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the journal

Tackling the key issues in banking and capital markets*

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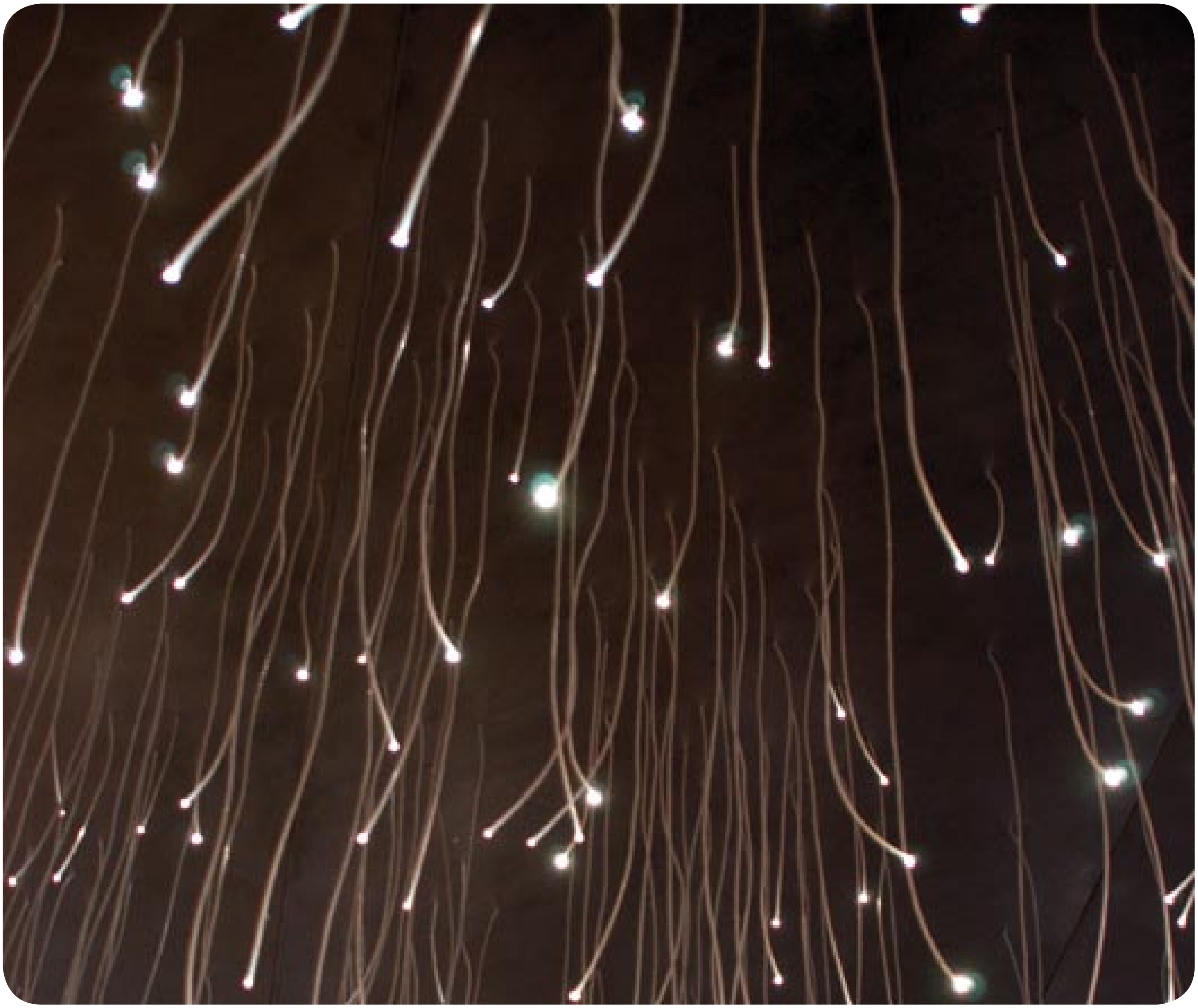

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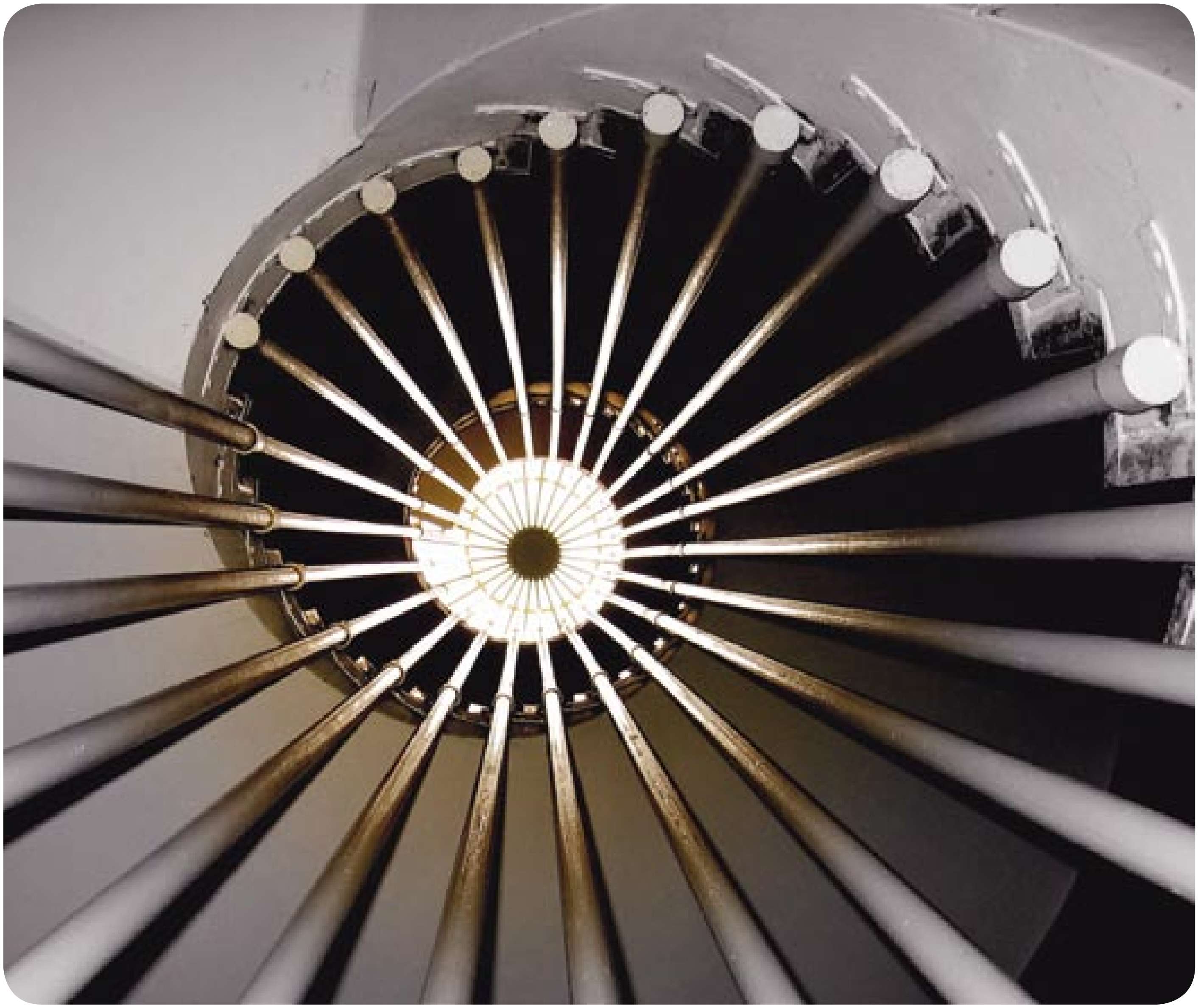

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Welcome to this special risk management edition of the PricewaterhouseCoopers banking and capital markets journal published to coincide with our sponsorship of the IBCI Risk Management conference in Geneva. In this special edition we have brought together a number of articles on a broad range of risk-related topics written by our risk management experts from around the globe.

It is a challenging and exciting time for risk functions; their role is evolving as banks increasingly recognise the competitive opportunities and value of a better understanding of risk. The key benchmarks for success are the extent to which risk information is being actively used to formulate decisions, the extent to which the risk function is aligned with its business partners and, ultimately, whether the risk function is in the right place to support a risk management culture. As part of the global Financial Services Briefing programme that we produce in cooperation with the Economist Intelligence Unit (EIU), the next in the series entitled 'Creating value: Effective risk management in financial services' will focus on risk management within a pan-FS environment and will be launched in March 2007. It will address a number of aspects including how to demonstrate and measure value from a Chief Risk Officer (CRO) perspective, what is the ideal risk management function and the value that a strategically integrated risk management function delivers for an organisation.[1]

Although Basel II has spurred the development of a more systematic approach to risk management, many banks are still wondering how to realise the competitive benefits of their investment. The ability to provide more usable risk information and play a more active role in support of frontline business operations could help to enhance the value, relevance and effectiveness of the risk function in the post-Basel II era.

The challenge of a post-Basel II world is explored in more detail in 'The dawn of a new era: Integrating Basel capital management into a coherent business model'. Maria Fadul and Benoît Catherine explore the challenges facing institutions as they look for the potential payback from Basel II as well as what work still needs to be done to ensure banks are not only compliant, but are adequately prepared to manage their risks and capital more effectively.

