STRATEGIC RISK MANAGEMENT

NEW DISCIPLINES, NEW OPPORTUNITIES

A Report Prepared by

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ABOUT THIS REPORT

In October 2001, CFO Research Services (a unit of CFO Publishing Corp.) launched a research program in the United States and Europe to explore how companies align risk management with their strategic goals. This report summarizes the findings of the mail surveys and telephone interviews done as part of the program. Aon, a global risk management, insurance brokerage, reinsurance, and human capital consulting services company, funded the research activity and publication of our findings.

Organizations that participated in the interview program and agreed to be cited are:

- **ABB Financial**
- **Akzo Nobel**
- **Aventis**
- **Corning**
- **Danone**
- **Duke Energy**
- **Merck**
- **Novell**
- **Six Continents**
- **Universal Access**
- **USAA**

The research hypotheses for "Strategic Risk Management: New Disciplines, New Opportunities" were developed jointly by CFO Research Services and by Aon Risk Services, a unit of the Aon Corporation. CFO Research Services conducted the survey and interviews, and Don Durfee, the research director, wrote and edited the report.

At Aon, we would like to thank Randy Nornes, Paul Maddock, Christy Johns, Lisa Kremer, Barry Franklin, John Bugalla, Alan Punter, Marc van Nuland, John Moore, Marianne Navickas, and Angie Tegan for their insight and guidance. We would also like to thank the many finance executives who took time to complete surveys and participate in the interviews. Without their contribution, this study would not have been possible.

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Key Definitions:

For the purposes of the study, we define “strategic risk management” as a method of risk management that takes an enterprise-wide approach to monitoring and managing risk in support of a company’s strategic goals.

RESEARCH SUMMARY

- Few CFOs are very satisfied with their current approach to risk management. Only five percent of survey respondents report being “very satisfied” that their current risk management approach supports their company’s business objectives.

- Strategic risk management is catching on. In three years, 39 percent of companies intend to have integrated their risk management processes across the organization. Only 12 percent expect they will still manage risks in separate functions.

- Strategic risk management is perceived as more effective than traditional approaches to risk management. The more unified a risk management process is across the company, the more satisfied CFOs are with it. Likewise, the more closely risk management is tied to the strategic planning process, the more effective CFOs believe it is.

- The chief risk officer (CRO) will remain a niche position. Despite previous predictions to the contrary, few companies have plans to appoint a CRO. Today, 15 percent of companies have a CRO, but only an additional five percent intend to have one in the future. Senior-level risk management committees will be more common.

- There is a perceived need for board-level audit committees to adopt a broader role in risk management oversight. Of the executives we surveyed, 73 percent believe audit committees should be more involved in ensuring that risk management is aligned with overall business strategy.

- Risk management can be a competitive weapon. 49 percent of respondents believe that a strategic approach to risk management can yield competitive advantage. CFOs believe this can happen mainly through better capital allocation and by helping firms manage their industry’s key risks in a superior way.

- There are significant obstacles to overcome in implementing strategic risk management. Developing a strategic risk approach requires companies to manage a number of challenges, including the time required for complete implementation, cultural incompatibility issues, and inadequate IT systems.

- There is no single path to implementation. The most common approaches to initiating a strategic risk program are: (1) building risk management into an existing process, (2) launching a company-wide initiative, or (3) creating an internal risk committee. Different methods reflect the goals and circumstances of individual companies.

Chapter 1: ENVISIONING A NEW APPROACH TO RISK

Introduction

The need for more effective risk management has rarely been so urgent. As CFOs grapple with the implications of events ranging from last September's terrorist attacks to the sudden collapse of Enron, they are reminded of a grim truth: threats to the business can come from any direction. These include not only terrorist acts or financial disaster, but strategic risks such as the emergence of a new competitor or a failure to predict marketplace shifts. Unfortunately, many of the biggest risks are often not measured or monitored.

To manage such risks, most CFOs realize that they need a more comprehensive and forward-looking system of risk management. Over the past few years, companies have attempted to create such a system—these efforts have come under various names, including holistic, integrated, and, more recently, enterprise risk management (ERM). As we will show, the principles underlying these approaches (i.e., mapping all of a company's risks in a uniform way and applying a cross-functional approach to managing them) are gaining acceptance.

There is an important point that most previous efforts have neglected, however. Risk management is as much about seizing competitive opportunity as it is about avoiding catastrophic loss. A company able to harness its risk management capabilities in order to identify and evaluate new investments has a distinct advantage over its competitors. And today, with companies under increasingly severe competitive pressure, anything that creates new opportunities is welcome.

This realization has led some companies to seek a closer integration between risk management and strategic planning. It's a shift that some have made explicitly. For example, Duke Energy, a North Carolina-based firm with operations in power generation and natural gas and electricity trading, has put strategic planning under its enterprise risk management operation. "It's our responsibility to determine where the capabilities we have at Duke Energy can achieve the best risk-adjusted returns for our investors," says Richard Osborne, the company's chief risk officer (and former CFO). Other companies, including Akzo Nobel and Aventis, are linking planning and risk management in less formal ways, but with the same goal: using risk management to drive value creation.

This white paper examines what steps CFOs are taking toward a new kind of risk management, which we refer to as "strategic risk management." This is not just a program of expanded audits, as some ERM efforts have become. Instead, strategic risk management calls for embedding a new way of thinking about risk into processes and decisions. The approach also calls for using risk management to support the company's strategic goals and to create competitive advantage, enabling corporate finance and the CFO to make a greater contribution to the firm's overall success.

Study demographics

To understand how companies view approaches to risk management, we surveyed senior financial executives at major American and European firms. The 416 respondents to our mail survey are from North America (71 percent) and Europe (29 percent), and represent a wide range of industries. They are the executives charged with the responsibility for risk management strategy: 60 percent are CFOs, 20 percent are treasurers, and 82 percent have corporate or head office responsibility.

The two best-represented industries are financial services (18 percent) and manufacturing (17 percent). Others include retail, high tech / telecommunications, business and professional services, consumer products, energy, and chemicals / pharmaceuticals.

We also conducted 11 in-depth interviews with CFOs, treasurers, and heads of risk management at companies ranging from Merck and Novell in the US, to Akzo Nobel and Danone in Europe.

Room for improvement

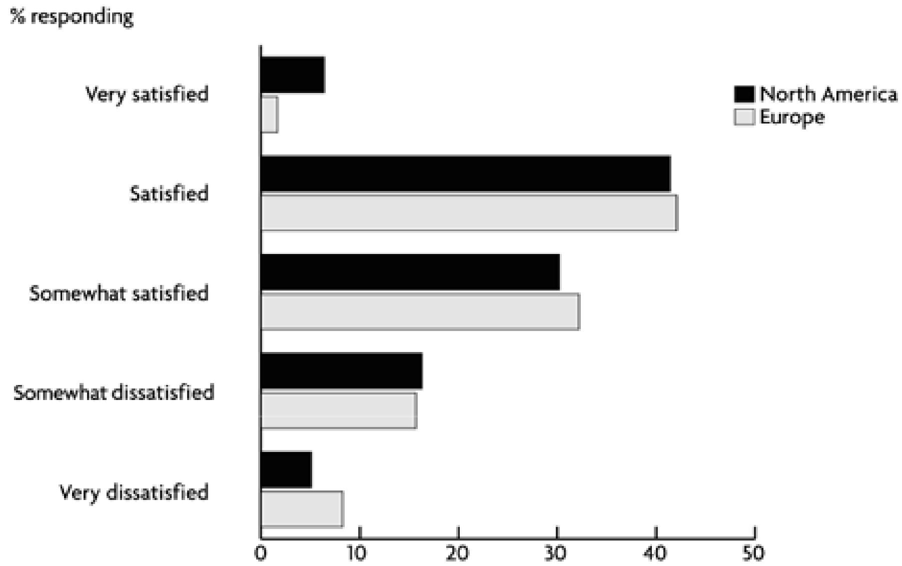
Despite the efforts many companies have made to improve risk management, few CFOs are content with their current risk management practices. Only five percent of survey respondents were "very satisfied" that their risk management approach supports their company's business objectives, and over 50 percent range from being "very dissatisfied" to "somewhat satisfied" (see Figure 1.1). Large companies (those with over $1 billion in annual revenues) reported being more satisfied with their current risk management than smaller firms. Among industry sectors, financial services and energy were relatively more satisfied.

