Thought Leadership Institute

Seizing opportunity
Linking risk and performance

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July 2009

The heart of the matter

Global business volatility seems more extreme than ever. How will your company manage the risks and rewards of doing business in unprecedented times?

The time to link risk and corporate performance management is now

The origins of the financial crisis will be debated for some time, but the fallout exposed one clear shortcoming: inadequate risk assessment practices. Too many companies took on excessive risk with too little regard for reasonable, realistic long-term performance expectations. The debacle is focusing minds on more robust approaches to risk management, with a new imperative to keep pace with financial innovation, performance incentives, and business goals. Reforms will stretch risk management across the organization and involve systematically linking risk and corporate performance management, leading to an informed view of reward.

Extreme volatility, even financial crisis, isn't new to US business. Companies that keep their proverbial eyes on the ball—on improving performance, both financially and operationally—will emerge from these trying times better positioned to take advantage of opportunities.

However, conducting business as usual is in itself a risky proposition. Compliance-driven approaches to managing risk no longer suffice in an increasingly volatile, interconnected business environment. Approaches to risk management need to provide business leaders and their boards of directors with an integrated view of risk and performance that defines how rapidly emerging events will impact operations, quality, and, ultimately, shareholder value.

Recent research shows that many companies fail to connect risk and performance in the course of basic performance management. Just 37 percent of nearly a hundred senior executives at US-based multinationals surveyed by PricewaterhouseCoopers in 2008 said their companies link key risk indicators to corporate performance indicators.

External stakeholders are already motivating companies to take a fresh approach to aligning their risk appetites and performance objectives in a smarter, more systematic way. Company directors, credit rating agencies, and institutional investors alike are scrutinizing the risk-reward relationship and formalizing their own linkages between risk and performance, creating new expectations and market demands for businesses. A further inducement is being crafted by the Obama Administration, which has telegraphed its clear intent to more closely tether compensation in financial services to long-term performance, through either regulatory or legislative action. The bonus culture has been a hallmark of Wall Street, but it's not entirely unique to the big banks. The reforms to compensation and incentives that emerge on Wall Street will likely have an influence on the wider American business community.

There is no handbook for integrating risk and performance management, but it should be understood at the start that this is not merely a defensive response to greater uncertainty in the business environment and, for some, to pending regulation. Companies are recognizing that the same drivers of increased volatility—capital mobility, rapid innovation, and the development of new business models—also offer opportunities that they must exploit to increase revenue, improve shareholder value, and satisfy evolving customer demands. With an integrated, principled approach to managing risk and business performance, companies can seize with greater confidence the opportunities that an interconnected economy presents.

The process of connecting risk and reward starts at strategy setting. When company leaders understand the greatest sources of value creation and destruction across their organizations, when they assign clear accountability for risk management and performance management, and when they systematically quantify the rewards associated with the risks, they change the decision-making game for their managers.

An in-depth discussion

Uncovering the connections between risk and performance reveals a fuller view of your company's strategy and operations.

Business as usual is a riskier proposition

According to the 2008 World Economic Forum Global Risks report, while the financial conditions of the past decade allowed for an exceptional period of economic growth and stability worldwide, the interconnected global business environment also presents new sources of increased volatility, including systemic financial risk, skyrocketing food prices, rapidly extending supply chains, and a looming energy crisis.[1]

From Wall Street to Main Street, and now around the world, the effects of that systemic financial risk are being harshly realized. Still, financial shocks aren't new: A recent PricewaterhouseCoopers analysis revealed that the international mobility of capital has, over the last two centuries, repeatedly produced financial crises by freeing large amounts of capital to swell local markets. In today's networked world, such bubbles inflate faster than ever.[2]

Whether or not one subscribes to the argument that current levels of economic volatility are cyclical, one thing is certain: the pace of change and business innovation over the last decade has been unprecedented. And it has dramatically increased the frequency—and scale—of economic disruptions.

Put into historical perspective, just one financial crisis affected the US in all of the 18th century (perhaps unsurprisingly, as the US was in its infancy), and five financial panics occurred in the US over the next hundred years. In the course of the 20th century, the US saw 11 major economic disruptions, and in just the first decade of the new millennium, the US has experienced two financial crises.[3]

In times of economic instability, the natural tendency among business leaders is often to batten down the hatches, shy from increased risk, and ride out the storm. In fact, some 80 percent of 101 senior executives at US-based multinationals surveyed by PricewaterhouseCoopers in 2009 said they're likely to be more cautious about spending and investing over the next 12 to 18 months.[4] However, the ability to take smart, strategic, frequently large risks is becoming increasingly important not just to business growth but also to sustainability and continuous operational improvement.

Berkshire Hathaway CEO Warren Buffett's insights on taking risk in volatile times offer a case in point. In 2007, Buffett expressed uncertainty about the road ahead for his company's core insurance businesses but seemed confident in the organization's ability to effectively manage risk and performance. In a letter to shareholders, he said the investment vehicle hadn't lost its taste for risk, yet added: "We remain prepared to lose $6 billion in a single event, if we have been paid appropriately for assuming that risk. We are not willing, though, to take on even very small exposures at prices that don't reflect our evaluation of loss probabilities. Appropriate prices don't guarantee profits in any given year, but inappropriate prices most certainly guarantee eventual losses."[5]

In many regards, increased risk is a cost of market entry. Take the case of home furnishings retailer IKEA, which, out of necessity, maintains a fundamental acceptance of, and appetite for, the increased risks associated with supporting a global operating model.

1. World Economic Forum, *Global Risks 2008: A Global Risk Network Report* (January 2008).
2. PricewaterhouseCoopers, *American Perspectives* (October 2008).
3. Ibid.
4. PricewaterhouseCoopers, *2009: Q1 Management Barometer* (2009).
5. Warren Buffett, *Berkshire Hathaway Annual Report 2006* (February 2007).

The company sources its products from 1,600 suppliers in 55 countries. Managing the operational and reputational risks associated with maintaining such a diverse supply chain could well become a minefield, but IKEA could not produce its expansive portfolio of offerings without those 1,600 global suppliers.

To maintain quality, safety, environmental, forestry, and social standards, the company has developed a "responsible supply chain program," which features formal processes to ensure that all their suppliers produce goods and services in accordance with internationally recognized conventions and standards. External auditors regularly monitor both primary suppliers and large sub-suppliers. While taking on the risk of sourcing internationally, IKEA smartly manages that risk by implementing and closely monitoring operating standards on a global level in order to maintain corporate performance.

IKEA, however, likely represents more the exception than the rule. As recent events have shown, today's corporate risk management practices have not always proved up to the task of balancing increased risk appetites with the need to maintain both financial and operational stability through rapid change.

