A CAPITAL APPETITE FOR RISK

NOT ALL RISKS CAN BE HEDGED OR INSURED. WHAT AMOUNT OF A COMPANY'S CAPITAL SHOULD BE USED TO MANAGE THE RISKS THAT ARE RETAINED? **IAN CHAPMAN** AND **TIM ASTLEY** OF ZURICH CORPORATE SOLUTIONS DELVE DEEPER.

The use and cost of corporate capital used to manage risks is more important today than it has ever been. The tragic events of 11 September have culminated in many insurers and re-insurers suffering heavy losses and as the principles of insurance state: 'the premiums of the many pay for the losses of the few'. In the litigious society in which we now live, the events of 11 September have taught us many things, the least of which are the losses of the few are becoming larger and larger, and the perception that risks are coming from new unidentified areas or have been previously undersetimated.

Companies have become sophisticated at managing risks. Treasury departments have been established to manage the financial risks from expanding global operations. These departments fully understand the nature and impact of interest rate, currency and commodity risks, and have brought a new understanding to the funding risks that face every firm. Additionally, insurance functions have built on their understandings of insurable risks including property, casualty, motor, business interruption and the like.

However, the gambit of risks does not stop at managing financial and insurable risks, fully understood in the vast majority of companies. Dependent on the risk appetite of each individual company, these risks will either be fully hedged/insured or companies will be prepared to take an element of first loss or risk retention (for financial risks, by taking out money hedges; for insurance, by taking a self insured retention).

If it is therefore accepted that companies have full understanding of financial and insurable risks and can determine how they manage these risks, the question turns to how to manage (if at all possible) the risks which fall outside this area – that is, risks of an operational and strategic nature.

A recent survey by management consultancy Mercer gives an indication of how important this is. The survey identified the main causes for 100 major stock falls over a given period. Strategic and operational issues contributed to 89% of the share price falls, while issues reflecting financial and hazard risks made up a mere 11%.

Figure 1 illustrates the various elements of capital structure used in relation to business risk. Decisions are made regarding the amount of off-balance sheet finance and the debt/equity balance based on the individual company's circumstances. The central element of retained risk must be addressed with the same considerations in order to optimise the risk/reward equation. Not all of these risks can be either hedged or insured. Indeed, most businesses do not wish to rid themselves of all risks. So what amount of a company's capital should be used to manage the risks that are retained? The answer is complex and beyond the scope of this paper but can start to be addressed with answers to the following questions: what risks do the shareholders expect the company to take, and what is the risk appetite of the company?

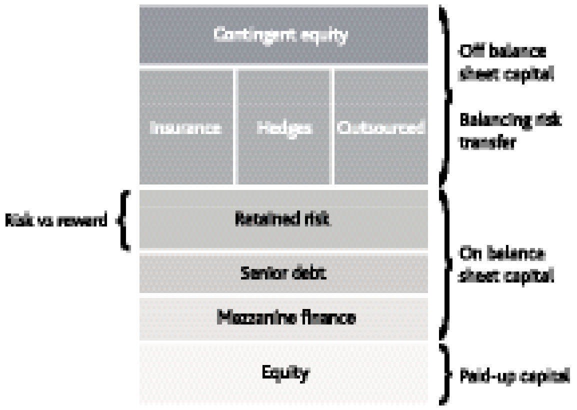
> 'NOT ALL RETAINED RISK CAN BE EITHER HEDGED OR INSURED. INDEED, MOST BUSINESSES DO NOT WISH TO RID THEMSELVES OF ALL RISKS'

WHAT RISKS DO THE SHAREHOLDERS EXPECT THE COMPANY TO TAKE? Shareholder concerns and perspectives must be taken into account by any business with a view to the long-term when considering risk. Investors will take an increasingly critical look at the activities of successful companies to ensure a rapid decline in portfolio values or credit ratings cannot be brought about by episodes such as the dot.com meltdown or the Enron failure. If investors believe that corporate risks are being taken which are not consistent with their perceived investment criteria, then they will move their money elsewhere. Therefore, risk appetite must be understood and communicated not only within the business but also to the external community.

WHAT IS THE RISK APPETITE OF THE COMPANY? Every company needs to take risks to survive. Understanding risk appetite enables companies to gain a better definition of which risks are acceptable and necessary and those which are not. Risk appetite is typically

FIGURE 1

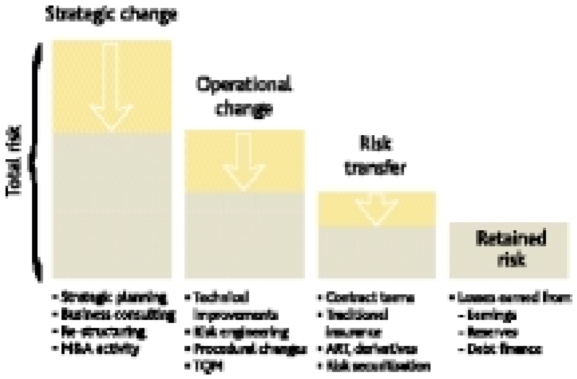
OPTIMISING CAPITAL STRUCTURE.


Contingent equity
Insurance
Hedges
Outsourced
Retained risk
Senior debt
Mezzanine finance
Equity
Off balance sheet capital
Balancing risk transfer
Risk vs reward
On balance sheet capital
Paid-up capital

Source: Zurich Financial Services

FIGURE 2

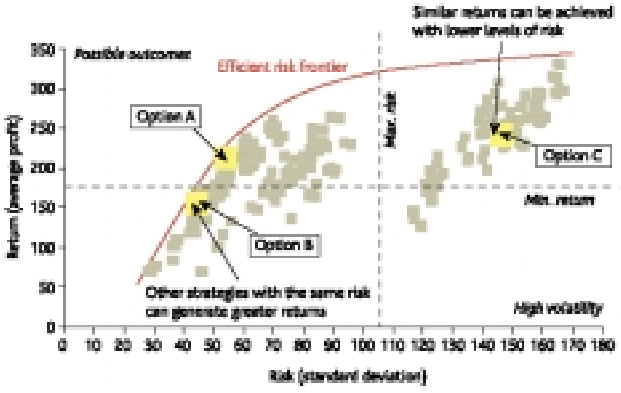
COMPONENTS OF A RISK MANAGEMENT SOLUTION.


