountable and informed decision-making about risk is far harder to achieve.

## Attribute 5

**Risk managers have teeth.**

To be effective, risk managers have to have authority and the backing of the board. The chief executive officer needs to seize the risk management agenda as his own and make risk management a strategic priority. To judge by the survey, that process is under way. Almost 50% of all respondents have established a new senior level position with firm-wide risk oversight responsibilities. And almost 70% have instituted a more frequent risk reporting system to help senior management make strategic decisions.

## Attribute 6

**The enterprise avoids products and businesses it doesn't understand.**

Experience has, however, taught many institutions the importance of scrutinising new ventures and new products more thoroughly before making a full-scale commitment. Almost half of the respondents disclosed that they had adopted more stringent approval processes for new products. Much of this added scrutiny comes from a cross-section of functional and business professionals (from legal, tax, accounting, operations and compliance) who provide valuable context to the business case for the new venture, even though they may not be directly involved in structuring or marketing the product.

## Attribute 7

### Uncertainty is accepted.

Risk management is all about uncertainty – accepting that risk is about likely, rather than definite, outcomes. That realisation should feed through into the strategic decision-making process. A company’s course of action should be flexible enough to vary with events. As we quoted in the Taming uncertainty e-briefing, a real leader in this sort of thinking is Royal Dutch/Shell. As Shell’s chairman, Philip Watts, says, ‘Scenarios are not predictions. They are a tool for focusing on critical uncertainties...Those that rely solely on forecasting in their thinking about the future can find the consequences very expensive.’ In other words, you need to take risk and uncertainty into account at the outset, and plan around them.

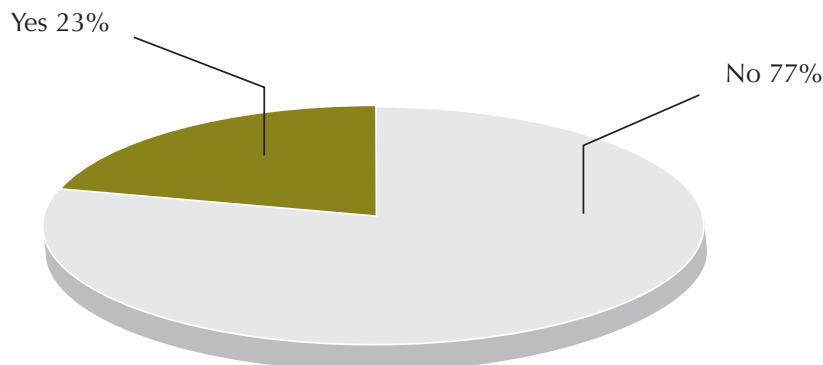
## Attribute 8

### Risk managers are monitored.

But again, more could be done. Given the increased emphasis being placed on direct board-level accountability for financial reporting and risk management, it is surprising that only 23% of the respondents have reaffirmed a direct reporting line to the board for the enterprise risk unit, even though 62% of them see the more timely dissemination of risk information to senior executives as their most pressing reporting priority.

*According to Mr Bryn: ‘A direct reporting line from the enterprise risk unit to the board, or to the board Audit Committee, facilitates both exchange of information and effective follow-through on action steps mandated by the board.’*

Has your organisation reaffirmed a direct reporting line to the board of the enterprise risk unit?



Source: PricewaterhouseCoopers 2002

## Attribute 9

### Risk management delivers value.

The skills and knowledge embedded in the risk management function can have a tangible impact on the successful delivery of the strategic plan.

Respondents identified a number of ways in which risk management programmes had added value to their organisation over the past 12 months, from ensuring a correct framework of procedures and controls for new businesses, products and offices to increased understanding of risk concentration through stress-testing of credit-loss forecasts.

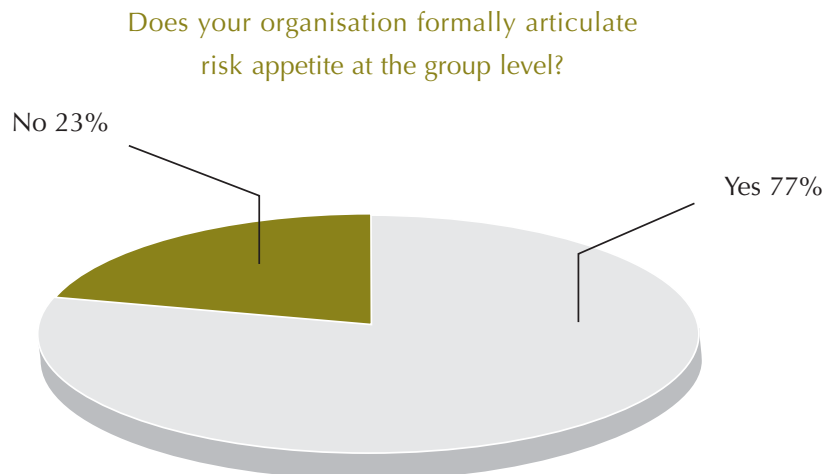
Many respondents are taking steps formally to link the risks run with the returns generated – 46% of the respondents have instituted performance analysis based on a measure of risk-adjusted capital. But that leaves a majority of institutions still seeking a way to solidify the link between risk management and value creation. Only a few of our respondents are pushing for closer integration of the risk and finance functions. According to one respondent, the roles are very different and occasionally in conflict; it is, therefore, important to have two strong independent functions. Yet, while it may not always be optimal to merge the risk management and finance silos so aggressively, closer integration of these two functions can only help to drive the awareness and visibility of risk management throughout the institution.