Siloed approaches to risk management create dangerous blind spots for business

Risk is, by definition, forward-looking. It is a measure of probability—of either loss or gain—depending on the circumstances surrounding a given event's occurrence. And that probability—of value destruction or creation—directly impacts a company's performance objectives. In fact, studies of large-cap companies have found that nearly 60 percent of the time, failure to assess and respond to strategic or business risks is behind rapid declines in shareholder value.[6] Nonetheless, many business leaders continue to view risk and compliance as two sides of the same coin, reflecting a common, organizational focus on managing risk to prevent known, historical business failures rather than to anticipate likely (or seemingly unlikely) game-changing events.

Compliance with regulatory and reporting rules is a non-negotiable feature of doing business, but a risk management strategy focused myopically on prevention is, by nature, backward-looking and fails to account for the likelihood of change or the possibility of growth. A holistic risk management program, on the other hand, encompasses the tools and processes used to identify, assess, and quantify business threats and the measures taken to prioritize, monitor, control, and mitigate those threats.

In the wake of the high-profile lapses of the 1990s that led to increased regulatory pressures, intensified shareholder activism, and a barrage of compliance requirements, many companies began to view risk almost exclusively as a threat to be mitigated. Without a doubt, increased regulatory complexity—both in the US and abroad—and the layers of compliance processes and controls associated with managing it have forced organizations to shoulder new burdens in terms of cost and productivity. But beyond the costs, a compliance-only approach to risk management can have the dangerous side effect of distracting from the principles that belie the requirements around the need to balance risk and reward in a well-reasoned, transparent way.

According to a senior risk management executive at one multinational energy company, performance-focused risk management can enable both compliance and business strategy. "We found that if we manage and design according to risk, we

6. PricewaterhouseCoopers, *2008 State of the Internal Audit Profession Study* (2008).

usually exceed any government requirements that anybody can lay on us, just because risk is such a logical way to do it. We know the risk associated with a certain thickness of pipe on a platform leg. We know the risk associated with a certain type of valve or a certain type of pump in a refinery. And we are going to design to a level higher than most government expectations," he said, adding that the primary drivers of his company's risk management programs are safety and finance. "We are more interested in protecting an $8 billion book-value refinery than any government is. We've got a lot of hide invested in those assets, and we want nothing to go wrong."

information silos designed to simplify and facilitate reporting and compliance. Leadership is unable to get an integrated view of the key connection points at which new risks—and new opportunities for business growth and operational improvement—might arise.

Without an integrated view of risk and performance across the whole business, companies are doomed to repeat the failures of the recent past—from high-profile supply chain disruptions to extreme financial breakdowns—in which they took on excessive risk without a fully informed view of reward.

"We found that if we manage and design according to risk, we usually exceed any government requirements that anybody can lay on us, just because risk is such a logical way to do it."

Focusing too narrowly on regulatory compliance—an important but discrete element of business risk—can result in silos of risk and performance information that often hamper an organization's ability to monitor critical risk interdependencies. Ironically, the same organizational structures that arose to manage compliance have now, at many companies, become insufficient for addressing increasingly complex and often overlapping global regulatory demands.

Consider, for example, a global pharmaceutical company that must comply with federal financial reporting requirements and drug safety standards; international trade and labor regulation; and global intellectual property management provisions. Each category of compliance is rife with risk that permeates every level of the organization—from product lines to functional business units, geographies, and the enterprise as a whole. But the knowledge about these highly interdependent risks resides in

Leading companies are already deploying fresh, integrated approaches that shed light on the path forward.

One global automotive manufacturer, for instance, was experiencing significant losses due to a key risk in its supply chain: supplier bankruptcies. In addition to the direct costs of those failures, the company faced the indirect costs derived from the poor product quality, unreliable supply, and management distraction that resulted from the disruptions. The company's goals in addressing the challenges were twofold: to enhance predictability across its supply chain operations and to lower the costs of managing supplier risk. Only by taking an integrated view of interconnected, global risks and their impacts on both operational and financial performance would the company be able to achieve these very clear objectives. By analyzing its suppliers' business environments, identifying leading risk indicators, and conducting risk-adjusted evaluations of its suppliers' pricing proposals, the automaker is now able not only to make more informed supplier selection decisions but also to quickly identify troubled suppliers and take early corrective action.[7]

Looking at risk interdependencies across the supply chain can undoubtedly yield performance improvements. Taking that integrated view to the next level and considering risk and performance in tandem, across a whole organization, can further improve performance and reduce operating costs.

A British oil company, for example, had set up various operating units as independent profit centers, each hedging currency risk independently. When senior managers looked at foreign exchange transactions across the business, they realized they were creating unnecessarily expensive hedges that could be avoided. By viewing risk across the company rather than in silos of risk and reporting information, management was able to reduce costs that accrued to the bottom line. "Risk is really a potential cost on capital," says Neil Doherty, chairman of the Insurance and Risk Management Department at the Wharton School. "So you can think of managing risk as really the other side of the coin from managing capital." Doherty contends that a "sophisticated and comprehensive" approach to risk management (such as the one taken at the British oil company), by which risk is viewed as an integral part of financial management, can increase a company's value 3 to 5 percent.[8]

Closer alignment of risk and performance management has become a business imperative

The market is recognizing, now more than ever, the natural linkages between risk and corporate performance, motivating companies to integrate the management of both in a more focused way.

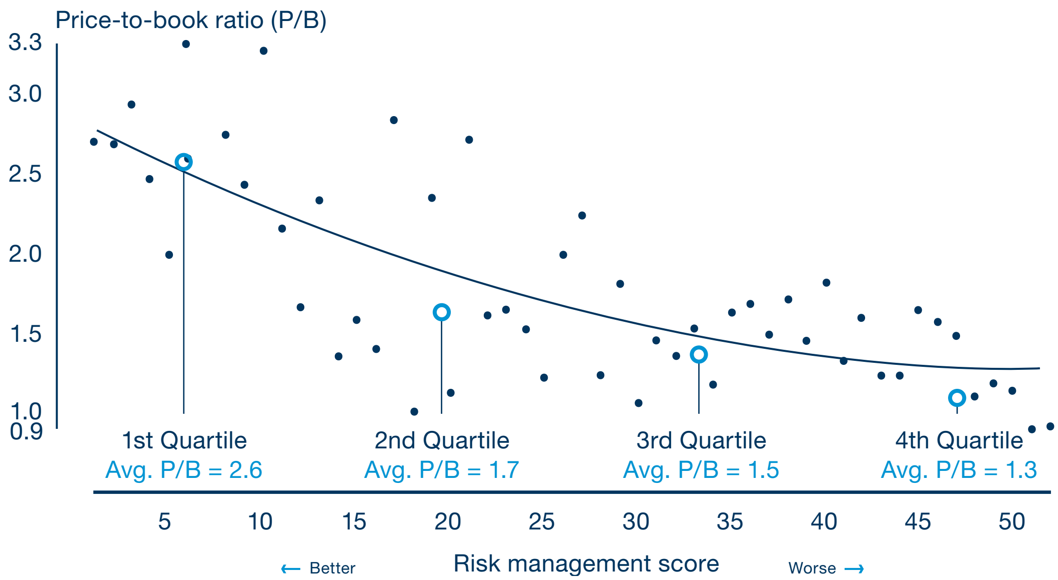
According to a PricewaterhouseCoopers analysis of 52 North American, European, and Japanese financial institutions, the market tends to assign a higher price-to-book multiple to firms with more effective, sophisticated risk management programs, as measured by earnings volatility, capital adequacy, and capital optimization (see Figure 1). These organizations integrated risk and return at granular levels across the business; continually analyzed the risk-reward relationship on new initiatives from inception; balanced qualitative and quantitative views of risk in management decision making with statistical metrics, stress testing, and business judgment; and employed metrics that rigorously accounted for market, liquidity, and operational risks but that were flexible enough to reflect changing market conditions.