CFOs' uneasiness appears to be a product of retaining the traditional insular approach to risk management in an increasingly dynamic business world. In most companies, responsibility for different risks is split among functions and operating units. For example, each division might look after its own risks—managing foreign exchange risk in treasury, hazard risk in the insurance department, and business risks in the planning function. Without a process to manage risk across functions, according to our study participants, many risks fall through the cracks. The resulting ignorance about the company's total level of risk could mean that either managers are too conservative—avoiding risks they could afford to take—or that they unnecessarily run the danger of corporate calamity.

Additionally, CFOs' dissatisfaction stems from a recognition that companies may be unprepared for new kinds of risks, such as information security, commodity price volatility, interruptions of sourcing and distribution, political unrest, and the threat of class action suits. "Business risks, while difficult to quantify, could potentially be more significant than those that are more easily quantifiable," says Chris Mandel, AVP of enterprise risk for USAA, a Texas-based insurer. "We really need to make sure there aren't any significant business risks out there that we're ignoring."

Figure 1.1

How satisfied are you that the risk management practices at your company support your primary business objectives?



Source: CFO Research Services

When these reasons are combined with shareholders' growing intolerance of deviation from earnings predictions, a strong motivation exists for CFOs to find a better way of managing risk.

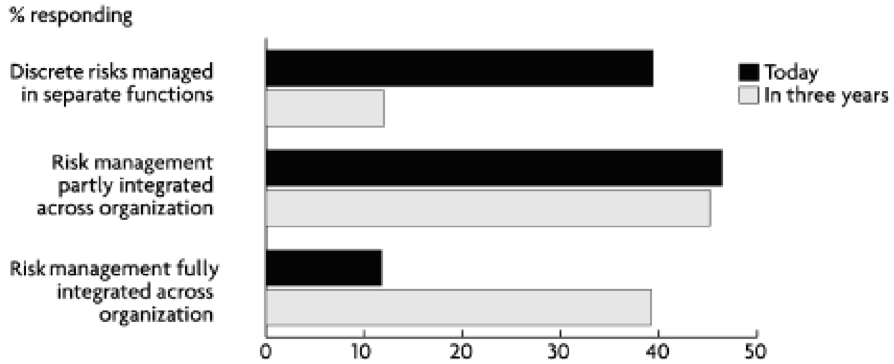
The shift to strategic risk management

Many companies are already moving to a more integrated way of managing risk. Our survey found that 12 percent of companies currently integrate all risk management functions and 39 percent intend to within three years (see Figure 1.2). The numbers are even higher for those partly integrating risk—for example, managing financial risk across the organization, but other risks locally. European companies are slightly ahead of North Americans in integrating risk management. This is largely due to Europe's corporate governance rules and guidelines, which call for more integrated monitoring and reporting of risk (for example, KonTraG in Germany and the Turnbull Report in the UK).

Although this trend began in the financial services and energy industries, there are now examples of cross-functional risk management in all industries. For example, Danone, the Paris-based consumer goods firm, launched an effort to map risks across its 120 subsidiaries worldwide. Aventis, a European drug maker, is in its second year of an ERM program. Novell, an American networking systems company, has also begun to pursue a more strategic approach. "[This program] will help me fulfill my responsibility to manage the exposure to our balance sheet and our business," says Cliff Simpson,

Figure 1.2

Which statement best describes your company's current risk management system?



Source: CFO Research Services

Novell's treasurer. "At the same time, it will provide important input to the businesses that could affect our decisions and strategies."

The idea behind this change is to give senior management a better grasp of the overall risk facing the company, and to eliminate the redundancies and divisions that would keep the CFO from taking effective action across units and risk types. It also allows companies to view the integrated effects of risks, which can be hard to identify—and even harder to manage—without an enterprise-wide view.

Companies are also focusing on integrating risk management with strategic planning. Nearly one-third of respondents have a process for formally considering risks as part of planning and resource allocation. Integration with strategic planning elevates ERM processes from merely improving risk management to creating shareholder value for the company.

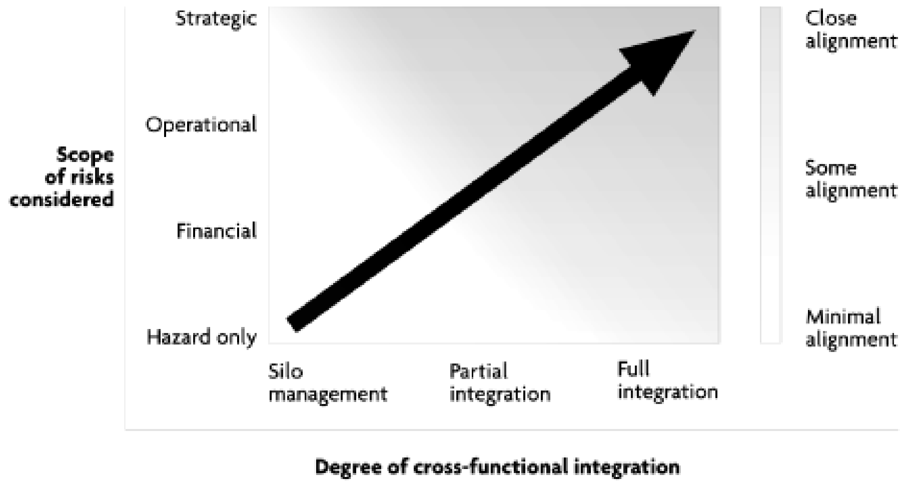
Figure 1.3 illustrates this evolution toward greater cross-functional integration, coverage of a broader range of risks, and a more direct connection between risk and strategy.

Assigning a value to strategic risk management

Is strategic risk management creating value for companies? Since companies have only recently begun to implement strategic risk processes, there is limited data available to measure this directly. Indirectly, some companies claim to be saving tens of millions annually through better capital allocation and averted losses. At the CFO level, at least, there appears to be a clear link between a more integrated approach and higher satisfaction with risk management procedures. Figure 1.4 shows the level of satisfaction reported by companies with differing levels of integration. Those with completely unified risk management systems are far more satisfied than those that pursue the

Figure 1.3

The evolution of risk management

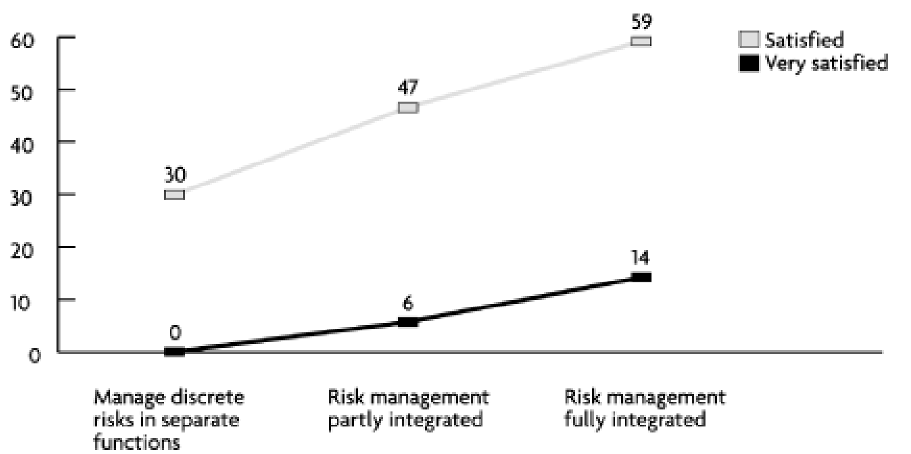


Source: CFO Research Services

Figure 1.4

Fuller integration of risk management leads to greater satisfaction

% who are "satisfied" or "very satisfied" that current risk practices support business objectives



Source: CFO Research Services

"silo approach" (management segregated among operations or by specific risks). The same pattern holds for those companies that formally consider risk as part of their strategic planning process.