## Attribute 10

### The risk culture is defined and enshrined.

The calculation and the communication of top management’s risk appetite – confirmed and approved by the board – is one of the most critical components of world-class risk management. Over 75% of the respondents indicated that their organisations formally articulate risk appetite at the group level, which is a highly encouraging result.

Articulating risk appetite once is not enough, of course. Communications about risk tolerance throughout the company must be frequent, timely and accurate. Although our respondents appeared to be sharply focused on the need to provide timelier information to the senior management team, the importance of the flow of information the other way seems to be less pressing. Only 36% of the respondents said that more rapid communication of changes in risk appetite and tolerance for potential losses/earnings volatility is a priority.



Source: PricewaterhouseCoopers 2002

## Conclusion: The path to risk maturity

Corporate scandals, regulatory developments, financial market volatility and political instability are all helping to persuade financial services institutions of the importance of a more holistic approach to risk management. Market and credit risk remain the bread-and-butter of risk management programmes but the denting of public trust in corporate governance and transparency increasingly requires institutions to focus on non-quantifiable areas such as compensation risk and reputational risk. The forthcoming implementation of the Basel II accord has raised the profile of operational risk within institutions. And the lesson of high-impact events such as Enron and WorldCom is that the unthinkable can happen, and destroy your business in the process.

Our survey shows that leading financial services institutions are moving steadily towards this more mature concept of risk management, one that aligns risk with decision-making at all levels of the company.

In PricewaterhouseCoopers view this represents a natural evolution in terms of the risk maturity of advanced financial services institutions.

Three-quarters of the respondent base formally articulate risk appetite at the group level; more than half have revamped policies for the authorisation of risk-taking to ensure closer alignment with the organisation's strategic objectives; half of the respondents have made a senior appointment to oversee enterprise-wide risk; and just under half measure performance on a risk-adjusted basis.

And yet, worrying potholes in the path to risk maturity also become evident from the survey results. Although financial risks today are generally well understood and accurately measured, just under half the respondents remain dissatisfied with the measurement tools at their disposal and 85% see aggregation of data across business lines as an area for improvement.

The next step along the risk management continuum



## Conclusion: The path to risk maturity *continued*

Although a significant minority of institutions do place compensation policies within the risk management arena, more do not. And, although timely communication of information to senior management is a priority within many organisations, most do not have a direct reporting line from the enterprise risk unit to the board.

The increased use and availability of enabling technologies such as XBRL is assisting organisations to accelerate the timely and accurate collection, aggregation and dissemination of risk and value-related management information.

*According to Scott Dillman, Partner in Financial Risk Management, 'Over the next two years, XBRL will play a significant role in improving the credit measurement and management process, specifically, credit scoring for financial institutions.'*

The survey reinforces the need for financial services institutions to continue to strive for improvements in the articulation and enforcement of risk management processes:

- 1 They must assess the balance between risk and return, showing greater appreciation for the risks to their franchise and share value that do not easily fit into the current planning and risk models.
- 2 Senior management must convert this assessment into a corrective action plan, with clear accountabilities and

deadlines reported to the board and disseminated throughout the organisation.

- 3 The board must receive clear and timely information about the implementation and results of risk management programmes.
- 4 Regular transparent stress-testing of the financial forecast should mitigate the risk of excessive leverage or volatility of earnings in the trading accounts.
- 5 Risk-adjusted forecasts should be communicated effectively to external stakeholders.

Finally, the implications of Sarbanes Oxley is currently becoming clearer and institutions are addressing the need for demonstrable improvements in their risk management practices. Specifically, the Act's requirements pertaining to operational risk and management sign-off (sections 302 and 404) are driving new initiatives.

Regulators and investors will continue to demand higher standards of accountability for the decisions that financial institutions take. Managers are increasingly aware of the value that risk management can deliver to the organisation. We anticipate that the movement towards enhanced risk management in all aspects of business conduct and shareholder value creation will not only continue but will also accelerate over the coming months.

## Contacts

If you would like to discuss any of the issues raised in this survey in more detail please speak with your usual contact at PricewaterhouseCoopers or call one of the following:

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