The linkages between risk and performance management have historically been made most apparent among financial services companies, but they certainly extend to other industries. In any industry, a comprehensive risk profile, aligned with key financial metrics, can allow senior management to compare the impact of risk management activities on the market valuation of the business.

More than half of 101 senior executives surveyed by PricewaterhouseCoopers believe the capital markets reward companies with a strong track record for risk management.

7. PricewaterhouseCoopers, *From Vulnerable to Valuable: How Integrity can Transform a Supply Chain* (November 2008).
8. Wharton School, "Leveraging Risk Management," *Knowledge@Wharton* (March 1, 2006).

Figure 1: The market values good risk management



Source: PricewaterhouseCoopers analysis, based on Bloomberg data, 2007

Credit rating agencies, under scrutiny themselves for their risk assessment practices in light of the mortgage-backed securities market implosion, are now taking up the charge of formalizing the linkage between risk and performance. Since 2005, the agencies have incorporated risk management evaluations into ratings for financial services institutions, but for most other companies across industries, the linkages between risk management and corporate performance remained implicit. A leading exception to that rule was Canadian utility Hydro One, which—after a five-year implementation of rigorous, holistic risk management practices—received a favorable credit rating by both Moody's and Standard & Poor's, resulting in a lower cost of capital.[9]

That economic connection is poised to be more clearly spelled out across the business world. Standard & Poor's, in its central task of determining creditworthiness, has begun to take the enterprise risk management (ERM) analysis used for financial services into sectors like industrial products, retail and consumer, technology, automotive, and entertainment and media. The ERM analysis will take into account an organization's risk management culture and governance, risk controls, emerging-risk preparation, and strategic management. Based on these components, a company will receive one of four ratings: weak, adequate, strong, or excellent. As a result, a company's risk management practices will be more formally tied to its cost of capital.

If the experience of the insurance sector over the past few years is an indicator, this new approach could result in credit-rating changes for some companies, potentially impacting their shareholder value and cost of capital—even their very access to capital. Capital may begin to dry up for those companies with poor or inadequate risk management practices relative to their peers.

9. Tom Aabo, John Fraser, and Betty Simkins, "The Rise and Evolution of the Chief Risk Officer," *Journal of Applied Corporate Finance* (Summer 2005).

Aligned with key financial metrics, a comprehensive risk profile allows senior management to assess the impact of risk management activities on the market valuation of the business.

Other stakeholders are homing in on the linkages between risk and performance, driving management to provide more transparency on both at an operational level. In fact, more than half of 101 senior executives surveyed by PricewaterhouseCoopers believe the capital markets reward companies with a strong track record for risk management.[10] Institutional investors are already using comprehensive analyses of risk, operations, and performance to assess a company's investment potential. The California State Teachers' Retirement System, the second-largest public pension fund in the US with assets of $158 billion, has, for example, identified 20 risk factors—ranging from monetary transparency and corporate governance to workers' rights and environmental compliance—affecting its evaluation of current and potential investments.[11] Boards of directors—stakeholders in many ways allied with institutional investor motivations—are likely to follow suit in seeking a more holistic view of risk and long-term performance, as well as of the corresponding data against which to assess and monitor investment and strategic decisions.

An integrated approach to risk and performance management leads to smarter risk taking

A principles-based approach to risk management integrates risk with performance across the entire organization to help companies eliminate redundancies, reduce costs, clarify roles, and designate accountabilities. By its nature, such an approach further leads to an understanding across the organization not only of risk appetite—the amount of risk an organization is willing to accept in pursuit of value—but also of risk tolerance: the level of variation an organization is willing to accept relative to the achievement of a specific objective.

Companies are awakening to the merits of assessing the risk-reward relationship by more closely aligning risk and performance management. But the gap between awareness and action remains to be closed.

According to a PricewaterhouseCoopers Management Barometer survey of 96 senior executives in 2008 at US-based multinational companies, just 37 percent of respondents said their companies linked key risk indicators (KRIs) with key performance indicators (KPIs). Of those companies, roughly two-thirds said their organizations linked key risk indicators to the management of earnings volatility, capital optimization, and capital adequacy; and just over half said their companies employed risk-adjusted performance metrics to set business objectives and monitor progress against them.[12]

Yet 45 percent of survey respondents said their organizations do not link risk and performance indicators at all, and 15 percent were uncertain whether their companies do so.

At its core, an integrated approach to managing risk and performance involves assessing growth opportunities, evaluating and quantifying a company's financial appetite and tolerance for risk, and improving operational effectiveness. Corporate performance management comprises the processes and systems that link employees and operations to corporate strategy and business goals as well as the metrics used to evaluate success. An integrated approach to managing risk and performance is about using the right information to achieve a meaningful view of risk across a business and to more accurately anticipate the associated impact on corporate performance. And it's about layering that information into strategy setting and decision making.

10. PricewaterhouseCoopers, *2009*: *Q1 Management Barometer* (2009).
11. California State Teachers' Retirement System, www.calstrs.com.
12. PricewaterhouseCoopers, *2008: Q2 Management Barometer* (2008).