In the next chapter we will review the opportunities created by a more strategic approach to risk management. Nearly all represent a departure from those that were viewed as possible under the traditional approach to handling risk.

Chapter 2: NEW OPPORTUNITIES

Top motivations for strategic risk management

As discussed in the last chapter, many CFOs are determined to adopt a broader and more forward-looking approach to risk management. Already, this has led to an improvement in achieving traditional goals, such as better risk prevention and more effective reporting of the operations' risk issues to senior management. But this development is also opening the door to new kinds of benefits; these include improved capital allocation, superior earnings growth over time, and an enhanced competitive position.

We asked survey respondents to identify their top one or two motivations for implementing a strategic risk program. Many of the top motivations reflect a change from those driving traditional risk management efforts:

1. Improved response to the full range of risks (38 percent)
2. Better capital allocation (28 percent)
3. Competitive advantage (27 percent)
4. Reduced earnings volatility (27 percent)
5. Lower cost of risk transfer (18 percent)

Objectives vary by industry (see Figure 2.1). For example, chemical, pharmaceuticals, and professional services firms are driven mainly by the need to respond to the full range of risks. Financial services firms aim primarily for better capital allocation. Consumer products companies are most interested in avoiding earnings volatility.

Figure 2.1

What are the top one or two motivations for measuring risk on a more strategic basis?

% responding

30% and over
20%-29%
0-19%

	Business/prof. services	Energy	Financial services	Consumer products	High tech/telecom	Manufacturing	Chemical/pharma	Retail
Respond better to the full range of risks	47	31	24	26	44	42	48	40
Allocate capital more effectively	14	38	43	15	33	27	22	26
Gain competitive advantage	31	31	22	44	31	27	35	23
Protect against earnings volatility	19	31	31	48	39	31	39	19
Save money through lower risk transfer costs	17	23	15	15	11	20	0	30
Factor financial risk into budgets and plans	8	19	12	11	8	15	13	28
Comply with regulations more effectively	8	12	22	4	8	8	30	15
Improve company's share price	8	15	4	7	3	6	0	2
Identify aggregating or offsetting risk patterns	11	0	4	7	6	3	13	4
Ensure employee safety	8	0	3	7	3	1	0	4
Other	0	0	1	0	0	0	0	2

Source: CFO Research Services

There are also differences between large and small companies. Firms with over $1 billion in annual revenues are more likely to consider capital allocation and lower earnings volatility as top goals, whereas smaller companies are more likely to concentrate on reducing risk transfer costs.

Improved response to the full range of risks

CFOs want a clear view of all the risks facing their companies to ensure that there isn't a crucial risk lurking unnoticed and unaddressed. For this among other reasons, Aventis launched a strategic risk program that includes routine cross-functional risk assessment workshops. "It helps cross over turf issues and clarify gray areas," says Ken Krenicky, who is in charge of global risk management for the pharmaceutical company. "Who should handle this risk? Things could fall between functions or be in both functions and you end up with two people handling the risk differently. You want to coordinate that."

Managing the full range of risks calls for a uniform way of quantifying so that risk levels in different units can be compared and aggregated. This is a major challenge. Our survey asked companies what risks they currently quantify (see Figure 2.2), revealing several areas that are inadequately measured. For example, only 48 percent of companies measure the threat from management liability, 43 percent measure supply chain risk, and 43 percent measure the risk to system security. While some industries are more likely to confront specific risks—such as product recall in consumer products—and are more likely to measure those risks, there are many companies that are unable (or don't try) to quantify their industry's major risks. For instance, despite the efforts many financial services firms have made in managing the risk of data systems interruption, we found that only 12 percent of these companies measure this risk.

Figure 2.2

What risks do you quantify?

% responding

Credit risk	67	FX risk	38
Business interruption	66	Quality	38
Interest rate risk	54	Environmental	37
Management liability	48	Employee absence	29
Employee turnover	45	Commodity price fluctuation	23
Product liability	43	System interruption	20
Supply chain	43	Political risk	20
System security	43	Employee/union relations	17
Customer satisfaction	41	Product recall	14

Source: CFO Research Services

Better capital allocation

The second most common motivation for a strategic risk program is improved capital allocation. When managers have an accurate sense of the total risk each business unit carries, they can make investment decisions based on the investment's marginal effect on risk and overall returns. For example, if a company's managers wish to obtain higher returns from a slow-growth business, they may be more confident applying capital to higher-risk projects if their analysis reveals that the total risk level is not excessive.

ABB, the Swiss power and automation technology firm, has started to consolidate market and credit exposure within its financial services division, with the goal of improving its capital usage. "We want to always be able to understand how much capital we need to support our businesses at our preferred safety level or preferred implied [credit] rating," says Stefano Tittarrelli, risk controller for ABB's treasury centers. "Our shareholders demand a good return on capital employed, so we are very sensitive to optimizing our capital usage."

A significant number of companies (38 percent) now formally assess risk as part of their capital deployment processes. Large companies are more likely to do this than small firms.

Competitive advantage

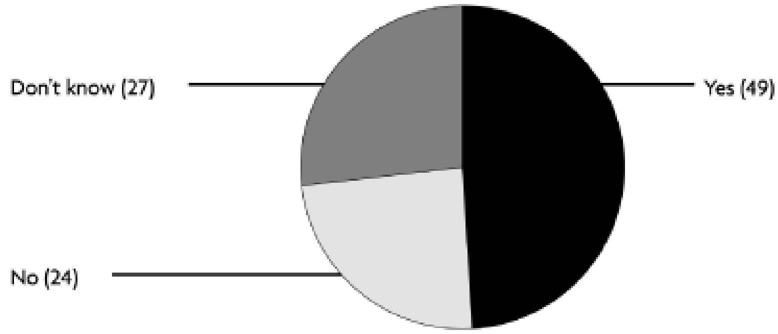
Companies are also starting to view risk management as a competitive weapon (see Figure 2.3). We found that 49 percent of survey respondents believe that a more strategic approach to risk management can produce a competitive advantage. High tech/telecommunications firms (72 percent) and energy companies (62 percent) are especially convinced of this.

Finance executives believe risk management can create competitive advantage in several ways. First, a company that can manage its

Figure 2.3

Do you think a strategic risk management approach would create a competitive advantage for your firm?

% responding



Source: CFO Research Services

industry's key risks better than its peers is in a stronger position to make or sustain a superior profit over time. Merck's mastery of product development risk is one example (see case study). Through a careful modeling of the risks in its product development pipeline, the pharmaceutical company has better insight into its central source of revenue. "This is a risk that we would never try to shift to financial products, because this is the risk that creates shareholder value," says Caroline Dorsa, VP and treasurer. "Anything you can do to provide management with additional insight into the management of the pipeline process should be—and I think in our case is—a contributor to our competitive position."

Merck: Managing the risks of product development
Caroline Dorsa, vice president & treasurer

Few activities in business carry as much risk as pharmaceutical R&D. On average, it takes ten years to bring a drug to market. Along the way, many things can go wrong: the drug-candidate may fail in clinical trials; the FDA may withhold approval; or other companies may bring a competing product to market sooner. Of the drugs that make it to market, 70 percent fail to return the company's cost of capital.

The Research Planning Model

For nearly 20 years, Merck has been refining the model it uses to understand and manage the financial risks of developing drugs. The model, called the Research Planning Model, was developed in the early 1980s by Judy Lewent, the company's current CFO. It applies statistical analysis to all products the company has under development, including potential licensing products and those in the early stages of marketing.

According to Caroline Dorsa, vice president and treasurer, the model's goal is to help managers understand how much value the product pipeline is likely to generate for the company. To do this, the company's analysts gather the major variables that affect the success of product development (e.g., marketing and manufacturing costs, scientific and therapeutic variables, product prices) and macroeconomic variables (e.g., interest, inflation, and foreign exchange rates). Using a computer program, the analysts conduct a Monte Carlo simulation, which generates values for each of the key variables from points on predetermined distributions. The outcome is a distribution of values for figures such as annual nominal- and constant-dollar forecasts of revenues, cash flow, ROI, and NPV.