When drafting Basel II, the regulators had in mind an economic capital-based model. In the article, 'The future role of economic capital-based models in regulatory capital and strategic risk-based performance management', Miles Kennedy, Mark Train and Connor O'Dowd look at what organisations need to consider in using economic capital as part of their strategic decision-making framework and what the future of strategic risk-based

[1] If you would like to participate in the survey, please visit www.pwc.com/financialservices
[2] Copies of the Banking Banana Skins 2006 report can be purchased through the CSFI website at www.bookstore.csfi.org.uk or by calling the Centre on +44 (0) 20 7493 0173

Editor's comments continued

decision-making models may look like, given the inherent limitations of economic capital-based models.

On the topic of Basel II and regulation, 'over regulation' topped the 'Banana Skins'[2] poll of risks facing banks for the second year running in 2006. The burden for financial institutions, in terms of financial cost, time, energy and resource is ever growing. The huge range of compliance activities from Basel II implementation to changes in accounting standards to Sarbanes-Oxley compliance have, in some cases, given rise to a significant degree of duplication. In 'Designing an efficient business-driven integrated control and risk management framework', John Bromfield and George Stylianides examine the benefits of implementing an integrated control framework by looking at how banks can leverage different activities and harness data to consolidate and produce better quality management information with a view to integrating and improving the overall control environment.

In 'Ensuring your market risk function is fit for purpose in the 21st Century', Wyn Francis, Jon Holloway and Doug Summa consider the evolving and changing role of the market risk function from the simple mandate of trade loss prevention in the 1980s to becoming an integral and critical part of today's overall business and risk management processes. The article discusses the challenges and limitations faced by existing market risk functions and what actions the senior management of financial institutions need to be taking to ensure that not only is the market risk function fully equipped to tackle the increasing regulatory pressures and other business requirements, but is also aligned with the wider risk processes to create a holistic and effective enterprise-wide risk function.

Looking at risk from a different perspective, Ron Collard and Dylan Flavell's article explores the increasingly pertinent area of people risk. In 'HR and people risk: creating a risk management culture', we highlight the importance of effective HR and people processes. Organisations need to be looking beyond risks posed by pure compliance to ensure the importance of behavioural and cultural risks are fully acknowledged and embedded within the organisation, thereby ensuring the overall risk management agenda is not being undermined. After all, most risk management issues relate directly back to people.

In our final article, we look beyond the banking sector to profile a key topic of interest facing our insurance colleagues. In 'Accounting and regulatory synergy: Aligning IFRS and Solvency II implementation', Paul Horgan and Annette Olesen examine how the solvency and financial reporting frameworks are increasingly converging and interacting. This article, a version of which also appears in the December edition of European Insurance Digest,[3] discusses how these synergies and alignments across the two can help insurers realise benefits, particularly in their approach to risk management disclosure.

I hope you find these articles of interest. Please continue to provide us with your feedback and ideas for articles you would like to see addressed in future issues. Online copies of this, and previous editions, can be found at www.pwc.com/banking.

[3] PricewaterhouseCoopers European Insurance Digest, December 2006 (www.pwc.com/insurance)

PRICEWATERHOUSECOOPERS

The dawn of a new era:
Integrating Basel capital management into a coherent business model

by Maria-Isabel Fadul and Benoît Catherine

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Banks are now looking beyond Basel II implementation as to how their institutions will operate in the new post Basel II environment. In particular, they are considering how best to align their Basel II capital management processes with the company's value strategies, business processes, performance measurement, stakeholder relations and wider regulatory obligations. Although the answer depends to a great extent on the culture and structure of the particular bank, many of the overriding issues are common to all institutions if they are to meet the challenges of integrating Basel II capital management into a coherent, compliant and ultimately value-enhancing business model.

Basel II comes on line

While significant progress has been made to implement Basel II, banks still face a number of important challenges. Although much of the systems development is in hand, many banks still have work to do to ensure regulatory certification of their internal models. Key priorities include shoring up the supply and quality of the required source data, especially in relation to the data intensive areas, such as loss given default for instance. Our work with clients also suggests that more effort may be required to validate and calibrate the model outputs and to reconcile the risk and accounting systems. In turn, banks also need to look at how to ensure the outputs are not just geared to compliance, but also provide tangible information that can be used by frontline teams to help manage their risks and capital more effectively.

Redefining the business model

More fundamentally, while strategic decisions need to incorporate a wide range of considerations, many banks will need to redefine key aspects of their business model to ensure that regulatory capital risk management is adequately incorporated into that overall strategic decision-making process. This includes building the regulatory capital risk appetite into business planning and ensuring that it is one of the key criteria in performance measurement and senior management's assessment of progress against objectives. If an organisation is to incorporate effectively Basel II capital management into its business model then it needs to realise this will impact the organisation at all levels, and in all of its functions and businesses and their respective core processes.

In practice, the growing demands on an organisation and its risk management function may also require a review of senior risk management roles and responsibilities. For example, would one person be able to oversee both day-to-day credit risk management on the one hand and the demands of a sophisticated risk capital infrastructure such as systems specification and model calibration on the other?

The ideal organisational structure of risk management requires a balance of central oversight and embedding of processes into day-to-day frontline operations. At the front end, front office teams need to continue to focus on providing proactive control and management of risk, along with support for the business in identifying threats and opportunities. Within the support functions, banks need to look closely at the specific roles of, and interaction between, compliance, risk management, regulatory reporting and, possibly, internal audit to simplify operations and ensure there is no duplication or confusion. The central risk function needs to be able to provide assurance to the Board about the institution's risk and regulatory capital position, as well as the effective operation of the overall risk control framework.

The dawn of a new era: continued

Creating a common language

The Basel II 'use test' arguably requires that the regulatory capital and performance management criteria for measuring risk within the business are one and the same. If actually achievable, the benefits of such an approach go beyond pure compliance. Indeed, the benefits that come with the creation of a common language that would align risk, reward and compliance considerations, and help to avoid any potential confusion caused by using an array of different independent indicators, are obvious. In order to achieve this a stable set of benchmarks is required. That is an integrated set of risk and performance metrics used across the organisation, to compare the profitability of transactions, products, clients and business units. Risk measures, performance indicators and compensation structures would be aligned to embed awareness of, and accountability for, risk and its implications for reward within the business.

In practice, while we must of course be aware of the limitations of the chosen risk management model, reconciling the different metrics can also be a challenge. For example, it may be difficult to relate the market pricing that drives financial trading to risk-adjusted return measures. While economic capital measures can provide a better understanding of the trade-off between risk and reward, Basel II does not recognise the impact of portfolio diversification and this effect can be very difficult to actually build into economic capital models. It is, however, a vital consideration in making strategic risk-based decisions and cannot therefore be ignored in running the business and assessing performance.

If we accept that whichever risk model an organisation chooses to adopt, it will by definition have certain limitations and drawbacks. The organisation can then choose to live with those known limitations rather than constantly changing its approach to its risk modelling methodology; it can then focus on the design and implementation of a common language by which to run all aspects of the business.

In our experience risk management models and key metrics can, to a large extent, be aligned to help create, while not a true single common language, certainly two languages for regulatory capital and performance management that are very closely aligned. For example, it is possible to develop an integrated management 'dashboard' that rates regulatory capital needs and the use of regulatory capital by type of risk, for each line of business, by country and, where possible, risk-adjusted returns for the same items.

Integration into decision-making

Once management is comfortable with the new 'language', strategic choices can then be evaluated using risk-adjusted return measures as one of the key indicators. In an ideal world the ultimate goal would be to have a decision-making model that includes all relevant risk parameters such as portfolio diversification effects, which then reconciles with the Basel II capital requirements, the risk appetite and tolerance standards set by the Board.

In turn, both Basel II capital evaluations and performance evaluations could then be used to aid frontline tactical decisions such as pricing and lending. Advanced measurement approaches (AMA) could bring greater basis point precision into the setting of loan rates, for example. Ultimately, the numbers could help to define risk limits and policy by client, product, country and economic sector rather than trusting to gross exposures.

Holistic approach to risk

Basel II has provided a catalyst for the further integration of strategic, operational, reputational and regulatory risks into an overall framework for strategic decision-making that includes both financial and non-financial risks. A more integrated approach could

help to bring non-financial risks more firmly onto the management radar. It could also help to streamline the activities of compliance, internal audit, risk management and other support functions responsible for managing non-financial risks. This includes providing a platform for a more streamlined and simplified approach to related compliance requirements such as anti-money laundering, Sarbanes-Oxley or the Markets in Financial Instruments Directive (MiFID).

All too often organisations approach new compliance requirements from scratch. This can lead to duplication of effort and a proliferation of controls. Organisations need to take a more holistic approach using a single data set and an integrated set of controls to meet all compliance requirements.

Organisation design and accountability are critical in ensuring that such a holistic approach is effective and cost-efficient. The ideal division of responsibilities between the business originating the risk and the relevant support functions independently monitoring and controlling the risk needs to be determined. Should the control framework be based primarily on business or regulatory considerations? Who is best placed in the organisation to manage, monitor and report threats and deficiencies – specialist risk or frontline business teams? What is the ideal systems architecture to support these functions – centralised to help avoid interface problems or devolved to take account of local needs and future business growth?

Putting out a consistent message

Another crucial advantage of a more coherent approach to strategic risk management is the presentation of a more informed, assured and consistent message to clients, investors, regulators and rating agencies. Indeed, Basel II Pillar 3 disclosure is set to provide more transparency and clarity in relation to risk and capital management.