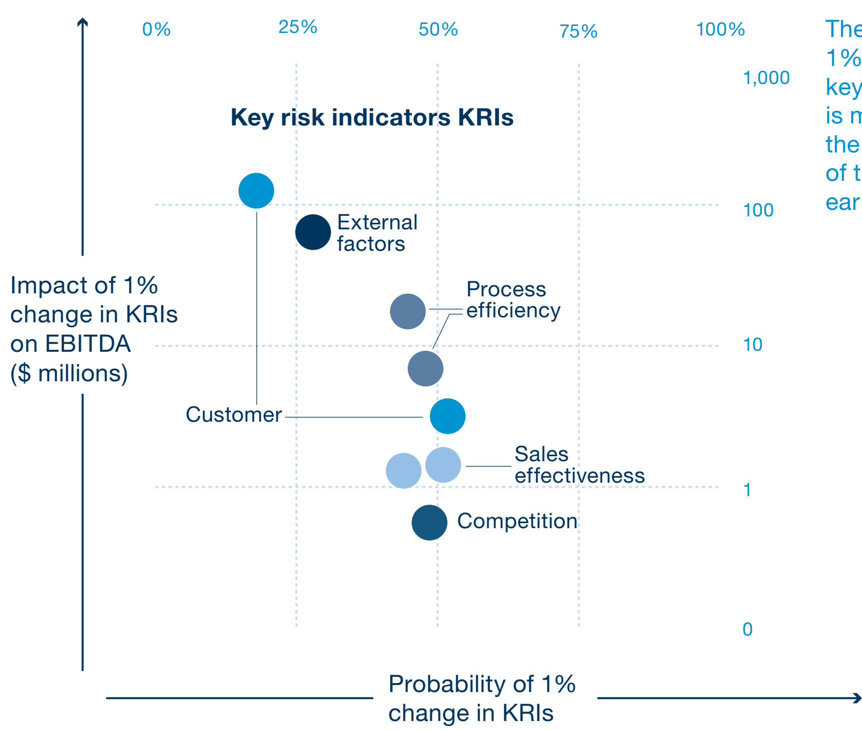
Take the example of a US fixed-satellite telecommunications provider. Faced with fierce industry competition, rapid technology innovation, and an economic downturn that's forced many customers to tighten their purse strings, the company is under pressure to improve both operational and financial performance in order to retain existing customers, win new business, and meet shareholder expectations. Managing global satellite risks—from a shortage of domestic engineering talent to trade barriers, political risk, and excess supply of telecommunications capacity (all of which present associated market opportunities)—is key to the company's success in achieving its performance objectives.

By integrating risk and performance metrics at the enterprise and business unit levels, business leaders can better assess the risk-reward proposition of these business challenges and their associated opportunities, and more deftly manage volatility. With a comprehensive view of how the linkages between risk and performance play out across the business, leadership can make better decisions regarding how to deploy resources to protect, maintain, and create value.

For example, each business unit might map the probability of change, in a given magnitude, across key risk indicators for customer satisfaction, process efficiency, and competition, against the potential impacts on earnings volatility (see Figure 2).

Such an integrated view can help management decide how resources—such as capital and talent—should be allocated to minimize volatility while achieving the organization's objectives. Perhaps most important, aligning risk and performance

Figure 2: Sample of potential linkages between risk and performance



The probability of a 1% change in eight key risk indicators is mapped against the potential impact of that change on earnings (EBITDA).

information in such a way can help business unit leaders forge a common view of the division's risk tolerance and appetite, which is critical to the company's ability to manage its risk portfolio and overall business performance.

This kind of comprehensive, portfolio view of investment opportunities and their sensitivities to specific strategic, financial, and operational risks empowers businesses to explore the risk-reward relationship in a realistic, informed way and make investment decisions that are in line with reasonable performance expectations.

Consider the example of one global financial services company that operates across the Middle East and North and sub-Saharan Africa. This company ranks the risk level in every country in which it does business on a scale of 1 to 10 (1 being least risky and 10 being most risky). Those ratings reflect a combination of economic, political, and market risk in the sector and in the region, relying on externally available qualitative data—to which the company assigns quantitative ratings—as well as internally developed quantitative evaluations. Based on the country's risk rating, the company determines capital allocation.

According to the organization's vice president of country and counterparty risk, "A certain return-on-capital threshold has to be met. We do business in jurisdictions that are graded a 7 or 8, which inherently have a lot of political and economic risk. But we nevertheless do business there and are profitable." By setting the bar for performance and measuring an opportunity against it in the context of the risks surrounding it, the company can more confidently proceed into less traditional, riskier territory.

An integrated risk and performance management process can help companies:

- More accurately quantify risk appetite and tolerance in the context of business strategy.
- Systematically identify potential risks across the business portfolio and mitigate (or exploit) their impacts on financial and operational performance.
- Explicitly assess specific risks when creating and evaluating performance goals of new projects or investments—at the business unit level and in the context of the company's overall business portfolio.
- Channel company resources—financial and operational—to initiatives where the risk-reward proposition is clearly defined and better meets basic conditions for success.
- Better align the financial incentives for risk taking with potential outcomes.

Moving toward an integrated approach to risk and performance management

Integrating risk and performance management for financial and operational improvement may seem like common business sense. But as research bears out, it's easier said than done. The barriers to systematically linking risk and performance measures are real for many companies, but not insurmountable.

An overwhelming majority—71 percent—of the senior executives surveyed by PricewaterhouseCoopers' Management Barometer said the biggest challenge their organizations face in linking risk and performance indicators is that the information resides in too many places across their companies.[13] Further PricewaterhouseCoopers research found that just 35 percent of more than 200 financial services institutions surveyed agreed that their organizations maintained one set of integrated systems for financial and risk reporting.[14] As management teams know, fragmented information is difficult—if not impossible—to act on.

Accountability is often also an obstacle: 43 percent of respondents to PricewaterhouseCoopers' Management Barometer survey noted that their companies did not have a single executive who was accountable for systematically linking risk and performance. Further, 40 percent of

Having accurate, timely, company-wide risk and performance information at the ready for deeper analysis enables senior management to evaluate how risk plays out across a business's operations and impacts financial performance in both the short and long terms. But the pressure to deliver on those near horizons drives many business strategies today and poses another significant challenge to taking a longer view of risk and reward. According to 85 percent of respondents to a 2009 PricewaterhouseCoopers survey of 101 senior executives at US-based multinationals, the focus on short-term risk was among the factors that contributed to the current financial crisis.[15]

According to a 2009 PricewaterhouseCoopers survey of US-based multinationals, the focus on short-term risk was among the factors contributing to the current financial crisis.

respondents to that poll also noted that the business case for linking risk and performance management remained unclear; the benefits of taking such an approach weren't readily apparent at their companies.

Information is at the heart of many of the challenges that companies face in integrating risk and performance management into strategic planning, forecasting, and even compensation decisions. Without an integrated vision of risk and performance—based on real, accessible information and an accountability structure that supports it—the risk-reward relationship, and the incentives supporting it, can easily remain misaligned.

According to the finance director at one multinational home appliance maker, the urge to maintain or improve short-term share price performance often eclipses the principles driving a longer view of risk and reward: "If you are looking at making a major acquisition, managing risk is obviously important. But if executive leadership is worried about what the market is going to say about this move in the next few weeks or the next quarter, then it could get derailed."

If the current financial crisis is any indicator, it is clear that a narrow focus on the next quarter can easily sabotage the principles of solid risk and performance management, especially when the two are viewed as discrete functions within an organization.

13. PricewaterhouseCoopers, *2008: Q2 Management Barometer* (2008).

14. PricewaterhouseCoopers, *Leveraging Compliance: Standardization and Simplification of Risk Adjusted Performance Reporting* (2006).