Using the results

By examining this data across all of Merck's products, senior management can understand the expected contribution of the current R&D portfolio to the company's shareholder value. "This means you can think about what that suggests for any strategic planning needs you might have, in terms of the richness of your product development pipeline, where it can be supplemented, or where there is more or less opportunity for growth or challenge, because you've now looked at different factors," says Dorsa. "And you can use that tool to help you think through how the scenarios affect financial results, which then informs a high-quality strategic planning process."

The model's results have also helped business units make operational decisions based on risk and return. Dorsa gives an example from drug manufacturing. Different medicines require different manufacturing processes—for example, some require fermentation and others do not—and planners usually have to decide whether to build a manufacturing facility before it's clear that the drug will make it to market. The planning model helps show the value of spending for flexible manufacturing facilities capable of producing a range of products. "In financial terms, it keeps your options open—and that has a value," says Dorsa. "Our model can help the manufacturing folks in their capital planning."

Second, a strategic risk management system helps CEOs and CFOs to evaluate project risks more thoroughly. Understanding the company's overall risk level and knowing how much aggregate risk it can bear makes it easier to recognize good investments that fit the corporate risk profile. Without this knowledge, executives may not take a chance on innovation. "A lack of good risk management could result in your being overly conservative and not effectively deploying your capital into certain businesses," says Osborne of Duke Energy.

Integrating risk management and planning can also help identify projects that reduce the company's overall risk and thereby improve its performance. For example, Akzo Nobel, a Dutch chemicals and pharmaceuticals manufacturer, has identified risk-reducing opportunities in its chemicals and coatings businesses, says Anders Bjarnehall, the company's head of risk and insurance. One such project is the development of a line of water-based coatings—these products reduce the company's liability and employee safety risk, and also produce higher profits. According to Bjarnehall, "If we can recognize certain environmental risks or risks to humans and be on the front lines in our product development, then we will certainly have an advantage in this market, where there is a demand for environmentally-friendly chemicals."

Reduced earnings volatility

Because a more integrated approach to managing risks can help CFOs identify risk concentrations and take advantage of offsets, strategic risk management provides executives with a better tool for avoiding or mitigating the impact of unexpected events. "We are in the mindset of avoiding surprises," says Simpson of Novell. "Good ERM should minimize unexpected shocks to the balance sheet or P&L statement."

Some companies have been successful in reducing financial losses through strategic risk management. One financial services company reported a 30 percent reduction in its loss-to-revenue ratio as a result of its ERM program. As investors become increasingly unwilling to tolerate any deviation from earnings predictions, the ability to reduce earnings volatility becomes an attractive feature of ERM.

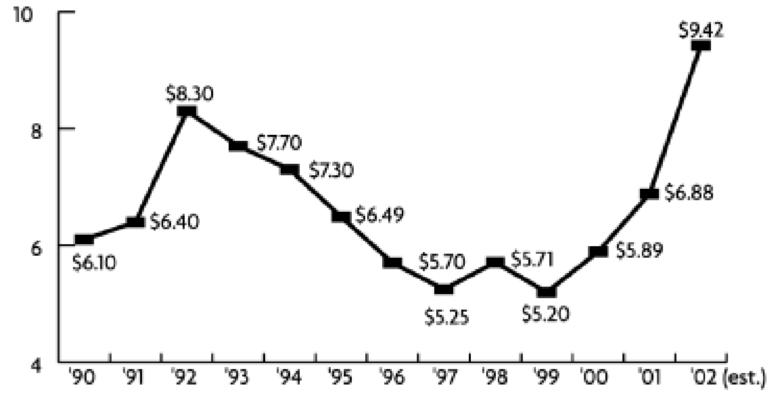
There is another reason to seek smoother earnings growth. A number of recent studies have shown that, under certain conditions, companies that reduce the volatility of pretax earnings can substantially cut their tax bill (see box: "Reducing your tax load through risk management").

Lower cost of risk transfer

In the wake of September 11, managing the rising cost of risk transfer has become crucial. Insurers now have less capacity available and are less willing to offer certain types of coverage. To date, the price of corporate insurance has risen 30 percent on average. Prudential Securities estimates that the cost of risk per $1,000 in revenues will be $9.42 in 2002, compared with $6.88 in 2001 (see Figure 2.4).

Figure 2.4

Cost of risk per $1,000 revenues

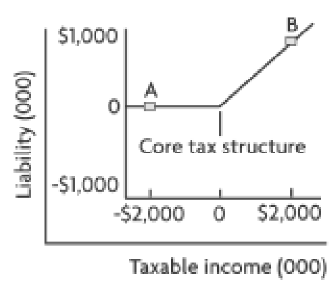


Source: 2000 RIMS Benchmark Survey; Prudential Securities estimates

Reducing your tax load through risk management

Many companies list reducing earnings volatility as the main goal of their risk management efforts. The reason is straightforward—investors prefer to see steady earnings growth, and punish companies that miss their numbers.

Figure A



There is another advantage. Research conducted over the past few years shows that, for many companies, a smoother growth curve for earnings can yield a smaller tax bill. In a 1998 study*, Clifford Smith of the University of Rochester and John Graham of Duke University demonstrated that companies facing an effectively convex tax function (which is generally induced by the asymmetric treatment of profits and losses in the tax code; the case for about 50 percent of US companies) can cut their taxes by an average of 5.4 percent by reducing the volatility of taxable income by just five percent. In some extreme cases, the savings can reach 40 percent. The reason has to do with the structure of the tax code. Consider the simplified case illustrated in Figure A. This company's tax structure is such that its tax liability will be zero for all low taxable income levels. If, because of income volatility, the company faced two equally likely outcomes—low taxable income, resulting in no tax liability (point A) or high income with a liability of $1 million (point B)—then the estimated tax liability would be $500,000. But if the company could hedge and entirely eliminate the volatility of its taxable income, both taxable income and expected tax liability would become zero.

The situation becomes more complex when accounting for factors such as tax-loss carrybacks or carryforwards, but the principle is the same. The greater the uncertainty in future income, the higher the tax liability is likely to be.

* Graham, John R., and Clifford W. Smith, Jr. "Tax Incentives to Hedge." *Journal of Finance,* Vol. 54, No. 6 (1999): 2241-2262.

One evident response is that companies are taking on higher levels of self-insurance. Nearly all of the companies we spoke with are planning to increase their deductibles and/or self-insured retentions. As a result, CFOs are under pressure to manage risks better internally. A strategic risk management approach is key to doing this, since it helps focus attention on risks neglected in the past or those creating the greatest exposure.

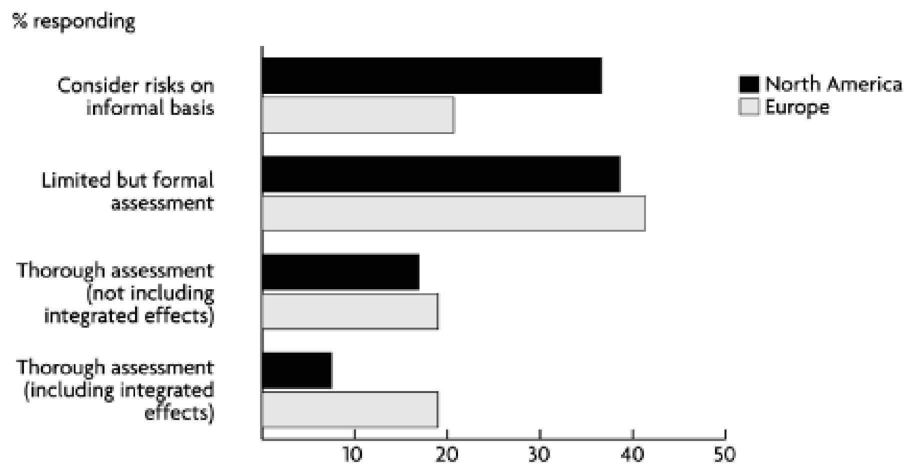
Because of its ERM program, Aventis is more willing to retain higher risk levels in its captive. "We decided that if we were going to take a larger self-insured retention in our own captive, then we needed to know our company's risk better, because we're not transferring as much risk," says Krenicky. "Thus, it's a direct tie-in to doing an enterprise risk analysis; if you do it properly, then you have more comfort and more confidence in taking on greater risk."