Strategic change
Operational change
Risk transfer
Retained risk
Total risk
• Strategic planning
• Business consulting
• Re-structuring
• M&A activity
• Technical improvements
• Risk engineering
• Procedural changes
• TQM
• Contract terms
• Traditional insurance
• ART, derivatives
• Risk securitisation
• Losses earned from:
- Earnings
- Reserves
- Debt finance

Source: Zurich Financial Services

FIGURE 3

THE EFFICIENT RISK FRONTIER.



Source: Zurich Financial Services

reflected in a business in many diverse ways. However, in practice, these factors are rarely recognised directly when assessing risk tolerance. Issues to address that imply or explicitly define risk tolerance boundaries include:

- formalised operational controls (for example, expenditure authorisation levels, investment hurdle rates);
- informal custom and practice at the operational level (such as practices and procedures and contracts terms);
- the actions and responsibilities of senior executives; and
- the imposition of strategic/business management controls and key performance indicators.

In addition, a well-developed understanding of the key business risks themselves will enable prioritisation and tacit recognition of the firm's appetite for various individual risks.

Figure 2 illustrates the full risk spectrum of a typical business, indicating the ways in which risks might be mitigated or removed through strategic and operational change and then ultimately through risk transfer. The risk appetite is typically reflected in part by those risks that are retained. However, it may be that some of the retained risks are not tolerable (that is, they are greater than the risk appetite) and therefore something needs to be done to address them. In this instance, there are three possibilities:

- to identify specific actions which will render the risks tolerable (for example, investing in physical firewalls to protect a factory from total destruction by fire and explosion, etc);
- to accept that the risks cannot be mitigated to an acceptable level of tolerance and to find the most effective way of managing the business around them; and
- to realise that individual risks need to be understood further and therefore to embark on a detailed quantitative evaluation.

STRATEGIC ALIGNMENT. Any risks dealt with under the second point above, must be communicated in order for everyone in the business who takes decisions to be fully aware of the risk. The communication of intolerable risks (those greater than the risk appetite) can be done through the development of risk measures. These risk measures must be controlled in a way that is completely consistent with the corporate strategy. If not, efforts to manage the risks may actually cause a deviation from the strategic intent of the overall business. Strategic management and key risk management can be aligned, by combining the controls and measures for each.

A set of key performance indicators (KPIs) typically tracks (either directly or indirectly) the progress towards a company's strategic and financial goals. Similarly, the management of key risks can be facilitated by the definition of key risk indicators (KRIs), enabling executives to monitor the factors contributing to the business' key risks.

Clearly, contradictions between the KRIs and the KPIs would indicate one of teo things. Either an inappropriate choice of indicators, in which case the indicators should be adjusted; or a mismatch between key risks and strategic intent. Any immovable inconsistencies would bring into question the strategy itself. For example, a set of business risks describing the threats to growth in market share in a particular region may completely ignore the fact that the overall group is cash-constrained and therefore not in a position to fund the growth in the first place.

Once KRIs and KPIs are aligned (they may even end up being synonymous), it is relatively easy to identify and communicate risk appetite throughout the business, leading to consistency of culture, business management and decision-making to support the strategy and manage risks appropriately. Furthermore, the establishment of such metrics enables greater understanding of the financial impact of key risks over time.

'ALL RISKS SHOULD BE IDENTIFIED, PRIORITISED, ALIGNED WITH STRATEGIC GOALS AND EVALUATED'

RISK QUANTIFICATION. Further quantification of individual risks or combinations of correlated risks (perhaps through dynamic financial analysis techniques or real options analysis) will clarify which risks to hedge or insure and which to bear, further indicating the possible capital implications. The exercise itself also helps to use the definition of risk appetite to make strategic decisions. *Figure 3* draws from classic Portfolio theory espoused by Markowitz. However, rather than examining financial investments, this example uses an equivalent approach to show how we might compare three strategic options, which have very different impacts on business risk and financial return. The plots on *Figure 3* represent the outcomes of many different strategic options (of which A, B and C are three), in terms of likely profit (return) and volatility (risk), where:

- the boundary of all possible outcomes is described by the 'Efficient Risk Frontier' curve; and
- the edges of the shaded areas represent the company's limits of both return and risk – that is, the limits of its risk appetite.

Option C generates an acceptable return but with a relatively high associated risk. It is clear that other options (closer to the curve but at the same horizontal level as C, could generate the same return but at a substantially lower and more acceptable level of risk.

Option B has an acceptable level of volatility but would not generate the required profitability. Other options with that same level of risk but closer to the curve (vertically upwards) could generate higher returns. Option A is very close to the Efficient Frontier and is clearly optimal.

APPROPRIATE RISK. So what is the appropriate level of risk for a company to take? Every company will have a different appetite for risk depending on sector, strategy, size and maturity as well as a wide range of external and internal factors. Nevertheless, all risks should be identified, prioritised, aligned with strategic goals and then evaluated. If risk appetite can be defined and applied to the business, there is a far greater chance that the risks within the business can be more fully understood and communicated. In turn, the extent to which a company can manage each of its key risks will become clearer, leading to far more efficient capital allocations and fewer surprises for the CEO and shareholders.

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