15. PricewaterhouseCoopers, *2009: Q1 Management Barometer* (2009).

What this means for your business

Build the foundation for a more stable future: Start with a deeper assessment of risk and reward across your organization.

Leading an organization to think about—and act on—risk and performance in an integrated way will face its roadblocks. But by focusing first on a few key areas for integration and improvement, companies can make great strides toward implementing a fresh approach that meets the challenges of an interconnected world.

There is no step-by-step handbook for designing a risk-based performance management program. But the underlying principles and the questions business leaders must ask of their organizations before setting out are universal. Business leaders should consider the following:

- What are the greatest sources of value creation—and destruction—across my business?

- Where or when has my company most clearly failed to realize or deliver value to key stakeholders? Where have we been most successful?

- Where does accountability for risk and performance management currently reside within my organization? Does that accountability structure facilitate the integration of business information around potentially risky opportunities?

- How does my organization currently measure the potential impacts of risk—and quantify the associated reward? Do we do that in a systematic way, on a continuous basis?

- Where is such risk and performance information currently housed in my company? Does it reside at the business unit or functional level, and if so, is it readily accessible for consideration at the corporate level?

- Is my company's information structure facilitating the natural connections between risk, operational improvement, and business performance or prohibiting those connections from being made?

- What events has the market rewarded in the past? What events have they "punished?" Is the market's perception of my company's risk profile consistent with my own view of it?

- Are the incentives for taking a principles-based, integrated approach to managing risk and performance aligned at every level of my organization? Does leadership promote a culture of risk-based performance management?

Start at strategy setting

Integrating risk and performance management takes place at strategy setting, first with a full C-suite consensus on clearly defined business objectives, whether strategic, financial, or operational. Once business leaders have defined those objectives together, they can then begin to identify the key risks that may present an opportunity to pursue those business objectives, or impede their ability to achieve them.

Sounds simple. But for many companies, that kind of risk-informed strategic plan begins gathering dust the minute the planning cycle ends.

The finance director of the multinational home appliance maker noted: "There are two types of companies. First, there's the company that looks out three or five years and uses [strategic forecasting] more as a 'gosh, wouldn't-it-be-nice-if?' sort of exercise, and they put it on a shelf when they're done. You don't really have anybody measuring against those strategic forecasts more than maybe a couple of months after the forecast is actually completed. Then you have the second type of company that uses that [forecasting] to say, 'Hey, we are in some really good times now, but famine follows feast and we need to dig in now and think about things from a strategic merchandising standpoint.'" A sustained, strategic view of how risk and performance mesh is critical—and it starts from a single, comprehensive risk profile.

Take the example of an aerospace and defense (A&D) technology company that faces challenging industry dynamics and unique risks, which present opportunities for both value destruction and value creation. The company must confront strategic risks (such as intense competition and the pace of innovation), operational risks (such as supplier disruptions and intellectual property theft), and financial risks (such as skyrocketing commodity prices and daunting pension plan liabilities). Mapping the organization's key sources of risk against both the level of potential impact on performance and the direction in which those are trending (as a leading indicator of their likelihood of occurrence) represents the first step in such a sustained, strategic view (see Figure 3).

Armed with such a view, this A&D company's management team can more effectively navigate the risks that impede and opportunities that promote business performance, allocate resources, and assign accountability where they are most likely to both prevent value destruction and facilitate improvements to both financial and operational performance. This view of risk and performance also provides transparency in risk reporting to external stakeholders, thus affording analysts and the market at large a better picture of their risk environment. Once the market can understand and appreciate the company's ability to manage performance based on its ability to manage risk, it will reward that company appropriately.

Canadian utility Hydro One, noted earlier as one of the first non-financial companies to receive an improved credit rating based on an evaluation of its risk management practices, offers an example of how an integrated approach to managing risk and performance begins at strategy setting and how the integration equips operational managers to see opportunities by addressing threats.

According to the company's Five Year Vision, Hydro One's leadership team established the following core business objectives: to have the best safety record in the world, with zero serious injuries; to have top-quartile reliability in transmission and distribution; to achieve 90 percent customer satisfaction across all segments; and to have top-quartile employee productivity and operating efficiency, as well as an A credit rating to drive shareholder returns.[16]

16. "Hydro One," RBC Capital Markets, Global Canadian Fixed Income Conference (April 2007), http://www.hydroone.com/en/investor_centre/speeches/RBC_Capital_Markets_April25_2007.pdf.

Figure 3: Sample of potential linkages between risk and performance

Risk momentum

Risk level	Decreasing	Stable	Increasing
High		Process efficiency IT systems Suppliers	Business strategy External factors Commodity price
Med		Customer Competition Reputation Legal Fraud	Technology & innovation Regulatory People Environmental Interest rates Equity Foreign exchange Pension risk
Low		Receivables Counterparty	

Business and strategic risks

Risk factors affecting the ability of each business unit to meet earnings targets; typically managed at the business unit level

Operational risks

Risk factors involved in operational failures and resulting in potential loss; typically managed by central corporate support

Financial risks

Risks resulting from volatility in underlying market factors and arising from uncertainty around the ability of counterparties, suppliers, or customers to meet financial obligations

Company leadership recognized that these performance objectives and operating goals would not be achieved without considering the impacts of the risks surrounding them.

Hydro One implemented an ongoing, three-phase risk management program—starting from a collaboratively developed, company-wide risk profile accounting for specific sources, levels, and likelihoods of risk; moving into individual discussions about the company's risk profile with the top 30 or 40 executives; and ultimately driving toward risk-based investment appraisal and planning sessions, at which the risk management and investment planning teams would jointly develop a risk-based approach to allocating company resources.

In one instance, the company recognized the ostensibly conflicting operational and financial interests it held in helping consumers reduce their energy consumption. Dramatically increased demand on the company's aging assets, however, posed a significant risk to many of Hydro One's core business objectives: customer satisfaction, distribution reliability, and operating efficiency. Acting on this alignment of risk and performance information, Hydro One launched an energy conservation initiative that made it the first electricity company in the world to provide customers with free PowerCost Monitors™. The company's 2006 pilot study showed that real-time electricity monitors helped customers reduce electricity consumption by up to 15 percent, thereby alleviating some of the burden on Hydro One's assets and helping it achieve both corporate and residential customer satisfaction ratings above 80 percent.[17]

17. Anette Mikes, "Enterprise Risk Management at Hydro One," Harvard Business Publishing, July 3, 2008.

Hydro One's integrated risk and performance management program clearly illustrates an approach that links potential risks to a company's long-term business strategy to the very real results of near-term operational execution, creating a continuous feedback cycle between planning and performance.

Such a cycle (see Figure 4) necessarily begins with a clear articulation of business objectives, derived from the overarching company strategy. Once a leadership team has identified the risks that directly threaten or serve business objectives, it can assess and quantify their potential performance impacts (financial and operational) in order to make risk-informed decisions about investment opportunities, resource allocation, and management accountability.