Strategic planning and budgets

Clearly, many of the motivations driving CFOs toward a new kind of risk management could be considered "strategic." But to what extent are companies formally linking risk and the planning and budgeting processes?

Figure 2.5

Integration of risk management and planning



Source: CFO Research Services

As we mentioned in the last chapter, relatively few companies integrate risk and planning very closely today: only 11 percent thoroughly examine risks, including their integrated effects, as part of the planning process, and 18 percent do so without considering integrated effects. Europeans are more integrated than North Americans (see Figure 2.5), and the high tech/telecommunications, energy, and financial services industries are more likely to integrate than others.

Despite these low numbers, our interviews indicate that many executives want to see a closer integration between risk and planning. One is Ian Powell, risk director for Six Continents PLC, a U.K.-based hotel, retail, and soft drinks group (formerly Bass PLC) that is conducting a company-wide risk mapping exercise. In an effort to make his company's risk management more outcome-driven rather than merely compliance-driven, he hopes to integrate the risk management and planning processes. "It's a question of trying to align ourselves more closely with existing, well-supported processes like budgeting and strategic planning," says Powell. "There is a loop to be closed in terms of the output of the strategic plan becoming an input into the risk exercise and vice versa."

Of course, risk assessment has always been a part of strategic planning; strategic risk management calls for an even closer connection between the two. This means providing more detailed risk information to senior planners, and requiring management to inject an ERM methodology into their consideration of the risk and returns of different strategies. It also requires the risk management function to measure the right threats, including any that might affect the strategic plan.

The benefits of integration

There are several reasons why it makes sense to tie risk and planning closer together. The first is better capital allocation. As we discussed earlier, if senior management has an adequate appreciation of the risks and opportunities inherent in different initiatives, it can funnel its resources to the best available opportunities. Duke Energy does this systematically, evaluating the risk-adjusted returns of each business opportunity (see case study).

Duke Energy: Integrating strategy and risk management
Richard Osborne, CRO

Although virtually every company claims that it considers risks as part of its planning process, few go much beyond an obligatory review of threats and opportunities. Duke Energy is an exception. The company recently created an enterprise risk function, put the chief risk officer in charge, and directed the function to oversee strategic planning.

According to Richard Osborne, Duke's former CFO and current CRO, the decision to place strategic planning in the enterprise risk group evolved out of a recognition that the company confronts risks so major that any plan must take them into consideration. First among these risks is volatile commodity prices—deregulation has led to wild fluctuations in the prices of commodities such as natural gas. "The issue is not just the magnitude of those exposures—which is very large for a company pursuing our kinds of strategies—but it is also the complexity of those exposures and the difficulty in understanding the true net position of the company," says Osborne. By assigning the planning function to the same group responsible for monitoring these risks, the company ensures that risk considerations are integrated into strategies.

Risk management and planning are a natural pairing—since the company's goal is to create the highest risk-adjusted returns for shareholders, a careful analysis of risk can help determine what businesses to enter or exit.

— Continued

Risk management and planning are linked in several ways:

- First, the planning process involves an examination of where the company can earn the best risk-adjusted returns. This can lead to a decision to invest or divest. “If we see an opportunity to reap a very attractive risk-adjusted return by developing new capabilities, we have to assess whether that’s a realistic strategy for us,” says Osborne. “And if we determine that some lines of business have been earning us attractive risk-adjusted returns, but those lines of business have characteristics that would impair those returns, then it is our responsibility to identify those and recommend that we exit those businesses.”

- Second, strategic planning at Duke involves active scenario planning. The risk group regularly reviews and revises scenarios. This involves an assessment of each business unit’s sensitivities, an examination of any offsets that exist across the company, and finally a calculation of Duke’s net sensitivity to major events, such as an increase in the price of oil or natural gas.

- Third, Duke uses its understanding of risk to improve budgeting. By understanding each business unit’s vulnerabilities, management can predict how likely the business is to meet its goals. “We are able to assess the real attractiveness of a business unit’s business plan and proposed budget simply by saying, ‘Here’s what they expect to contribute to earnings. Here’s what they expect to spend in capital. And here’s the range we can expect to see out of this unit.’” Senior management receives a bar chart that summarizes this information. Each bar represents a unit’s expected earnings contribution; a bracket at the top of the bar indicates the distribution of likely outcomes.

This approach creates two main benefits for Duke. First, integrating planning and risk management allows managers to make plans while fully aware of the company’s true risk levels. This helps ensure that planners don’t lead the company to take on too much risk. Second, it leads to better capital allocation, steering the company toward the most attractive opportunities. If planners can gauge the company’s net risk position and understand how risks offset one another, they will be more comfortable allowing a promising business to take more risk. This, in turn, contributes to the company’s long-term growth.

Second, integrating risk management and planning helps senior managers devise strategies that more fully account for risks. Danone ensures that the results of its enterprise risk mapping program are incorporated into its strategic plan. According to Thierry van Santen, the company’s head of risk management, Danone does this partly by including its top executives in the risk assessment process. For each of its three business lines, the company has a risk committee at the corporate level. The committees include Danone’s branch managers and their teams, and the head of risk management. These committees evaluate the results of the risk assessment and determine which issues ought to be factored into the strategic plan. As part of the planning process, each business must come up with an action plan for mitigating the risks the committees have identified.

The third benefit is that the CFO can better understand the likelihood of the company meeting its earnings targets. By providing a clearer picture of the risks associated with the company’s various earnings streams, a strategic risk management process enables managers to view them within a portfolio context, and project the firm's overall earnings volatility. Universal Access, a Chicago-based company that connects different parts of the fiber-optic communications network, is pursuing that goal. According to Bob Brown, the company's CFO, Universal Access plans to perform scenario analyses as part of its strategic planning process. This could include using Monte Carlo simulation to help forecast earnings.

Corning illustrates another approach to factoring risks into earnings forecasts: applying a risk discount premium to every unit's budget based on an analysis of that business' risks. According to Mark Rogus, the company's treasurer, "Whether it's investment proposals, appropriations requests, acquisitions, human capital, or fixed capital, we imbed a higher risk discount premium depending on the situation to cover any systemic risk that might be in a particular initiative."

In the next chapter, we will examine the obstacles to implementing a risk program and consider the experiences of companies that have done so successfully.

Chapter 3: THE WAY FORWARD

For much of the past decade, CFOs have debated different ways of managing risk. Despite the progress that many companies have made, the majority have yet to adopt a truly strategic approach. Only 12 percent of companies have a fully integrated risk management process, and only 29 percent tie it closely to planning and budgeting. What explains these low numbers?

Part of the answer, of course, is that not everyone is sold on the concept of strategic risk management. This is particularly true of smaller companies who operate mostly in their home market, feeling little pressure to change. But conversations with senior finance executives suggest that most would like to move toward strategic risk management. For companies of all sizes, the main problem lies with the obstacles to implementation.

The barriers to strategic risk management

Looking at those companies that still use a silo-based risk management approach, we found that CFOs struggle with several main challenges to managing risk more strategically:

- Lack of uniform metrics across the organization (33 percent consider this to be a highly significant barrier)
- Too much time required for design and implementation (31 percent)
- Incompatibility with corporate culture (25 percent)
- Inadequate IT systems (25 percent)

The significance of these obstacles varies by industry (see Figure 3.1). For example, the energy industry is particularly concerned with inadequate IT systems and a lack of uniform metrics, perhaps reflecting an industry still moving away from a regulated environment.