Clearly, there may be differences between economic, regulatory and accounting evaluations, for example the absence of portfolio diversification benefits in the Basel II numbers as mentioned before. Similarly, issues such as the hedging rules under International Financial Reporting Standards (IFRS) may create anomalies between the numbers used for risk assessments required by IFRS and those in Pillar 3. However, it is possible to create a single framework for data, model analysis and verification. In turn, a common language of regulatory capital and performance risk management could then help to form the basis for communication with analysts, credit rating agencies and other stakeholders.

Bridging the gap

Basel II is meant to bring regulatory capital requirements into line with the way the business is managed and therefore the design and operation of the internal controls, banks need to ensure they bring together their reporting processes and key performance indicators (KPIs) with the new Basel II criteria.

In practice, in order to instil regulatory capital risk awareness into the strategy and operations of the business, this may require a fundamental overhaul of the existing business model. This could include a revamp of organisational structures, management roles and/or reporting lines/accountability. It also includes the pursuit of that common language (as far as possible), which brings together risk and performance management into the a single decision-making mechanism for the institution.

In many ways, these challenges will be more taxing than Basel II implementation itself. However, addressing them could help to turn Basel II from a compliance imperative into a competitive opportunity by using it as a catalyst to strengthen processes and controls and by providing a more assured and informed platform for taking appropriate value creating strategic decisions.

The future role of economic capital-based models in regulatory capital and strategic risk-based performance management

by Miles Kennedy, Mark Train and Connor O'Dowd

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A lot of claims have been made on behalf of economic capital. In establishing a relationship between risk, capital requirements and performance, its advocates hold it out to be a framework for assessing risk, driving accountability for risk and also making decisions on everything from transaction pricing to corporate strategy. Regulators have given economic capital a further boost with the advent of Basel II. Although a comprehensive economic capital system is not explicitly required, such a system appears to be in effect the only way to satisfy the regulators' expectations for any bank that wants to use the advanced approaches described by the new rules. This implicit regulatory endorsement has revived interest in economic capital over the last few years and prompted the banking industry to invest more resources in an area that previously had almost as many detractors as it had advocates.

With its new-found popularity and the implicit regulatory endorsement, there is a danger the limitations of an economic capital model are overlooked. It certainly can, and indeed should, be one of the tools used for managing capital adequacy and optimising capital usage with specific regard for risk, if only to placate the regulators under the Basel II accord. However, despite growing acceptance in the industry, strong regulatory endorsement and a variety of technical advances in risk quantification, it is still no panacea. We have discussed in depth in a previous article in the journal, the advantages and disadvantages of using an economic capital model to manage risk (see *Risk, capital and economic profit – Are we seeing the full picture* in the January 2005 edition of the journal – these thoughts are summarised in the box overleaf).

Many firms have of course already embraced economic capital to a greater or lesser extent. In most cases, however, the use of economic capital has been found to be of greatest value in areas such as setting risk appetite, managing capital adequacy and setting risk limits. The experience in using economic capital to support things like strategic planning, M&A and – the acid test in many ways – setting compensation, has been quite mixed.

There are a number of identifiable reasons why some firms have not yet extended the use of economic capital into these areas. Some relate to a simple prioritisation of effort, particularly with so much resource being directed towards Basel II. Other issues are more fundamental, having to do with whether a capital based approach can ever deliver a wholly satisfactory risk-adjusted performance solution.

In a nutshell, the limitations revolve around the fact that capital is not in fact a commodity – its price is a function of the type of risk that it bears (this is a fundamental tenet of corporate finance, where a company's Beta – being a measure of its systematic risk – is a key determinant of its cost of equity). Yet economic capital typically does not make this distinction, but allocates capital in proportion to total portfolio risk, charged at a homogenous group cost of equity. This omission is not a problem from a capital adequacy point of view, since all risks are equally relevant in that sense. But it can substantially distort performance metrics, and can give quite misleading signals in valuation/M&A situations. An important question therefore is whether users should develop work-around solutions to correct for these distortions, or search again for a better way, perhaps not involving capital at all.

The future role of economic capital-based models continued

The work-around solution

This solution involves maintaining economic capital as the central framework for both capital management and performance management applications, but implementing a range of fixes to correct for the potential distortions alluded to above. For example, a diverse multinational financial services group might consider setting different costs of capital for different lines of business calibrated with their mono-line industry peers. An alternative is to distinguish between risk factors in terms of how systematic or otherwise they are, and give them different weightings in the capital allocation process so that business units which have a high concentration of systematic risk (would have a high Beta if listed separately) are allocated a proportionately higher capital burden.[1] A more basic approach still is not to tamper with the capital allocation scheme, but rather supplement economic capital metrics with other traditional metrics (such as profit growth, market share, peer comparatives, etc.) in a balanced scorecard approach. In this way, not too much rides on a single – potentially erroneous – measure, and management judgement is invoked to identify the right courses of action where the individual measures conflict.

There is a lot to be said for the work-around approach in that it involves relatively little additional investment (assuming an economic capital model is already in place); change management aspects are relatively straightforward; and it doesn't depart too much (if at all) from what the regulators are comfortable with and expect. There are two issues however that it doesn't really address. One is, however much the capital allocation scheme is tweaked, it will still be essentially a top-down process requiring a number of judgements to be made to finesse it, thereby risking making it too cumbersome and opaque. We suspect firms would want to keep it fairly simple, making distinctions between businesses and risks only where there is a demonstrable case for doing so. As such, we question whether a tweaked capital allocation scheme will ever be a reliable basis on which to price for risk particularly when money is leaving the bank – for example, valuing an investment, pricing a loan or paying a bonus.[2] The second issue is that a capital approach, driven by risk, is fraught with diversification issues which are challenging enough within a simple risk and capital aggregation structure, never mind when it comes to 'cutting and dicing' business performance to better understand, for example, the value contribution of different products, geographies, customer segments, etc.

The search-again solution

Before outlining what an alternative approach might look like, it is worth emphasising that in no way are we suggesting that economic capital is redundant. Rather, we are considering whether it should be dedicated to the particular applications where it has been found to work best: capital planning; risk appetite; portfolio management

[1] For example, credit risk is generally considered to be highly correlated with the state of the economy and therefore there is likely to be a sizeable systematic element which cannot be diversified away, even by shareholders. In contrast, operational risk can be regarded as almost entirely non-systematic.

[2] For example, giving credit risk a weighting of, say, 150% in the allocation scheme (relative to operational risk at, say, 50%) would not address but rather exacerbate the fact that credit risk itself is somewhat diversifiable – credit concentration risk is unique amongst risk categories in being diversifiable by definition. Giving credit risk a 150% weighting could therefore increase the tendency of banks to price lending business in a way that reflects the makeup of their existing portfolios, rather than its true value in the market. Managing portfolio concentration is of course valid from a solvency/capital efficiency point of view, but the cost of concentration risk is a second-order frictional issue and should not be confused with the true economic cost of risk from a shareholder's perspective. To be of much use, therefore, the scheme really needs to fix the issue at source, rather than push it down where it might further distort pricing and portfolio management decisions at the coal face.

processes which essentially revolve around capital adequacy and efficiency. This would leave the job of measuring performance and pricing for risk to a new 'market-consistent' approach which does not involve capital at all, but rather adjusts for risk by means of a monetary risk premium based on the 'systematic' riskiness of individual assets and liabilities.[3] The rationale for this is that, by by-passing capital, the approach would also by-pass the diversification-related complications associated with a capital-based approach.

Even so, for performance and pricing applications, the idea of abandoning economic capital in favour of a shiny new alternative may be a daunting prospect for many firms – but economic capital, it is worth pointing out, is not as radical, nor as untested, as it may appear. Some insurance firms are already moving in this direction to align their internal risk and capital management processes with core valuation principles.[4]

The idea is to price risk at the most granular level possible – the level of individual assets and liabilities. Each of these is assigned a monetary 'risk load' based not on the variance of its returns (in terms of losses/cashflows/earnings), but rather on their *covariance* with an external index of returns which embodies the fully diversified (i.e. systematic) risk profile to which every equity investor is, in principle, exposed. This is analogous to the Capital Asset Pricing Model which adjusts the cost of equity for the covariance of individual stock returns with the overall stock market. With the price of risk taken care of in this way, the cost of capital from a funding perspective (as opposed to risk perspective) can be commingled with other sources of funding and taken care of through the funds transfer pricing (FTP) system.
In a valuation context, the 'certainty-equivalent' cashflows (i.e. net of the risk load) can simply be discounted at the risk-free rate.

The challenge with this approach is to decide just how the covariance should be determined (there are a number of feasible approaches), but we argue that this challenge is no greater – in many ways less great – than that of deciding what correlation/diversification assumptions to use under a capital based approach. Furthermore, we believe that much of the underlying data to support this form of analysis could be shared with economic capital/Basel II regulatory capital models.

The advantages on the other hand are many, starting with the fact that it tackles the systematic versus non-systematic risk issue at source and thereby facilitates a highly granular basis for risk-adjusted pricing and valuation which is consistent with the external market. A second major advantage is that, being based on a measure of covariance, the risk loads levied on assets and liabilities are entirely additive – a feature which means they can be aggregated to any sub-portfolio level one wishes without falling foul of diversification issues.
In simple terms, this means that management can quickly analyse the economic profitability of business units, product groups, geographies, etc. without re-running the capital model, each time with a different portfolio composition.

[3] By 'market-consistent' we mean that risk is valued / priced internally in the same way that it would be valued etc. in the external market – that is, on a fully diversified basis, consistent with the principles of the Capital Asset Pricing Model.