With risk-informed performance measures in place and accountability aligned to reflect an integrated, cross-functional approach to risk and performance management, company leadership can continually monitor existing and emerging risks, and identify areas for both financial and operational performance improvement.

Doing more with less: Honing your arsenal of business metrics

When it comes to measuring the links between strategy and execution, less may actually be more. A few essential, risk-informed performance indicators, tied to the processes that offer the greatest opportunities for value creation or value destruction, will serve a leadership team better than a cumbersome laundry list of metrics will. This sharpened arsenal of risk-based performance indicators—operational and financial—can become an early warning system for likely threats, a means of realistically linking risk and reward based on the organization's risk appetite, and a tool for identifying areas for improvement.

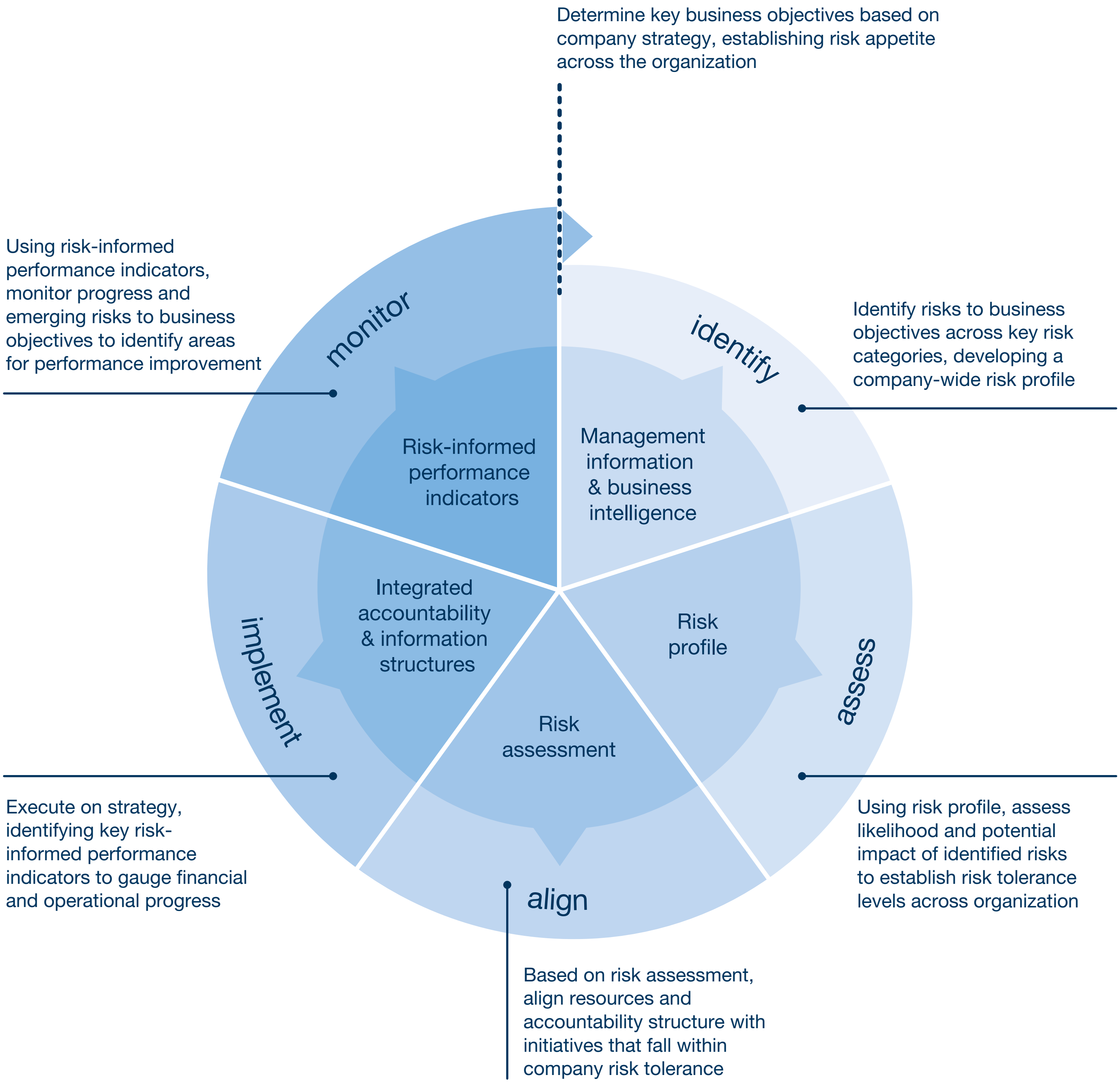
Among the financial measures mentioned earlier (earnings volatility, capital optimization, and capital adequacy), a few additional metrics are involved in strategy setting and decision making. The following two questions—and the measures associated with their answers—might feature prominently in an integrated approach to risk and performance management.

What have I *really* got to lose? All too often, companies assess the anticipated rewards of a risky transaction without evaluating—and actually quantifying—just how much they are willing to lose if an opportunity sours. Often referred to as *value at risk,* the answer to this basic but difficult question represents the amount a company is willing to lose, over a given amount of time, if an initiative fails. Assessing this metric, and understanding if and how it can change, enables leadership to realistically assess downside risks—and exit or close down an initiative if circumstances warrant.

How much shock can my balance sheet endure? Surprising as it may sound, many companies don't have a firm handle on how much money would be required for the business to survive in the event a risky opportunity turns into a worst-case scenario. Referred to as *economic capital* in the financial services sector, this is a key metric for decision making around any potentially risky business initiative. Unfortunately, according to PricewaterhouseCoopers' survey of more than 200 financial institutions, few respondents believed that this strategic measurement concept was well understood outside the risk function: Only 9 percent of respondents believed their board of directors was very knowledgeable about economic capital, while 22 percent considered their board not knowledgeable at all. As such, respondents agreed that downside risk was not being extensively used in measuring business unit performance and was used even less in determining compensation.[18] But as market,

18. PricewaterhouseCoopers, *Leveraging Compliance: Standardization and Simplification of Risk Adjusted Performance Reporting* (2006).

Figure 4: Integrating risk and performance management



credit, and operational risks increasingly threaten companies inside and outside the financial services world, economic capital will likely become a critical and much-better-understood risk-informed performance metric for businesses across sectors and industries.

A fine-tuned portfolio of risk-informed performance indicators will also include the operational metrics essential to improving the business processes that deliver on innovation, quality, and customer satisfaction. In fact, a 2007 PricewaterhouseCoopers survey of 193 senior executives at European multinationals found that companies that reported better-than-expected financial performance over the previous three years relied on operational metrics—in addition to financial metrics—far more than their underperforming peers did. These metrics, tailored to specific company objectives and industry conditions, lie at the heart of an integrated risk and performance management strategy.