Addressing the challenges

Companies that are succeeding with strategic risk management are addressing these challenges in diverse ways:

- **Lack of uniform metrics across the organization.** Recognizing that a lack of uniform metrics could block the progress of its enterprise risk program, USAA plans to start its effort by developing a common set of risk definitions and terminology. “One of our early objectives is to get the terminology regarding risk consistent,” says Mandel. “Like any company this size, we’ve got a lot of people doing something in this area—we need to get everybody talking the same language.”

Uniform metrics are also necessary if companies are to determine their aggregate risk level. Aggregating major risks is easier for financial firms, whose main risks are quantifiable and interconnected. It is more difficult

Figure 3.1

How significant are the following barriers to managing risk on a more strategic basis?

% responding "very significant" or "extremely significant"

30% and over
20%-29%
0-19%

	Business/prof. services	Energy	Financial services	Consumer products	High tech/telecom	Manufacturing	Chemical/pharma	Retail
Lack of uniform metrics across organization	19	38	28	26	31	25	35	36
Too much time required for design and implementation	39	27	30	15	25	32	17	40
Inadequate IT systems	28	35	22	26	17	30	17	28
Incompatible with corporate culture	22	23	22	19	17	24	13	23
Unable to quantify intangible risks	33	19	16	22	11	23	30	17
Senior management unconvinced of value	19	19	12	11	11	27	17	26
Risks too diverse	19	19	14	22	14	15	17	13
Inadequate support from the board	19	15	8	19	14	24	17	9
Opposition from operational functions	14	19	12	15	11	14	17	13
Other	0	0	0	4	0	4	9	2

Source: CFO Research Services

for other kinds of businesses. "[Quantifying and aggregating exposures] in a multi-line business is very problematic," says Rogus of Corning. "There are so many exposures that manifest themselves in so many different areas." Rogus adds that threats to Corning's most important assets—its intellectual property and the innovation of its employees—are perhaps the most difficult to quantify.

Merck, which confronts a similar challenge, analyzes the integrated effects of its financial risks through its treasury department, but doesn't fit other risks such as hazard or operational risks into the same model, according to Dorsa. "We do try to get to the same point—because the point is the right one—by using vehicles like our planning model to pick up variability in each of the key inputs into what is ultimately each of the products we sell in the marketplace."

- **Too much time required for design and implementation.** Typically, companies need between one and two years to evaluate what sort of strategic risk program they need; implementing a full program generally requires at least another two years. Some companies, including Danone and Aventis, have been willing to devote the time necessary for a company-wide implementation. They've maintained support for program development by demonstrating benefits to the business, including measurable cost savings and better management of previously neglected risks.

Strong support from senior management and the board is also essential for the success of any major risk management project. Fortunately, boards have become increasingly aware of the need for strong and integrated management, and are pushing audit committees to be more active in this area (see box, next page: "The audit committee's evolving role"). Still, many CFOs feel they can't devote the time or money needed for a complete overhaul of risk management. For these companies, the answer may be to implement the project in stages, or to focus it on one important process or business unit.

■ **Incompatibility with corporate culture.** For some, change in risk management raises cultural issues. The central problem is that strategic risk management calls for a higher degree of central coordination, causing problems for a company with a decentralized culture.

Universal Access faces the challenge of keeping close tabs on its risk position while not stifling employees' entrepreneurial spirit. "One of the things I find challenging with this entrepreneurial and very decentralized culture, is that it's difficult to generate truly holistic enterprise-wide risk management," says Brown.

Brown's approach has been to adopt the risk control model that many financial trading companies use. This is a matched-book approach—requiring salespeople to match network sales with purchases. "We will have margin targets that we set, which obviously then give our client services representatives and salespeople some room to work with pricing," says Brown. "And we don't have a problem with them working with lower margins if they're able to do offsetting positions."

■ **Inadequate IT systems.** To truly manage risks across the enterprise, companies need an information system to automate data collection and analysis, so that decision makers can focus their efforts on interpreting the results and acting on them. This will require many companies to overcome issues surrounding legacy systems that are incompatible or that contain data in different formats. Automating data collection and analysis may also require adjustments to internal accounting processes.

Robust systems are especially important for companies attempting to aggregate exposures across diverse operating units. Duke Energy has a major project underway to develop a risk management information system. "The intent is to update or replace—depending on the particular system you're talking about—all the trade entry systems that our trading entities use in order to have a common risk engine that enables us to draw all [of the risk information] together in a much more fluid and flexible way," says Osborne. "That requires that business units really come to some common set of processes, and that we only have deviations where there is a real commercial need to have such deviations."

An additional challenge interviewees mentioned was resistance from business units. CFOs may face the challenge of selling yet another corporate initiative to the business units. In some companies, that challenge is compounded by failures of earlier programs, from process

The audit committee's evolving role

Once regarded as the backwater of corporate governance, the audit committee of the corporate board is gaining an increasingly high profile. The SEC's conflict-of-interest rules have placed these committees under the spotlight and have given them a management role in overseeing outside auditors (a role that will likely increase in the wake of the Enron scandal). Furthermore, as companies adopt an expanded definition of risk—from a narrow focus on financial reporting to a wider view that encompasses operational, human resources, and other risks—the audit committee's job has expanded. Indeed, our survey found that a significant number of audit committees now review non-financial risks, including legal and regulatory risks (43 percent), operational risks (41 percent), hazard risks (38 percent), and market risks (32 percent). Additionally, 73 percent of survey respondents believe audit committees should be more active in aligning risk management with corporate strategy.

The result of this change is that boards have begun to recognize the need for independent directors with a strong finance and governance background. "Boards have realized that it's important to get the best of the directors on the audit committee," says Roger Raber, president and CEO of the National Association of Corporate Directors in Washington, D.C. This hasn't been easy. Many of the best qualified candidates—such as retired partners from the Big Five accounting firms—are unwilling to serve because of conflict-of-interest and liability issues. As audit committee meetings become more frequent and agenda items increase, some shy away from the commitment.

Are audit committees overextended?

One solution to this may be higher pay for audit committee members. But boards should also consider a more fundamental question: what should the audit committee's role be with respect to risk management? Formally, the audit committee has two responsibilities: to oversee the integrity of the financial control and reporting system, and to oversee the independence and competence of the external auditor.

To extend oversight to non-financial risks may not make sense, according to Charles Elson, a professor at the University of Delaware and the director of the Center for Corporate Governance. "The question is, should strategic risk be part of the audit committee's responsibility? Keep assigning additional responsibilities and the audit committee essentially becomes the board. It's not supposed to work that way."

There is agreement, however, on several recommendations for audit committees:

Be more anticipatory. Audit committees should be looking forward to new risks that might affect the financial performance of the company, and ensure that management has a plan to manage them.

Build trust and confidence. For corporate governance to work effectively, there must be open and honest communication between senior management and the board. Where this communication is absent, audit committees may have to be more persistent in their questioning of managers.

Don't be overzealous about risk avoidance. In encouraging management to take an active stance toward risk management, audit committees should be wary of implying that the best way of dealing with risk is simple avoidance. They should encourage a balanced assessment of the full range of alternatives, including risk transfer, risk mitigation, and risk financing.

reengineering to E-business transformation. Aventis has built support for its ERM program by ensuring that all of its units and functions are fully involved in the implementation. "People can feel threatened that corporate is coming in and is going to dictate about an area they maybe are not as knowledgeable in," says Krenicky. One step the company has taken to resolve this is to create cross-functional teams to identify risks and recommend solutions—a team effort rather than something imposed from above. Another is step is to ensure that senior management responds to the findings that come out of the operational workshops. "You have to assure people that if you do find out about a risk, you're going to act upon it," says Krenicky.

Other executives report that starting a strategic risk management program with a pilot project is a helpful way of explaining the process and overcoming resistance.