[4] Recently established valuation and reporting principles adopted by a number of leading UK and European life insurers extend traditional embedded value techniques by valuing insurance liabilities with particular risk components (e.g. embedded equity; interest rate options; guarantees) on a 'market-consistent' basis, i.e. with direct reference to how the market prices such instruments. This principle has been extended by some insurers to cover all assets and liabilities, and applied more fully to become the central mechanism for risk-adjusted pricing, target setting and performance measurement (i.e. not just statutory valuation).

The future role of economic capital-based models continued

But what would the regulators say?

However strong the case on economic grounds for a 'search-again' solution, it is clearly important that regulators and other non-equity stakeholders are kept happy. The more so when you consider how central economic capital has become to satisfying the so-called 'use test' under Pillar 2 of Basel. On the face of it, it is easy to see why regulators are happy to see firms make capital the central feature of their performance regimes. Similarly, it would not be a great surprise if they were to resist moves to separate solvency and performance management processes along the lines we propose. Having said that, the performance versus capital adequacy distinction doesn't map directly to, respectively, shareholder versus other stakeholder interests. Put simply, remaining solvent is a legitimate shareholder concern and, likewise, maximising shareholder value is in the long run the only sure way of attracting and retaining the capital that depositors and policyholders rely on for their security.

Therefore, the key to keeping regulators on-side is giving them sufficient confidence that risk and capital management is a serious organisational concern. This can be demonstrated through clear and openly disclosed statements of risk appetite, integrated risk-based strategy and capital planning processes, and robust risk policies and limits. Against that background, we put forward the premise that firms should feel free to explore new ways to account for risk which are better aligned to the true economic interests of their owners.

The limitations of economic capital models

The basic philosophy of economic capital states that in relation to risk a company needs to hold capital and in relation to capital it needs to earn profit. There is, therefore, a relationship between risk and profit: an organisation can assess and set performance targets accordingly. Businesses that are riskier and consume more capital must also earn higher returns – and the same goes for specific trading desks or individual transactions.

The limitations in this approach begin to appear when disaggregating the group-level figures. Within a large, complex organisation, a diverse range of risks are incurred by its portfolio of businesses – these internal diversification effects need to be taken into account if the organisation wants to set appropriate capital levels and performance targets. More importantly, the firm's shareholders have investment portfolios of their own, so any risks that do not diversify within the firm itself may be diversified within these external portfolios. As a result, a lot of the volatility that an organisation generates is of no consequence to shareholders. Requiring businesses to generate profits to compensate for that volatility is a distortion.

Basel II makes scant allowance for this external diversification effect – and this is entirely appropriate when calculating overall capital requirements, where the chief concern is to avert insolvency on the part of the individual firm.[5] But Basel II also seeks to make these calculations the driver for a range of other business and strategic decisions – the setting of performance targets, for example – which impact directly on shareholder value. As noted above, taking this extra step can mean the impact on shareholders is detrimental.

[5] Interestingly, the Basel II IRB risk weight functions under Pillar 1 set regulatory capital for individual loans on a fully diversified basis (i.e. the systematic component only) on the assumption that most banks have well diversified loan books. Although this may seem to contradict the point, apparently the objective is to make the primary calculation and aggregation of regulatory capital easy (i.e. uncomplicated by portfolio diversification issues) and, if banks are found not to have well diversified loan books, this will be labelled 'concentration risk' and factored into their capital charges under Pillar 2. The combined effect therefore is – as it should be given the solvency focus - to set regulatory capital on the basis of actual portfolio risks.

Ensuring your market risk function is fit for purpose in the 21st century

by Wyn Francis, Douglas Summa and Jon Holloway

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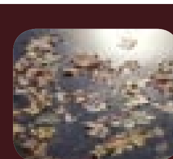

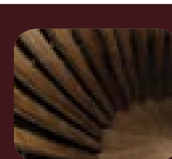

It is hard to imagine these days a bank anywhere around the globe without a market risk function of one sort or another, but it is worth remembering that the market risk department is actually still a fairly 'new' department. The market risk function first appeared on Wall Street in the 1980s. Initially, these departments had a simple – but powerful – mandate. They were told to prevent trading losses by setting and policing exposure limits. To do this they were often given wide-ranging powers, including – in the case of one leading US bank that first set up its market risk team after losing millions of dollars in the mortgage-backed securities market – the power to liquidate any trading position it did not like, without appeal.

Fast-forward to today and the life of a market risk manager has become much more demanding. The complexity of instruments and trading strategies has increased to such an extent that simple position limits are often insufficient – today's trading risks can only be understood by employing a range of sophisticated models. Developing and maintaining these models requires the employment of numerous quantitative analysts, who are technically very strong, but can at times lack the practical business experience.

Over the years the role of the market risk function has also changed. It now plays a vital role as a partner to the business, rather than seeking simply to limit trading losses. Many banks seek to make money by being quicker than their peers in bringing new products to market or offering bespoke transactions to clients. These products and transactions need to be modelled and priced individually. So, in addition to the measurement and control of trading risk, today's market risk function is also a key part of the product development chain and helps determine the speed at which a bank can bring new products to market.

The interaction with other functions – including product control, finance and other risk departments – is also increasing, as is the requirement to contribute to business critical processes. An example is the measurement of counterparty credit risk exposure for trading book positions. It usually falls to market risk to build, implement and validate the measurement tools and regularly run exposure models, albeit in close association with the credit risk function.

This evolving and changing role of the market risk function over the last 20 years or so has meant that many market risk functions do not have an up-to-date and fit-for-purpose strategy in place. The result of this can be that they face significant issues in ensuring that they meet the demands being placed upon them by both the business and senior management, not to mention the requirements of external regulation such as new US and international accounting requirements as well as new legislation in relation to reporting on internal controls, such as Sarbanes-Oxley in the US.

Increasing levels of risk

The internal workings of the market risk function are most visible to senior management and to external stakeholders through one of the discipline's innovations – a metric known as Value-at-Risk ("VaR"), which aims to show how much money a trading operation could lose on a single day at a certain level of confidence. These figures are widely reported within

Ensuring your market risk function is fit for purpose in the 21st century continued

the bank and are also normally disclosed in quarterly, interim and annual financial statements. In recent years, VaR figures have risen across the industry as banks have rediscovered their appetite for trading risk. It is not uncommon today to find banks reporting average one-day 99% VaR levels of $80 million and more. At the turn of the millennium, by contrast, it was hard to find a bank that was taking even half that amount of risk.

Thankfully, this dramatic increase in VaR numbers has not yet been accompanied by widespread trading losses. It may be that, despite the increase in VaR numbers and the dramatic and ongoing change in the market risk function, banks have trading risk well in hand. There is however a growing accumulation of evidence that suggests that the banks may not have market risk as well controlled as they might wish.

Reasons to worry

Market risk functions are increasingly overworked and are at times struggling to cope with the ever increasing demands placed upon them. While some of this is anecdotal, senior market risk managers do increasingly complain that their departments are overstretched. The pace of innovation is producing backlogs of new products that need validated models, resulting in friction between the business lines – which want to start marketing these new ideas – and risk managers, who feel they are being pulled in different directions. Banks are responding by trying to hire more quantitative analysts in what is a very competitive market. You only need to talk to recruitment firms to understand the level of competition; the current demand they are seeing for these quantitative specialists is phenomenally high.

There is also other evidence that problems may be emerging. Banks required to comply with Sarbanes-Oxley have been through a lengthy process of documenting and testing their internal controls. Some have identified a number of control weaknesses in the market risk processes – often around the controls surrounding the valuation models. In extreme cases, banks have even struggled to produce an inventory that maps different products to the models used to price them. With the increased use of fair value in accounting and new rules around revenue recognition, auditors are also increasingly focusing on this area as the outputs from these models are beginning to have an increasingly material impact on the financial statements.

Some of the current challenges being faced by market risk are often as a direct result of this step-change in expectations around internal control, driven by external regulation.

Managing stakeholders

The relationships with other functions – particularly product control and finance – are also an area which can lead to problems. Product control functions themselves are required to be increasingly quantitative and technical when responding to the challenges of independent price verification (IPV) and revenue recognition issues. One solution is to resource product control functions with more quantitative analysts. However, the cost and availability of this skillset has often forced banks to stretch further the existing resource pool.

Unfortunately, this normally means an additional burden for the quantitative capability of the market risk function, potentially leading to reduced clarity around the role they are required to perform and the priority that they should give to the many demands made on them. One good example of where this has occurred in recent years has been around the interpretation and implementation of new US and international accounting rules in relation to the reporting of profit on financial instruments. Typically this has taken a huge amount of time and effort by the product control, finance and market risk teams.

In meeting the various different expectations placed upon them by the business, product control, finance, etc. It is vital they have in place an appropriate management structure. Finding the right individuals to manage the market risk function in todays ever more challenging world can be difficult, these people need to have a deep understanding of the business and a wide range of skills, which ideally should include quantitative, communication, management and people skills.

Well-developed communication channels with the various different internal stakeholders have now become essential if a market risk department is to meet the demands of its increasingly broader role. Ensuring the various different internal clients, be they the business, senior management, product control or finance, get the right information, in terms of format, frequency, scope and level of detail, is critical.

A common criticism levied at market risk, at times unfairly, is the way in which market risk management information is reported is not appropriate and that the key messages can therefore be lost under a mountain of numbers and data. The key issue, where this is the case, is often the balance between the quantitative and the qualitative analysis. As an example of this, in a recent analysis of a significant trading loss it was revealed that a particular desk limit was regularly breached and a high proportion of transactions were booked late. This information was being reported to senior management, but it was buried in a pile of statistics.