In the telecom industry, cable companies pay close attention to customer care metrics such as customer satisfaction, customer retention, and customer loyalty because those metrics predict customer churn—the rate at which customers defect to competitors—which is a key risk indicator. Poor customer care metrics guarantee customer churn. External data also comes into play as risk-informed metrics; for example, unemployment rates provide a leading indicator of estimated churn in a cable company's customer base.

The UK's Admiral Group, an auto insurer, combines financial and non-financial data in management reports, with information on sales published on the same pages as customer-call answer rates. The common denominator isn't whether it's a financial or non-financial number, but whether it is a key aspect of business performance, according to the company's finance and information technology chief, who analyzes three critical "live-or-die" metrics every morning: loss ratios, expense ratios, and ancillary sales. The data prompts Admiral to take action as necessary, thus contributing to the company's portfolio of leading risk indicators.[20]

A PricewaterhouseCoopers survey found that companies that reported better-than-expected financial performance over the previous three years relied on operational metrics—in addition to financial metrics—far more than their underperforming peers did.

UK-based Shire Pharmaceuticals, for instance, recognizing that operational failures can easily turn into financial risks, uses operational measures such as launch dates for drugs and the timing of product approvals to pinpoint high-risk areas in its drug development initiatives. "If you're not hitting your approval dates, you're not necessarily going to hit your financials," noted group financial controller Simon Gibbins.[19] Operational metrics around people and process—productivity, utilization, and product quality measures, among others—can show leadership what's actually happening in an organization, while financial metrics translate the results of that execution into terms that can be viewed in the context of business risk.

While companies across industries work hand in hand with suppliers to identify supply-chain risks, such collaboration has proved critical in the aerospace and defense sector. A&D companies often work with suppliers to assess the likelihood and impact of key risks and together determine what qualitative or quantitative information would serve as leading risk indicators—signs that the company's risk profile is changing or that a new risk is emerging. For example, in

19. PricewaterhouseCoopers, *Management Information and Performance: CFOs Face New Demands for High-Quality Data That Drives Decisions* (June 2007).

20. Ibid.

subcontracting to a metal fabricator, an A&D company might consider timely delivery a core risk to business objectives and might work with the subcontractor to assess its current and proposed levels of resource allocations to anticipate or mitigate any risks to the delivery timeline. Whatever the response, companies can continually monitor their key risk indicators, aware that operating conditions—and the required responses—are in constant flux.[21]

In establishing an integrated view of risk and performance, every company will develop its own tailored tool kit of risk-informed performance indicators. But whatever metrics a company determines to be most informative and actionable, the data underlying those measures must be consistent across the whole business for an integrated approach to risk and performance to stick.

Transforming disparate data into meaningful information

Moving toward an integrated view of business risk and performance doesn't necessarily require an IT overhaul. For many companies, the information required to link up risk and performance data, and layer it into strategic planning and decision making, already exists. But it's often buried in data silos and systems across business and functional units that never sync up. In fact, almost 80 percent of 101 senior executives at US-based multinationals surveyed by PricewaterhouseCoopers in 2009 say quality and timeliness of information are among the top challenges for improving risk management in the next two to three years.[22] However, when the information is consistent—and accessible—across the organization, leadership has access to well-integrated insights into target areas that represent risks to, and opportunities for, operational improvement.

For example, one multinational food and beverage company faced the challenge of providing meaningful information to its board about the frequency and significance of business conduct incidents. Data about such incidents resided in systems tied to customer and employee hotlines, employee surveys, certification processes, and ad hoc reporting. With a team of PricewaterhouseCoopers data management specialists, the company was able to standardize its incident management and reporting processes to provide the board of directors with synthesized, meaningful enterprise-wide information that could also be broken down by division, location, and incident type, offering insight into the current situation and forward-looking trends. With this incremental but important step toward improved data management, the company was able to identify key risk areas in its operations—and to facilitate better decision making about future investments in ethics and compliance.

While companies may maintain troves of data in various operating systems, that data does not always constitute meaningful information. It is the ability to transform data, wherever it resides, into actionable management information that facilitates the integration of risk and performance management.

Japanese pharmaceutical company Takeda, for example, integrates internal information with external data obtained from a third-party service provider. "Because everyone [in the pharmaceutical industry] has this information, the competitive advantage derives from the measures you take out and how quickly you react to the information out there," says Axel Mau, chief financial officer (CFO) for Takeda's German subsidiary. Armed with this type of market-oriented information, Takeda can drill down into performance issues. For example, if the company hears that a competitor is planning to launch a product in a particular region, Takeda will crunch numbers in real time in the new system and "right away, the sales

21. PricewaterhouseCoopers, *How to Fortify Your Supply Chain through Collaborative Risk Management* (January 2009).
22. PricewaterhouseCoopers, *2009: Q1 Management Barometer* (2009).

In an increasingly interconnected world, a more collaborative accountability structure may help companies better manage risk alongside performance.

force can put efforts in that region to hold the market share or increase it. If you have to wait a month before we have an analysis—as we sometimes have had to in the past—then it's rather difficult."[23]

Creating accountability and incentives for integrating risk and performance management

When it comes to managing risk and performance, companies appear to be split in their approach to oversight. While 51 percent of the executives surveyed by PricewaterhouseCoopers' 2008 Management Barometer said that one person (most frequently the CFO) or group is responsible for both risk management and performance management, 49 percent reported that oversight resides with a combination of executives.[24]

In some sectors, such as financial services and energy, chief risk officers are most often accountable for risk management and mitigation. But in many other industries, accountability for risk typically falls to the CFO, with input from the chief operating officer. A centralized, top-down approach to risk may work for some companies, but as recent events have shown, a more collaborative, integrated accountability structure that provides appropriate incentives at every level of the organization may be better suited to managing risk alongside performance in an increasingly interconnected business world.

At one major multinational energy company, for example, accountability for managing both risk and performance is shared by managers (who are close to project execution) and company leadership (who maintain oversight of the risks to the company's full portfolio of initiatives). The project manager or business unit manager is responsible for evaluating the operational risks to execution and near-term business performance—such as volatility in the pricing of materials and contracts, and risks to labor and productivity. However, the company's response to macro risks, such as labor strikes, natural disasters, or political instability—and their associated performance impacts—is considered outside the project manager's or business unit manager's scope and resides with a leadership team at a higher level in the organization.

Fostering the right behaviors around smart, performance-driven risk taking at the operating level of a company is also critical to the success of an integrated risk and performance management strategy. At Westinghouse Electric, a subsidiary of Toshiba that builds and maintains nuclear power plants, the company's nuclear engineers had not been conditioned to take business risks—in fact, quite the contrary. But as it started facing pressure to grow through new business ventures, new markets, and new technologies, Westinghouse leadership decided to align incentives around smart, performance-based risk taking.