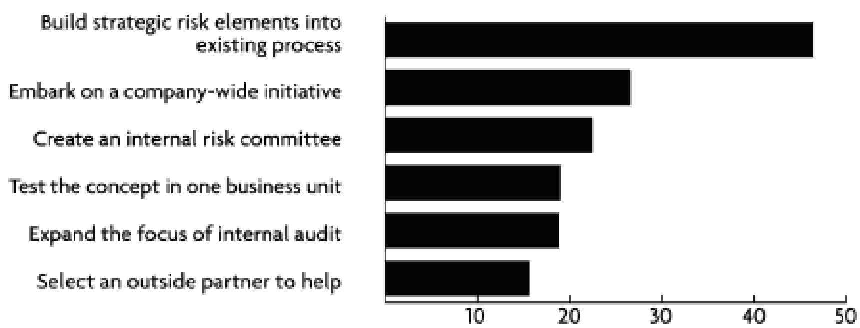
A framework for implementation

There appears to be no single best way to implement a strategic risk management program. As Figure 3.2 shows, we asked survey participants how they plan to initiate their programs (respondents were allowed to select more than one option). The most favored approach (47 percent) is to build strategic risk elements into an existing process. This might mean incorporating a risk management methodology into the budgeting process, strategic planning, or supply chain management. The second most popular approach (27 percent) is to embark on a company-wide initiative. Others will start by creating an internal risk committee, testing the new risk approach in one business unit, or by expanding the focus of the internal audit function. Although anecdotal evidence suggests that most companies will eventually bring in outside advisors to help with implementation, comparatively few begin with such a step—the majority will first conduct their own internal review.

Figure 3.2

If your company manages or plans to manage risk on a more strategic basis, how will you begin your implementation?

% responding



Source: CFO Research Services

Preferred implementation methods can be further described as follows:

- **Focus on one unit or process.** The first approach is to start a risk management program with a narrower scope. This offers several advantages: it's easier to get off the ground, less disruptive to ongoing operations, and allows a company to recognize benefits from the program sooner (though benefits may be limited by the project's scope). One example is Akzo Nobel, which is working on a strategic risk program that concentrates on the risk reporting process. According to Bjarnehall, the goal is to ensure that corporate planners account for each division's major risks.

We found that companies whose main goal is to gain competitive advantage are more likely to pursue a narrow approach, as there is a greater incentive for these companies to link risk management to strategic processes.

The survey also suggested that certain obstacles may encourage CFOs to begin with a program focused on one operating unit or production/service sector. Starting the project in one area can be an effective way of overcoming internal resistance by demonstrating the benefits of strategic risk management. Likewise, companies that confront a particularly broad range of risks (particularly if many are hard to quantify) may decide to concentrate on the more quantifiable areas first, such as treasury risks, rather than tackling the entire scope of risks at once.

- **Launch a company-wide initiative.** This approach is more difficult. Launching an enterprise-wide initiative requires time, money, and a concerted effort on the part of the CFO to coordinate the effort. As the experience of Aventis shows, a successful program requires extensive planning and careful implementation (see case study). Our survey found that companies whose main goal is to better respond to the full range of risks are significantly more likely than others to pursue a company-wide program. Danone, for example, identifies one of its primary objectives as ensuring an awareness of all the major risks in its global operations. Such an effort requires unambiguous support from senior management and the board. The survey results also revealed that companies that cite lack of board support are less likely to begin a risk program in this way.

Aventis: Implementing a global risk management program
Ken Krenicky, vice president, global risk management

As an investment, a major risk management program has its own share of risks. Like any company-wide initiative, it can be expensive, time-consuming, and a distraction from ongoing operations. Some companies have responded by implementing the program in pieces—starting in one business unit and moving to others later. Others have chosen to narrow the project's scope, settling, for example, for an audit of business risk without considering how all of the organization's risks interact.

Aventis has taken a different route. The company has chosen to implement a full enterprise risk management program across its divisions. The program began in early 2000, shortly after the company was created from the merger of Hoechst and Rhône-Poulenc.

— Continued

According to Ken Krenicky, who runs the company's global risk management operation, Aventis' senior management realized soon after the merger that they needed a better understanding of the new company's risk profile. This coincided with the rise of new corporate governance rules in Europe, such as KonTraG, a German law that requires companies to have a system for identifying and managing risks. Given the situation, a corporate-wide risk management program seemed appropriate.

The process

From the start, Aventis planned to implement its program both from the top-down (looking to senior management for direction) and from the bottom-up (seeking input from those close to the operations). "I don't think you can do one without the other," says Krenicky. "The top-down process shows some senior management perceptions of risk, but you need the bottom-up operations approach to truly validate the perceptions of senior management."

The first step was to conduct in-person interviews with the company's top 20 managers and send questionnaires to about 100 senior employees in different functions. One goal was to identify the risks most important to senior management and to develop a list of the top ten. Another goal was to encourage a close look at the company's existing risk guidelines, procedures, and controls and decide how to blend them. Krenicky also wanted a measure of senior management's risk appetite. What level of risk would keep them up at night? What effect on the company's share price would senior managers be comfortable with?

The second step was to test these findings in a series of workshops held in the operational functions. Aventis formed a workshop for each of the top ten risks identified from senior management interviews; an important feature of the workshops was that they were cross-functional. "If you only talk to people within your function, sometimes you miss the forest for the trees," says Krenicky. "You're close to certain issues, but someone from the outside might ask some basic questions that make you think." The workshops were also anonymous, to encourage employees to speak frankly about risk issues. Aventis intends to update this risk mapping exercise annually.

The conclusions coming out of the initial round of workshops were used to develop processes for the global risk committees that reside within each of the company's five operating divisions. The committees, which are cross-functional groups chaired by the CFO of each division, meet at least quarterly. Krenicky serves on each one to help ensure that the work is coordinated. "The key with these committees is that they're operationally chaired," says Krenicky. "So it's not corporate saying 'You ought to do this.'"

The committees review the risks facing the division, assess what tools are in place or are needed to mitigate them, and report the major risk issues to the group executive committee. The executive committee, in turn, assists in prioritizing all of the risks and may allocate capital to address them.

A culture of risk management

Krenicky argues that for a risk management program to succeed, it must become part of the company's ordinary business processes. With this in mind, Aventis requires all key operational standing committees to consider risks as part of their activities. Committee chairmen must fill out a form describing what risk issues were considered during each meeting. The head of risk management and the functional head receive the form. "Risk management has to be ingrained into the normal operating processes of the company," says Krenicky. "Otherwise, it will fail like many other flavor-of-the-month projects. This has to be understood going in."

■ **Pursue an expanded audit exercise.** The third option is to launch a program that concentrates on risk identification. One company pursuing such a program is Six Continents. The company has launched what it terms a "major risk exercise" to ensure that senior management is aware of the firm's primary business risks. Every six months, the risk management department meets formally with the key players in the business to discuss their risks (they have informal contact in the meantime). The results of these meetings form the basis for the internal audit function's work during the next year. One benefit of the program, according to Powell, is management's greater awareness of certain long-term risks that weren't so apparent prior to the audit exercise (for example, the rising cumulative cost of regulations that affect the beverage industry).

Our survey found that this approach is used more by companies whose main risk management goal is regulatory compliance. This is logical, given that many corporate governance regulations essentially call for a more vigilant internal audit function, rather than a complete overhaul of risk management.

Structuring the new risk function

In addition to considering the obstacles and alternative approaches to implementation, CFOs must also consider where in the organization the risk management function should reside. To date, companies are adopting two main models:

■ **An empowered central risk organization.** One approach is to create an enterprise risk management function with the authority to set risk policies and enforce them. Typically headed by a CRO, this structure is most common among financial services and energy firms, which often feel it's necessary to dedicate someone to be in charge of managing the exposure to market and credit risk. In addition to Duke Energy, examples include UBS and Koch Industries.