None of this means that banks are doing a bad job of measuring, monitoring or controlling individual risks. Rather, where these weaknesses occur they should be seen as warning signs. Many risk functions are overstretched and finding it hard to cope. This can be fertile ground for more serious problems to emerge if left unaddressed.

Progress to date

Over the last few years banks have therefore started to rethink the way they run their market risk functions. One common change has been to appoint a departmental Chief Operating Officer (COO), who complements the market risk head by concentrating on the operational aspects of the division. The COO is charged with stepping back from the day-to-day business of risk management, to look at how the department's resources and the supporting infrastructure are used, and to find ways of deploying them more effectively. This often includes responsibility for looking at all aspects of the control environment. This has been particularly effective when the COO has also taken on the role of managing internal relationships – ensuring that regular and ad hoc requests are prioritised and dealt with accordingly.

There has also been a trend of hiring resources with deep capital markets experience and quantitative skills into both product control and internal audit. This technical background relieves some of the pressure on the market risk department and enables a greater degree of oversight of trading activities. It also allows better assessment of the activities of the market risk functions. The hope is that specialist auditors will be able to identify and escalate control weaknesses and emerging issues ahead of time and also to ensure that the risk function acts to address them appropriately. When coupled with the COO role, this gives a mechanism to ensure that control weaknesses, once identified, are acted upon swiftly and decisively.

Banks have also been looking to go further, and borrow tools and techniques developed by operational risk management departments, and apply them in the market risk arena. For example, most banks now have or are developing a system of Key Risk Indicators (KRI) that can be helpful in identifying the patterns of weaknesses that pose a potential risk, and enable the department to allocate resources more efficiently to deal with the problem.

Ensuring your market risk function is fit for purpose in the 21st century continued

Areas where KRIs can be used, include the back testing of models, limit utilisation, limit breaches, late booking of trades, the IPV process and model validation.

The challenges ahead

Even with these changes further challenges lie ahead for market risk departments. The increasing focus on and disclosure of risk information in public documents, such as the financial statements, and the continued pace of change in external regulation in relation to issues such as fair values and revenue recognition is again going to increase the pressure in market risk.

One only has to look at the recent introduction of FAS 157 in the US to understand some of the challenges. Having taken a number of year and a huge level of resource to get on top of the previous pronouncement regarding revenue recognition, EITF 02-03, one can only speculate how much time and effort banks will need to spend on FAS 157.

All of this is also before we consider other regulatory implications such as those of Basel II and CAD model approval. With the increased use of models in financial reporting and capital management regulators around the globe are becoming much more focused on the controls surrounding these models. For example, the FSA in the UK has recently issued one of its “Dear CEO” letters setting out their expectations around stress testing of risk models.

Ultimately, however, even with the various tactical initiatives outlined above, if a market risk department is going to be successful in meeting and delivering on the current challenges it faces, it needs to review its overall strategy. That strategy needs to be up to date, well-communicated and well-understood if the department is to deploy its resources in such a way that it can do its job more effectively and efficiently. It also, and critically, needs to be in line with the overall enterprise-wide risk strategy for the bank in order to ensure the effective management of all risks across the whole bank.

PricewaterhouseCoopers is in the process of helping a number of clients with a strategic review of their market risk operations, including looking at the fundamental remit and structure of the group in order to ensure the market risk function is well-placed to meet the current and future challenges it will face in the current regulatory environment.

 

Designing an efficient business-driven integrated control and risk management framework

by John Bromfield and George Stylianides

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It will not come as news to any senior executive in the financial services industry that complying with laws and regulations is a major drain on resources, whether it be new regulatory capital rules, new accounting standards or other regulatory compliance requirements. For instance, while the Basel Committee issues evermore prescriptive guidelines on how banks should calculate and manage their regulatory capital, national regulators are, in certain areas, implementing the Basel rules in slightly different ways from one jurisdiction to the next. Further, the pronouncements from some regulators – notably the SEC – have the power to impact the entire organisation globally. The implementation of these new rules is further complicated by the fact that the appropriate interpretation of these new rules is not always clear, while some regulators will offer firms a steer, others just outline principles and some even announce rules or interpretations during speeches at which some firms may not even be in attendance.

This burden has produced a growing frustration within the industry. Compliance doesn't just exact a financial cost – it also requires the investment of time and energy. At one of our clients, senior executives estimate that 30% of back and middle office management time on a day-to-day basis is consumed by compliance activities. And while the current wave of new regulation is crashing on the industry's shore, the second and third waves are already forming. There is therefore little prospect of any near-term respite from the current pace of change.

Despite this, institutions can lessen the burden or – if they are more ambitious – turn their compliance efforts into a potential source of value for the business and even potentially a source of competitive advantage.

Duplication of effort

Getting a tangible business benefit out of all this regulatory spadework is possible because institutions are now often gathering data but are not necessarily using this data as part of their day-to-day management of the business. Many of these new strands of regulation have a focus on internal controls and – through these controls – on the mitigation of various risks, whether those risks are related to money laundering, financial misstatement, abuse of customers or events like rogue trading. Typically, however, these activities are undertaken by different departments, using different data sets. As institutions scramble to ensure that they comply with all these different rules, they will frequently find themselves knowingly or unknowingly going over ground they have covered before – perhaps in a slightly different way, or in a different business area or location. Consider the following real-life example:

An operational risk manager in the IT department of a major bank has the mandate to ensure that all potential loss events arising from problems with people, processes and systems in the department are being properly identified and controlled – that includes the risk of an employee making unauthorised changes to a key program. So, as part of his/her job, the operational risk manager will assess this specific risk and ensure it is being monitored and reported appropriately. Separately, the bank – as part of its Sarbanes-Oxley (SOx) compliance efforts – has also identified a key control that should be in place to mitigate the risk that its financial data could be amended in an unauthorised fashion. The result of these parallel efforts is that, independent of operational risk, the SOx compliance team again ran the rule over the controls

Designing an efficient business-driven, continued

relating to programs and systems access. Later on, if this duplication had not been identified, separate testing of these controls would have been performed for both operational risk and SOx, both of whom may then have made separate recommendations to the IT department on the operation of those controls. While this duplication would clearly add to the burden on the IT department, the recommendations made from the two separate processes may even have conflicted.

This kind of duplication of effort is actually startlingly common. Of course, in the scramble to comply, there has not been an opportunity to call a 'time-out' on compliance efforts so that management can examine how best to leverage existing work to meet fresh needs. The rapid proliferation of these different layers of compliance activity has now reached a point where the burden is so great that the financial costs – to say nothing of the costs in time and energy – are at an eye-watering headline level. Management at many of our clients have complained that the strain is becoming unbearable. Sooner or later therefore, institutions will have to make time to address this problem and in doing so, there is a spectrum of different possible options, each offering different kinds of payoff.

Putting data to work

Getting a true grip on compliance necessitates the adoption of a top-down approach as a starting point. Too often the response to new regulation has been to work from the bottom up – building or documenting controls to cover a wide range of specific risks that are faced by frontline businesses or within control functions. They have then been startled when regulators have tested their mastery of the new rules by switching emphasis away from these detailed requirements to ask questions at a far higher level: 'How do you know you have control in business A, or country B?' Institutions now need to make the same shift and, in doing so, put themselves in a better position to reap the benefits of their investment.

Financial institutions already have a huge amount of data on process flows and control templates, which are often now gathering dust in little-used data repositories. The work of collecting all this data has been done and there is now an opportunity to turn the thing on its head and organise the ongoing reporting and analysis by asking what risks senior management need to monitor, regardless of which strand of regulation has given rise to it. An existing control or groups of controls can then be identified that mitigate the risk identified, monitoring and reporting can then be developed to monitor that particular risk exposure. This should be undertaken within the institution's overall risk management framework.

This change in emphasis is one that several PwC clients are taking and it has produced dramatically slimmer and more focused management reports, which help to direct management attention to where it is most needed. One client discovered that 70% of the controls it had previously been monitoring were superfluous for the purposes of monitoring by senior management. Although they had been deemed to be mitigating the bank's risk exposure, the extraneous material simply was not needed at that level of the organisation. Similar benefits were achieved at lower levels in the organisation. This then ensured there was a consistent framework connecting all tiers of management that allowed a holistic view of risk and control to be achieved. Compliance efforts at this organisation had resulted in a proliferation of management information dashboards – 14 in all – being used by different corporate functions, despite there being significant overlaps in the content of these dashboards. Once this issue was identified, this information was consolidated – again, increasing efficiency and effectiveness.

These steps can also be incorporated into more far-reaching change, in which not just reporting, but the whole day-to-day compliance process is reordered in a streamlined and coordinated way that better suits the company. At the moment, compliance is often what it says on the tin – a narrowly defined, but massively burdensome attempt to satisfy regulators. It can, and should, be an integral tool for a more effectively run business. This means approaching the whole effort with business goals in mind – compliance should be a valuable side benefit that is encompassed by this process, but it is not the be-all and end-all. It is an integral part of day-to-day activity.

Integrated control frameworks

Companies are therefore taking this opportunity to not only eliminate duplication and make their data work harder (as outlined above), but also to fundamentally review the underlying control framework currently in place, with the aim of better integrating the various different components of the control environment, and so align controls with management's overall risk assessment regardless of the external regulatory trigger. A holistic view of risk, reflecting the companies risk appetite, aligned to the controls and other risk mitigants that alleviate potential exposure can then be achieved.