Freeing up a core group of senior managers to pursue new business ideas and innovations, the company teamed them with efficiency experts who focused the potentially risky propositions with metrics that rigorously accounted for a project's upside—and downside—potential. From the ground up, all managers are now evaluated on criteria aligned with Westinghouse's risk and performance management strategy, such as the number of customer calls and sales proposals they make. To date, the program has helped Westinghouse move into two new growth areas.[25]

Of course, from the C-suite to the factory floor, incenting the behavior that creates a culture of risk-based performance management often requires the teeth of compensation to drive accountability.

23. PricewaterhouseCoopers, *Management Information and Performance: CFOs Face New Demands for High-Quality Data That Drives Decisions* (June 2007).

24. PricewaterhouseCoopers, *2008: Q2 Management Barometer* (2008).

25. Brian Hindo, "Rewiring Westinghouse," *BusinessWeek* (May 19, 2008).

In light of the current financial crisis, corporate reformers are now trained on the connection between risk, performance, and compensation. Amid a swell of public disgust over bonuses at banks receiving bailouts, President Obama in February called for limiting executive pay for future recipients. Banking and securities regulators are seeking to take the principle a step further with an overhaul of compensation rules across the financial sector. It's not clear where and how regulators will enforce pay curbs, and even whether they'll ultimately be successful, but the intent isn't in doubt. As former Federal Reserve Chairman Alan Greenspan said in congressional testimony to the Committee on Oversight and Government Reform, "Those who have looked to the self-interest of lending institutions to protect shareholders' equity—myself especially—are in a state of shocked disbelief."[26] As compensation practices undergo change in financial services, pressure to follow suit will inevitably be felt across industries, as businesses work to reinvigorate confidence in global markets.

In its July 2008 report on best practices in response to market turmoil, the Institute of International Finance—the world's only global association of financial institutions—outlined approaches by which organizations might realign the incentives around managing risk and performance, including: basing compensation on risk-adjusted performance and aligning incentives with long-term, firmwide profitability; ensuring that compensation incentives do not induce risk taking in excess of risk appetite; and aligning payout of compensation with the timing of risk-adjusted profit.[27]

The US Department of the Treasury has sought to realign risk and performance incentives by requiring financial institutions participating in its capital infusions program to meet certain standards that ensure incentive compensation for senior executives does not encourage "unnecessary and excessive risks that threaten the value of the financial institution." The approach further sets penalties in the form of clawbacks of any bonus or incentive compensation paid to a senior executive based on performance statements that are later proven to be materially inaccurate.[28]

A centralized, top-down approach to risk may work for some companies, but a more collaborative, integrated accountability structure that provides appropriate incentives at every level of the organization may be better suited to managing risk alongside performance in an increasingly interconnected business world.

Clawbacks, arguably a more controversial approach to motivating the behaviors that support a principles-based risk and performance management strategy, seem to be on the rise across industries. A 2008 study by The Corporate Library of more than 2,100 of the top companies in the US and Canada found that 329 companies have implemented such policies today—up from just 14 of the 1,800 companies surveyed in 2003. Thirty-four percent of companies reporting some type of clawback program said they have introduced performance-based clawbacks. Still, of all the companies surveyed, only one was found to have actually used its clawback provision.[29]

26. Alan Greenspan, congressional testimony at the Committee on Oversight and Government Reform, October 23, 2008.
27. "Financial Services Industry Response to the Market Turmoil of 2007-2008," Institute of International Finance (July 2008).
28. "Emergency Economic Stabilization Act of 2008," http://banking.senate.gov/public/_files/AYO08C04_xml2.pdf.
29. Paul Hodgson, "Updated Analysis of Clawback Policies," The Corporate Library, July 2, 2008.

Revising incentive strategies to align risk and performance requires considerable organizational change, and many companies will find it a difficult road to travel. In fact, according to PricewaterhouseCoopers' survey of more than 200 financial institutions, a minority of responding companies—29 percent—said that the KPIs on which senior management are graded, and the incentive schemes derived from them, were based on risk-adjusted performance.[30] Even in the aftermath of the financial crisis, less than half of 101 senior executives responding to PricewaterhouseCoopers' Management Barometer survey in early 2009 considered aligning compensation with prudent risk taking a top priority.[31]

Ensuring the alignment of risk, performance, and compensation is no easy task. Wall Street banks, where the pressure is most acute to tie compensation to long-term performance, are resisting pay curbs, fearing a drain of top talent to less-regulated industries. Harking back to Warren Buffett's 2006 letter to Berkshire Hathaway shareholders, the self-proclaimed "Typhoid Mary of compensation committees" presciently argued that true compensation reform could happen only if the world's largest institutional investors demanded a fresh look at the whole system. At Berkshire Hathaway, however, Buffett claims to keep incentive structures simple and fair, to ensure that executives are compensated for their performance and incented to take the smartest business risks possible.

"When we use incentives—and these can be large—they are always tied to the operating results for which a given CEO has authority. We issue no lottery tickets that carry payoffs unrelated to business performance," wrote Buffett. "If a CEO bats .300, he gets paid for being a .300 hitter, even if circumstances outside of his control cause Berkshire to perform poorly. And if he bats .150, he doesn't get a payoff just because the successes of others have enabled Berkshire to prosper mightily."[32]

A call to action

The effects of misaligned risk and performance management strategies are now reverberating throughout the financial services sector, across industries, and around the world. While the effort to address the systemic risk permeating the financial markets will require global collaboration among public- and private-sector stakeholders, companies can tackle change from the inside out by taking smarter risks to improve that which is squarely in their control: operational performance. Integrating risk and performance management for operational improvement (and, ultimately, improved financial performance and shareholder value) not only makes sense; it also is a business imperative.

The benefits of taking such an integrated approach, founded on the principles of solid risk and performance management, are difficult to quantify in places, but the costs of hesitating are daunting. A recent PricewaterhouseCoopers analysis of 600 companies affected by supply chain disruptions caused by convergent risk factors found that, following the disruptions, average shareholder value at these companies plummeted, their stock prices experienced greater volatility, and they suffered sharp declines in return on sales and return on assets relative to their industry peers. More intimidating even, the effects of the disruptions on the companies' stock prices were still apparent at least one year after the disruptions were announced.

The time to consider a fresh approach to managing risk and performance across an organization is now. The world is watching. Consumers, investors, and regulators are all looking to businesses for the kind of change that will help restore confidence in the global markets. And, as we've discussed here, that change can start with a few relatively simple steps toward a systematic, more effective linking of risk with reward in every business decision.

30. PricewaterhouseCoopers, *Effective Capital Management: Economic Capital as Industry Standard?* (2005).
31. PricewaterhouseCoopers, *2009: Q1 Management Barometer* (2009).
32. Warren Buffett, *Berkshire Hathaway Annual Report 2006* (February 2007).

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