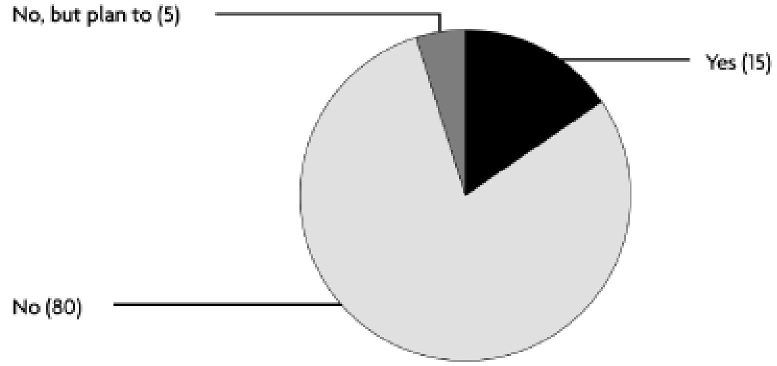
■ **A virtual risk organization.** A second option is to create a more dispersed risk organization, where most of the work still occurs within the units and functions, but is coordinated by a central facilitator or a risk committee comprising senior management and representatives from the business units.

Our survey examined the current and planned use of CROs and risk committees. Contrary to what some analysts and news publications have claimed, the CRO seems likely to remain a niche phenomenon. Only 15 percent of companies have such an executive today, and a mere five percent plan to create the position (see Figure 3.3). CROs are more prevalent in certain industries—24 percent of financial services companies have one, as do 23 percent of energy companies, and 14 percent of high tech / telecommunications firms. Likewise, the position is more common in firms with over $1 billion in annual revenues. One quarter of

Figure 3.3

Does your company have a CRO?

% responding



Source: CFO Research Services

such companies have a CRO, compared with just 10 percent of smaller firms. Additionally, Europeans are somewhat more likely to have one than their North American counterparts (18 percent versus 14 percent).

Our survey indicates that risk committees are more common. Today, 34 percent of companies have one, and another five percent plan to (see Figure 3.4). Like the CRO, the risk management committee is more common among larger firms. 43 percent of large firms have such a committee, and 31 percent of smaller companies do. This may be because risk issues facing a large company are generally too complex for one person to manage. As Figure 3.5 shows, most risk committees include the CEO and CFO, reflecting the strategic priority many companies now attach to risk management.

Figure 3.4

Does your company have an executive-level risk management committee?

% responding

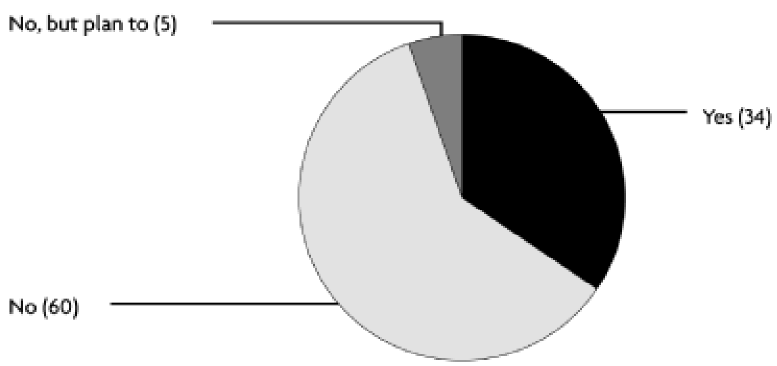


Figure 3.5

If you have a risk management committee, which executives are members?

% responding

75% and over
50%-74%
0-49%

	Business/prof. services	Energy	Financial services	Consumer products	High tech/telecom	Manufacturing	Chemical/pharma	Retail
CFO	79	92	92	80	100	88	86	91
CEO	36	58	68	40	33	41	57	82
Business unit heads	43	42	49	40	44	29	57	27
Risk manager	14	42	43	50	33	24	29	18
Treasurer	21	25	35	50	56	53	43	27
Director of HR	36	8	16	70	33	41	57	36
COO	7	33	27	40	67	18	14	27
Director of internal audit	21	17	30	40	44	12	29	9
CRO	7	17	30	10	22	6	29	9
Chairman	14	8	19	20	22	0	14	0
Legal counsel	7	8	3	0	0	6	29	0
CIO	0	0	3	0	0	0	0	0
Other	14	8	3	20	0	12	0	18

Source: CFO Research Services

Conclusion

Strategic risk management represents a shift in CFO thinking about risk (see Figure 3.6). Previously, many viewed risk management as an activity separate from the company's real work—an after-the-fact effort to protect against dangers inherent in business operations. There is now a recognition that risk management should be inseparable from strategy development, capital allocation, and other core processes. It follows that if managers are to use risk information to steer the corporation, they need a view of that data unhindered by organizational divisions or

Figure 3.6

Old CFO view of risk management	New CFO view of risk management
■ "Silo" management	■ Centralized management
■ Focus on risk transfer	■ Efforts to take advantage of portfolio effects
■ Limited integration with processes	■ Risk to create competitive advantage
■ Scope limited to financial/hazard risks	■ Integration of risk into plans and budgets
■ Unclear link to corporate objectives	■ Monitor more risks
	■ Link risk management to corporate objectives

Source: CFO Research Services

definitional problems. As our study has shown, despite the relatively low numbers of companies practicing strategic risk management today, many more will do so in the future. Those companies planning to adopt this approach expect that it will help them meet many of their central challenges, including the need for reduced earnings volatility and for new sources of competitive advantage.

Obstacles exist, however. Managers will need to overcome a lack of uniform metrics, insufficient IT systems, and conflicts with corporate culture, among others. Furthermore, there is no single, correct way to implement a risk management program. Different companies will focus on different processes and different risks, according to their own situation.

The challenge ahead for CFOs will be to integrate this new way of thinking about risk throughout the organization. Only when all of a company's managers are equipped to base their decisions on a better understanding of risk and opportunity will companies realize the full value of strategic risk management.■

Sponsor's Perspective

A NEW GENERATION OF RISK

By Michael D. O'Halleran
President and COO
Aon Corporation

When Aon Corporation partnered with CFO Research Services last September to survey how companies view and handle their risk management, we hoped to produce a timely report encompassing numerous geographies, industries, and strategies. As recent events have shown, rarely has intelligent risk management been so vital to a company's survival and success. In an environment where CFOs face heavy scrutiny of business practices and delivery of company goals, risk management is at the forefront of many executive agendas. Therefore, we eagerly sought to measure and define how companies were responding or planned to respond to the new challenges before them.

The number and quality of responses we received truly ensured a comprehensive report. Over 400 respondents from the U.S. and Europe, the majority holding senior titles of CFO or finance director, sent us completed surveys. Yet, it was the respondents' invaluable input that served as our barometer and compass: showing us where risk management is now and the direction it is heading.

One clear conclusion of our survey is that current risk management systems are inadequate. The traditional insular approach leaves too many gaps and divides a company's objectives. Corporate leaders do not have a concise way of evaluating a company's overall risk position, which could lead to corporate calamity. Some companies are now moving to centralized risk management across the enterprise, while leading companies are currently integrating risk and strategic planning. Audit committees have begun taking more active roles in risk management. Change is clearly on the horizon.

The seeming next generation of risk management outlines a more strategic approach. In documenting the emerging trend of strategic risk management and outlining flexible and varying paths to implementation, our report considers ways to reduce earnings volatility, improve capital allocation, and establish a competitive advantage. Strategic change inevitably faces obstacles, but as the report documents, there are also ways to overcome such challenges.

To achieve long-term success in today's business marketplace, clear vision is needed. Today, only 12 percent of companies who responded to our survey have fully integrated risk management across the organization. Yet in three years, it is expected that 39 percent of respondents will achieve a fully integrated approach. It is evident that the evolution of risk management is accelerating, leaving the antiquated silo approach behind.

What is not left behind is the desire for options in making any strategic decision. There is no single way to implement a strategic approach to risk. The challenge is creating a culture of strategic risk management within an organization and finding the right experts to assist along the way. Companies have the potential to realize greater success when managers possess a thorough understanding of risk and opportunity, as well as risk consultants who truly understand their business and its objectives.

As a provider of strategic risk management solutions, Aon looks to continuously expand and develop tools, experts, and solutions to meet this next generation of risk. Whether you are a client, partner, prospect, or competitor, I would like to thank you for your interest in our findings and wish you well on achieving your risk management objectives during these challenging times.

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