In putting this theory into practice it is complicated by the need to work on multiple levels. As well as thinking about structure and process, an organisation will also need to spend time on cultural issues – this is all about establishing a top-down risk management framework in which everyone's role is clearly defined and understood and is part of their day-to-day job. As such, some of the key challenges revolve around communication – for example getting across the idea that everyone is required to think about and manage risk, giving individuals a clear idea of what is expected and (perhaps trickiest of all) convincing them that this initiative is not going to add to their workload. The ideal end-state is one in which everyone is empowered to think about and proactively manage and mitigate risks – a kind of risk management nirvana.

That goal may seem far off, but PricewaterhouseCoopers is now working with many of its clients to design, create and implement their 'integrated control frameworks'. The projects are large and often complex, but the efficiency payback in terms of improved information, lack of duplication and reduced management burden is immense.

PRICEWATERHOUSECOOPERS

HR and people risk: Creating a risk management culture

by Ron Collard and Dylan Flavell

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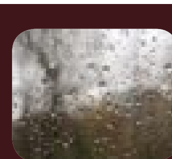
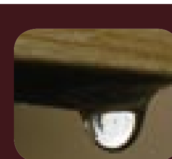




Your employees are motivated, talented, bright individuals. People are your key asset, but they are also potentially your greatest risk. Fundamentally, your organisation is a collection of wilful, creative, intelligent individuals and, as a result, there is substantial risk that is inherent in the management of those people as a business resource.

Regardless of how good internal controls are, risk management efforts will fail unless businesses go beyond compliance to address the supporting culture and behaviours of the individuals throughout the organisation. Creating an effective risk management culture cannot be the sole responsibility of HR, but requires an integrated risk management approach, which links up critical functions with line management.

The regulatory imperative

Risk management has been high on the corporate agenda for several years, particularly in the Financial Services sector. This has been driven primarily by the requirement for compliance with key legislation such as Sarbanes-Oxley (SOx) and sanctions imposed by regulatory bodies such as the Financial Services Authority (FSA) in the UK.

Up to this point, the emphasis has been on doing everything possible to meet compliance requirements. Organisations have focused on improving internal controls and addressing gaps in processes to keep pace with the legislation. However, as the regulatory burden increases, several commentators observe that the cost of controls appears to be spiralling upwards at an exponential rate, without the corresponding reduction in compliance breaches that might be expected.

In May 2006, the SEC's acting chief accountant, Scott Taub, defended the implementation of SOx Section 404 and told critics: 'if you think 404 does nothing for fraud, you're doing it wrong'. He went on to suggest that soaring costs were due to overly detailed testing on too many controls and that, as a result, companies may be failing to focus on those controls that pose 'substantial risk'.

Despite the boldness of Taub's assertions, he has a point. There is no question that SOx regulations and related developments in corporate governance have done something to address fraud, malfeasance, embezzlement and other areas of corporate malpractice, if only by creating a heightened awareness of such risks and compelling the need for tighter internal controls. However, there is a growing realisation that a focus on compliance and controls alone is not enough.

So, you're compliant – now what?

People are arguably the most valuable and frequently the most expensive resource in any organisation. They are critical to business success and yet, at the same time, pose the most substantial risk to business objectives – and the greatest challenge to any set of regulations and resulting controls, however robust or rigorous they may be.

Successful business outcomes are dependent on consistently appropriate workplace behaviour and a culture that is driven by widely shared and reinforced perceptions, values and attitudes, associated with risk and compliance.

High-profile corporate crises and scandals have highlighted the important role of culture and behaviours, not to mention the widely publicised outcomes of employee compensation claims in cases such as discrimination or workplace bullying.

HR and people risk: Creating a risk management culture

continued

Even the regulators are beginning to acknowledge the importance of the people aspects of risk more explicitly. When Taiwan suspended the head of their financial regulator earlier this year, citing an investigation into alleged corruption, the government issued a statement saying that Kong Jaw-sheng (chairman of the FSC) was 'suspected to have been involved in three corruption cases in his tenure as Taiwan Sugar chairman and has failed to properly supervise his staff in his current position'. As if the charge of corruption was not enough, the demonstrable lack of proper management and leadership in his role at the FSC was deemed significantly damaging to be reported.

This emphasis on effective HR and people processes can also be seen coming through in new legislation. The focus by regulators around the globe on treating customers fairly, as seen by the recent introduction of Treating Customers Fairly (TCF) by the FSA for example, aims to combat misrepresentation and mis-selling to clients. Similarly, the forthcoming Markets in Financial Interests Directive (MiFID) – aimed at investment banks, portfolio managers and other investment intermediaries – introduces unified European requirements for the best execution of a client's orders.

Organisations impacted by these legislations will need to demonstrate that they are acting in the best interests of their customers. This will require robust, cohesive and consistent people policies and processes across the business, but they must be supported by ethical behaviours on the part of the traders and a culture that promotes effective implementation of those policies. Most frauds occur because of individuals being under pressure to meet certain targets whether arising from internal budgets or under pressure to succeed and be recognised or from external personal financial pressures. For example, short-term incentives, such as commission-based bonuses, may reward individual success and positively encourage traders to perform well in an aggressively competitive market. However, bonuses based on how much revenue has been generated with no recognition of how the deals were achieved will not help to reinforce desired behaviours – or worse, will undermine the business itself by encouraging unacceptable levels of risk-taking.

Proceed with caution

In May 2005, Dominic D'Alessandro, head of Canada-based insurer, Manulife Financial Corp, criticised Sarbanes-Oxley as ineffective and deeply flawed.

'It is now becoming fashionable to believe that corporate behaviour should always be viewed with suspicion… This is a very dangerous premise upon which to develop a governance regime… We run the risk of imposing onerous and impractical restraints that will stifle entrepreneurial activity'.

D'Alessandro did not see how the cumbersome regulations could deal with malpractice and essentially advocated self-regulation by corporations that, with the promise of harsher sentencing from the government, would pursue perpetrators aggressively. Astutely, he also highlighted the risk that over regulation, rather than promoting positive behaviours, could negatively impact desired behaviours.

Other commentators on the day-to-day operation of corporate culture might echo D'Alessandro's sentiment that the regulatory pendulum has swung too far when the potential of penalties, such as uncapped liabilities for race discrimination claims, may make employers and employees, operating in a global marketplace, far more circumspect in their dealings with diverse clients and colleagues.

Nevertheless, organisations that ignore the risks of behaviour that undermine the desired corporate culture do so at their peril.

Don't blow it

For example whistle-blowing procedures will not be effective without a culture in which employees can raise concerns in a safe environment. Regulators are aware of this and in certain jurisdictions they are taking steps to ensure this happens, in the UK, for example, employers may fall foul of the Public Interest Disclosures Act (1998), which was introduced by the FSA with the intention of protecting workers from victimisation during the whistle-blowing process.

More critically, aside from regulatory considerations, organisations will be putting their external reputation at risk if they do not cultivate the necessary supporting culture and behaviours. Potential outcomes may include:

- **Ignorance** – individuals are not aware of the process you have in place, so feel they have nowhere else to go but straight to external bodies, such as the regulator or the press, resulting in damage to external reputation and stakeholder perceptions.
- **Fear** – although procedures are well-communicated and individuals are informed and aware, management behaviours do not endorse an open culture of listening, so employees fear approaching anyone with the information they have.
- **Distrust** – employees initially have confidence in the process and follow the established procedures, but no follow-up actions are taken by the organisation and as a result they lose faith in senior management.

Understanding your risk management culture

Risk management culture can be understood in terms of four key levers of organisational behaviour: leadership and strategy; accountability and reinforcement; people and communication; and risk management and infrastructure (illustrated in detail by Figure 1 overleaf). Ultimately, it is these practices that will shape the risk management culture and tone within your organisation.

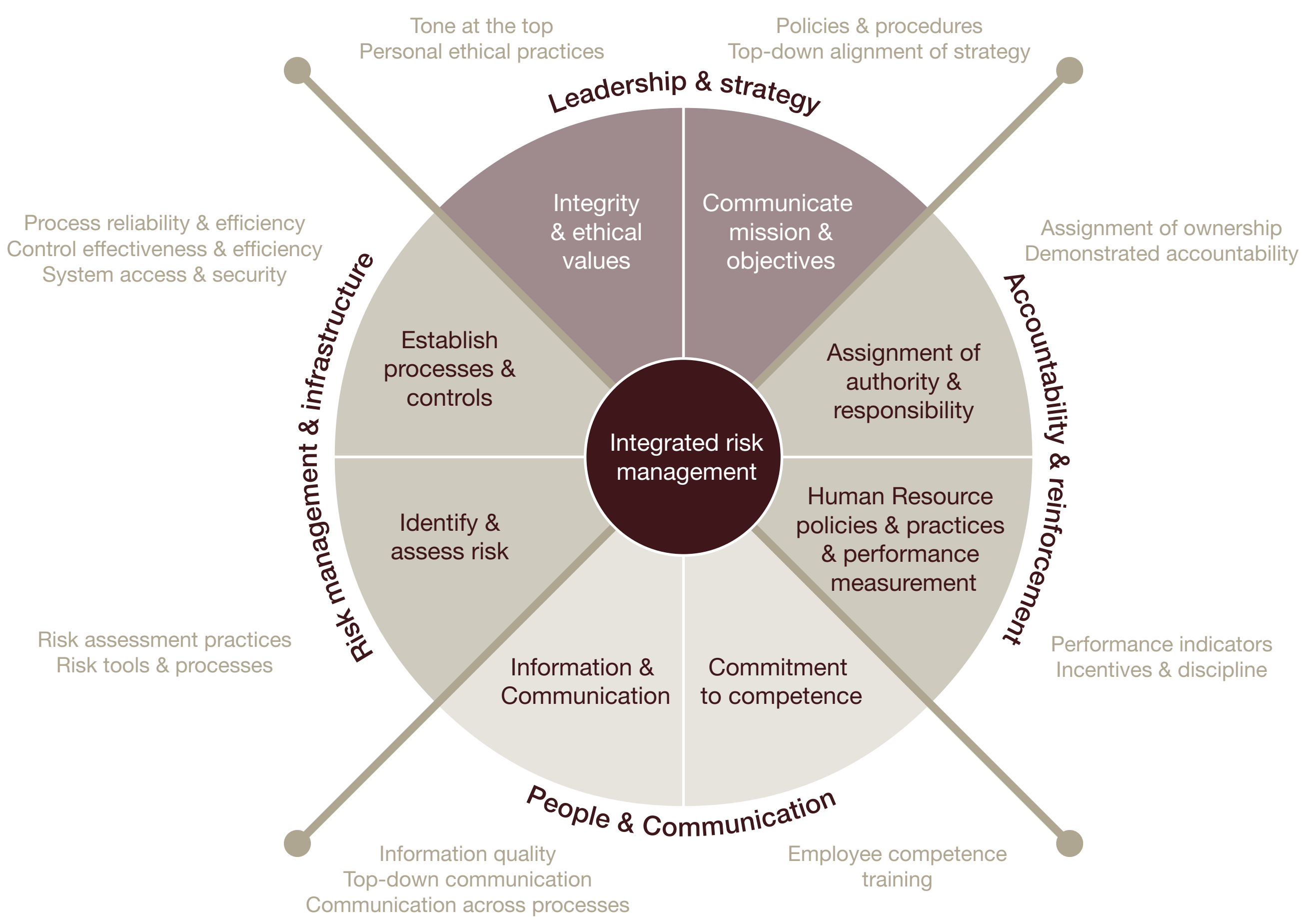
This model was developed from the COSO framework, as well as through analysis of critical factors contributing to high-profile corporate incidents in the recent past and can be used as a framework to diagnose an organisation's current risk management culture. Assessing these drivers of culture considers not only systems and policies (i.e. what we say we are doing), but also examines the supporting behaviours within an organisation (i.e. what is actually happening in the business). This provides critical insights into risk management culture and often makes apparent the real reasons for risk and control failures, which might otherwise remain hidden.

'Igniting Risk Culture' is a program recently launched by the Australian and New Zealand Banking Group (ANZ) to heighten awareness of the impact of culture on risk and compliance outcomes, as well as to give business units the tools required to implement effective change. Siobhan McHale, Head of Breakout and Cultural Transformation at ANZ cited the collaboration between the cultural transformation and the risk and compliance functions as being critical in driving the desired culture. "Effective and aligned cultural change, whether it be from a risk perspective or from a broader culture perspective, depends on an integrated and consistent approach from the organisation. HR can set the course for cultural change by highlighting key levers for behavioural change, but in this instance it's the risk and compliance function and line management who give it context and bring it to life. Our success in delivering on our cultural vision depends on these partnerships."

HR and people risk: Creating a risk management culture

continued

Figure 1: Creating a risk management culture



Source: PricewaterhouseCoopers

A description of the four areas of the above model are given in the following bullet points:

- **Leadership & strategy:** Effective risk management requires that the behaviour of leaders within the business is consistent with risk and compliance policies and procedures, that critical risk and compliance issues are linked into the organisation's objectives, and that leaders are seen to be role-modelling high ethical values at all times.

- **Accountability & reinforcement:** Staff clearly understand the risk and compliance objectives for which they are responsible. Furthermore, clear formal and informal recognition and reward practices are in place to encourage desirable risk and compliance behaviours.

- **People & communication:** Resourcing and skill levels must be adequate to ensure that risk and compliance-related requirements can be fulfilled and clear communication channels are in place to enable open and effective dialogue between management and staff.

- **Risk management & infrastructure:** Controls are in place to mitigate and monitor risk and employees periodically identify the key risks in their area of responsibility and communicate these to management.

Understanding the organisation in these four areas will create a picture of where specific intervention is required to bridge the gap between the existing risk management culture and where the organisation needs to be. The model also illustrates the importance of an integrated approach across all areas for risk management to be successful. This approach recognises that corporate culture can be influenced by conscious and deliberate decisions and actions, which provides real opportunity for change where necessary.

Focusing on the management of culture and behaviours

The importance of culture and behaviours can be seen in all four areas of the framework and taking action to manage them effectively, through appropriate people management strategies, is at the heart of the risk and compliance culture.

We have identified three types of risk associated with managing people. The defined risks are intrinsically linked and overlap in many ways; however, the distinctions we have drawn are intended to assist in understanding where an organisation might begin to tackle the management of culture and behaviour issues.

1. **People risk:** these are the risks inherent in the management of people as a business resource, such as employees not being capable of doing their jobs, poor succession planning and talent management, non-compliance with mandatory requirements – either intentional or mistaken, motivational issues, resourcing and retention.

2. **HR risk in policy and process:** these are the risks found in the employee-facing activities that HR delivers for the business. Legal and regulatory changes may not be reflected in HR policies or compliance procedures, reward strategy might be at odds with business strategy, poor employee communications may result in low motivation and disengagement, or underlying discrimination may exist in recruitment processes.

3. **Risks in the HR function:** these are the risks surrounding the day-to-day operation and overall effectiveness of the HR function, such as poor financial management of HR costs, minimal knowledge-sharing, lack of HR capability and capacity, or poor service provider management, for example resulting in payroll errors.

Clearly, the HR function has an opportunity to take the lead in tackling negative behaviours that undermine the desired risk management culture and business leaders should be challenging them to do so. However, it is important to remember that they are not solely accountable for delivering the risk management agenda.

The only truly successful way to establish an effective risk management culture is through an integrated approach that engages all functions, business management and employees in their responsibilities. Identifying, validating, prioritising and taking action to address your HR and people risks should form a central part of your overall risk management strategy and will underpin your overall risk management culture. However, like regulatory compliance, the impact of any HR and people risk management activities will be limited, unless the organisation goes further than policy changes and process improvements to ensure that supporting attitudes and behaviours are embedded throughout the organisation.

Accounting and regulatory synergy:
Aligning IFRS and Solvency II implementation

by Paul Horgan and Annette Olesen

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European insurers are facing another wave of what has been described as a ‘perfect storm’ of financial reporting and prudential regulatory reform. While the gathering storm threatens a huge implementation challenge, it also presents the opportunity to integrate information systems, improve the basis for decision-making and demonstrate the strengths of the business to analysts, rating agencies and other key stakeholders.

Underpinning these opportunities is the increasing alignment between the unfolding proposals for Solvency II and IFRS Insurance Contracts (Phase II) – (referred to as ‘IFRS Phase II’). Although the frameworks will serve fundamentally different purposes, supervisors, accounting standard setters and industry groups are actively seeking to enhance the synergies and reduce the potential duplication and cost burdens for insurers.

In June 2006, Alberto Corinti, Secretary General of the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS), the organisation that is advising the European Commission on the development of Solvency II, presented a paper to the International Accounting Standards Board (IASB), outlining the structure and work of the solvency project. ‘In order to ensure convergence of valuation rules, supervisory reporting and public disclosure, as well as to limit the administrative burden for supervised institutions, the (solvency) system should be compatible with IASB standards’, he said.

The European insurance industry, through the joint work of the CRO Forum, CFO Forum and Comité Européen des Assurances (CEA), is keen to encourage CEIOPS and the IASB to minimise their differences. ‘The CEA, CRO Forum and CFO Forum are working to combine accounting and solvency requirements into a single coherent IFRS-based framework’, said Olav Jones, former Chairman of the CEA’s Solvency II Steering Group, in a presentation to the Association of British Insurers in April 2006. The key to meeting this aim would be the creation of a ‘risk-based economic framework based on market-consistent valuation of assets and liabilities’.

Eyes of management

Clearly, the scope of the twin frameworks differs. In particular, prudential regulations focus on the entity, while IFRS looks at the contract. Therefore, some insurance products that do not meet the IFRS definition of an insurance contract still fall under the umbrella of the insurance entity for solvency purposes at present and would continue to do so under Solvency II. There may also be variations between the shareholders’ equity reported under IFRS and what the solvency rules consider to be part of the regulatory capital. Typical instances might include the treatment of certain financial instruments that due to their degree of subordination or other particular features are considered in the calculation of the regulatory capital of an insurer whilst being presented as financial liabilities under IFRS.

Although principle-based approaches are envisaged by both sides, the IFRS proposals are expected to be less prescriptive than the implementation of Solvency II, leaving scope for companies to reconcile their accounting and solvency statements. The more specific requirements of a European Solvency II directive and its subsequent application by local regulators may not be appropriate for the financial reporting of global entities wishing to present accounts that are comparable with peers regulated under different regimes.

Accounting and regulatory synergy: continued

Overall, the solvency and financial reporting frameworks are moving towards a more 'economic' basis of evaluation and disclosure. The parallels between IFRS and Solvency II can already be seen in the approach to risk. The existing IFRS 4 for insurance contracts requires companies to 'disclose information that helps users to understand the amount, timing and uncertainty of cash flows arising from insurance contracts'. This includes concentrations of insurance risk and sensitivity analysis of the assumptions underlying cash-flow projections.

It is also notable that IFRS 4 disclosure is principles-based rather than prescriptive, which gives companies wide discretion in how they explain the risks they run and the nature of the systems in place to manage them. This has clear parallels with the internal assessments of risk that are likely to form part of Solvency II.

IFRS4 is to be replaced in Phase II of the IASB's Insurance Project. Although a discussion paper on measurement of insurance contracts is expected in the new year the IASB have a long way to go to achieve a full standard. The IASB's search for consistent financial reporting is challenged by the unique features of insurance compared with other contracts. This drive for consistency and comparability may lead to accounting decisions not anticipated in a solvency regime.

IFRS 7 Financial Instruments: Disclosure, which comes into force in January 2007, takes risk reporting a stage further by insisting that disclosure should be 'based on information provided internally to the entity's key management personnel'. The need to present risk information through the eyes of management consciously mirrors the 'use test', which already forms part of Basel II for banks and is likely to be a critical element of Solvency II compliance. A consultation paper published by CEIOPS in December 2005 states that 'issued IAS/IFRS, especially IFRS 4 and IFRS 7, may be a common reference in building up the Pillar 3 disclosure requirements for the new solvency system'.

The close interaction between IFRS and Basel II offers further indication of how the corresponding relationship between IFRS and Solvency II might function. The IFRS 7 Basis for Conclusions aims to be 'consistent with the disclosure requirements for banks developed by the Basel Committee (known as Pillar 3 – COREP/FINREP), so that banks can prepare, and users receive, a single co-ordinated set of disclosures about financial risk'. In turn, Basel II acknowledges the overlap with IFRS in its acceptance that in a 'situation where the disclosures are made under accounting requirements or are made to satisfy listing requirements promulgated by securities regulators, banks may rely on them to fulfil the applicable Pillar 3 expectations'.

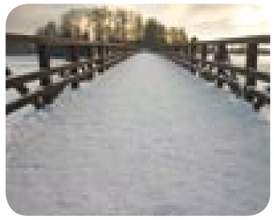
Banks' approach to Basel II suggests that Solvency II is likely to provide further impetus for the use of economic capital. A survey carried out by PricewaterhouseCoopers at the end of 2005 found that some 70% of the world's 50 largest banks disclose the use of economic capital as a risk management practice in their annual reports.[1]

Common basis of evaluation

The proposed 'market-consistent' bases for evaluating reserves and liabilities are also closely related. In particular, both frameworks would require an estimation of liabilities reflecting the anticipated amount and timing of future cash flows. This would be augmented by a risk margin that would reflect the cushion a notional third party would require to take on the liabilities, particularly in respect of any uncertainty in the liability estimation. According to the CEA, 'valuation of the technical liabilities for solvency purposes could be different from, but reconcilable with, the accounting technical provisions'.

However, there is continuing debate about the best way to estimate the technical provisions in the absence of an

[1] Effective capital management: Economic Capital as an industry standard (www.pwc.com/financialservices)



observable market in insurance liabilities. With regard to Solvency II, this centres on whether to adopt a 'percentile' or 'cost-of-capital' approach as a proxy for market-consistent valuation (see the July 2005 edition of European Insurance Digest www.pwc.com/insurance). With regard to IFRS, the debate focuses on whether to adopt an 'entry' or 'exit' value approach (see article on IFRS Phase II takes shape).

Within the supervisory community, there is also some debate about whether or not to include an additional margin for prudence within the technical provisions. Speaking at the CEIOPS annual conference in November 2005, Florence Lustman, Secretary General of the French Commission de Contrôle des Assurances des Mutuelles et des Institutions de Prévoyance, said that 'I would like to hear the word "prudence"; I do not think a market in insurance liabilities exists'.

Advocates like Ms Lustman believe that a prudence margin could help to take care of any potential unreliability or possible volatility in the proxies used to gauge market-consistent valuation. Possible options might include margins based on the aggregate of surrender values for life insurance policies or the aggregate of 'prudent' case estimates for non-life insurance.

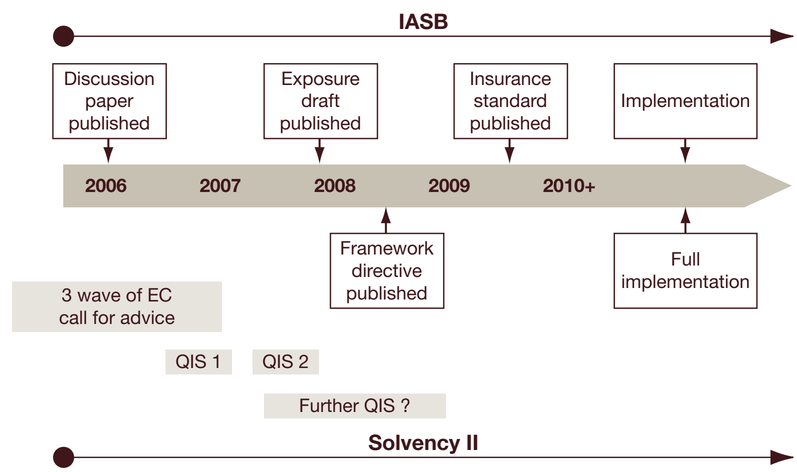
In contrast, John Tiner, Chief Executive of the UK Financial Services Authority, has described such prudence margins as 'inflexible', 'opaque' and 'outdated'. In a speech to the CEA/Geneva Association Seminar on Solvency II in November 2005, Mr Tiner argued that additional prudence would be unnecessary, as 'if case estimates are probabilistic best estimates then one would expect the quantum of technical provisions to exceed their aggregate value'.

Some within the industry have also expressed concerns about what they see as the 'double counting' of additional prudence margins. Speaking at the CEIOPS annual conference, Mel Carvill, Deputy General Manager of Generali, argued against what he believes is 'arbitrary prudence'. 'This is an issue of the doubling up of prudence. The outcome would be a 'solvency mis-match', similar in principle to the 'accounting mis-match' that IFRS is on the way to eliminating'. In particular, many within the industry strongly oppose the use of aggregate surrender values as being contrary to the fundamental insurance principles of the pooling and sharing of risks.

Aligning implementation

While these deliberations will continue, there would appear to be general agreement on the broad thrust of the proposed new solvency and financial reporting frameworks. Although neither Solvency II nor IFRS Phase II is likely to

Figure 1: Direction and timeframe of IFRS Phase II



Source: PricewaterhouseCoopers

Accounting and regulatory synergy: continued

be finalised or introduced until at least 2009 and will be most likely to come into force at separate dates (see Figure 1), the industry's opportunity to influence the debates is imminent with an IASB discussion paper expected in the New Year and a draft European directive on Solvency II due in the middle of next year. Before then, however, insurers only have a few more months to prepare for the initial move to the 'common reference' of IFRS 7.

Companies will need to ensure that their risk management disclosure under IFRS 7 is as consistent as possible with their eventual Solvency II disclosure.

It is telling that Basel II requires that 'banks explain material differences between the accounting or other disclosures and the supervisory basis of disclosure'. Moreover, consistency could prove as much of a competitive as a compliance imperative. Any unexplained inconsistencies in the disclosures arising from IFRS 7 and Solvency II could erode stakeholder confidence at a time of heightened market scrutiny of risk and capital management.

There may, therefore, be a strong case for using IFRS 7 as an opportunity to help lay the foundations for the integrated implementation of Solvency II and IFRS Phase II. Common data and systems requirements underpin much of the necessary information that is likely to be required for each set of valuations and presentations. Exploiting the synergies now, rather than later, would therefore allow insurers to avoid some of the costs and potential disruption of applying and managing the frameworks separately.

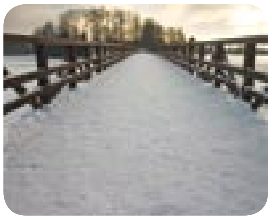
From a competitive perspective, a proactive and integrated response to the evolving disclosure requirements could provide early mover advantages in meeting growing market demands for more transparent and assured risk and capital management disclosure. This not only includes enhancing the depth of the information presented to stakeholders, but also being able to tie this information to other audited IFRS presentations and therefore enhance its credibility.

Companies existing enterprise-wide risk management (ERM) initiatives and capabilities can, as a secondary benefit provide a sound platform for meeting the demands on risk measurement, management and disclosure created by IFRS 7 and the eventual IFRS Phase II and Solvency II, along with Sarbanes-Oxley and other risk-based reforms. ERM can provide the necessary infrastructure of information and assurance. This includes the ability to bring the data from internal models and management information systems up to an auditable standard for external communications. Robust ERM's primary objective is of course to control and manage risks effectively, in doing so thereby also reducing the regulatory capital demands on the business.

A common front

The latest developments in financial reporting and solvency regulation represent a common front, which will broaden the disclosure of risk and capital management and open insurers up to ever-greater market scrutiny. In particular, the ability to see how risks are managed through the eyes of senior executives will provide valuable insights into the quality and effectiveness of risk control and decision-making.

Ensuring analysis and information for financial reporting and solvency regulation are consistent is essential for maintaining market credibility. While this may be viewed as a challenge, insurers have an opportunity to exploit synergies that could help to reduce the cost of implementing both sets of requirements. Areas that can be substantially aligned include data and IT systems. ERM can be used to provide a robust and proactive platform of information and control to help meet these demands.



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