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The background of the page is a black and white photograph showing a complex, geometric structural framework of a modern building. The structure is composed of numerous intersecting beams and supports, creating a series of triangular and polygonal shapes. The perspective is from a low angle, looking up at the structure, which creates a sense of height and architectural complexity. The lighting is dramatic, with strong highlights and deep shadows, emphasizing the three-dimensional nature of the structure.

A risk challenge culture

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A risk challenge culture

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1. Introduction

The 2008 global financial crisis exposed weaknesses in risk management across a wide variety of industries and corporate cultures. There is a growing perception that much of the weakness stems from deficient governance practices for managing risk. Some organisations that claim to have a robust risk governance structure have one in name only; the directors are not as actively engaged in risk oversight as they need to be. They often lack adequate training in risk issues and may receive unduly optimistic risk reporting. After a crisis, a typical question is, 'Where was the board while this was happening?'

The need to develop and implement effective risk oversight has continued since the financial crisis. Organisations are still searching for systems that work well for their cultures and strategies. A promising model for the strengthening of risk oversight is the risk challenge culture.

A challenge culture is an environment that encourages, requires, and rewards enquiries that challenge existing conditions. When a subordinate is afraid to ask senior management about perceived risks, that is not a challenge culture. When a board member is satisfied with the CEO's facile answer to a serious risk issue, that is not a challenge culture. When board members 'rubber stamp' management's critical actions without serious debate, they have not acted as befits a challenge culture.

Developing a challenge culture for risk management and oversight is the next logical evolution for boards and C-suite executives as they seek to reduce risk in their organisations while recovery from the financial crisis continues. Stakeholders, regulators and even ratings agencies have a keen interest in the management and oversight of risk. This interest will continue to grow.

This report discusses the elements of a risk challenge culture. It draws on discussions from the ACCA–IMA Accountants for Business Global Forum and insights from ACCA–IMA roundtables held in Dubai, London and New York City in late 2013. In these sessions, the participants discussed the following essential elements of a risk challenge culture: professional scepticism and board oversight of risk; board diversity and expertise development in enterprise risk management (ERM); conversations and roles in a risk challenge culture; information asymmetry and risk reporting; decision making and cognitive biases; risk culture – assessment, diagnostics, and signs; risk appetite; strategy and risk; and incentives and risk.

2. Professional scepticism and board oversight of risk

A risk challenge culture begins with the board of directors and the C-suite where the required tone at the top is set. Board members and the C-suite embrace a risk challenge culture when they approach their responsibilities for risk oversight with a healthy professional scepticism. This requires that they approach risk oversight with a 'questioning mind' and make 'critical assessments' (PCAOB 2012: 1) of the effectiveness of their organisation's risk-management process.

'The idea of professional scepticism at the board and the C-suite is a must because it ultimately is about value creation – trying to provide that level of scepticism to the point that you're adding value as opposed to limiting what needs to be done. So there is some balance to strike.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

Since outside board members are not involved in the daily affairs of the organisation, they have to ask challenging questions of the C-suite to gain sufficient information to make their critical assessments and form judgements on which to base decisions. This holds also for the CEO, who should approach his/her assessment of the risk information cascading up from operating units with professional scepticism and challenging questions. Asking questions can generate further questions, which reveal deeper insights

about the subject under discussion. Also, in a board meeting the search for clarity through asking challenging questions 'may blaze a path for others' on the board, encouraging them to become more knowledgeable (Scott 2004: 185).

In board discussions, a productive line of challenging questions is 'what if' rather than 'why' questions. 'Why' questions tend to be judgemental whereas 'what if' questions indicate a desire to learn new insights rather than to judge (Adams 2009: 38–9). Also, as noted in the following statement, 'what if' questions focus on the future, which is relevant in managing risks:

'Much has been written about the power of creative thinking, ideation, disruptive innovation, etc, but little has been written on how to successfully implement these processes. If you've ever wondered how to find those 'ah-ha' moments, they all begin through observations inspired by asking what if.... Change doesn't need to be complex. In fact, what's more simple than using the filter of what if? It doesn't require any special skills or ability, just the willingness to look beyond what presently exists' (Myatt 2013: 1–2).

A board can exhibit leadership by using questions to generate 'ah-ha' moments for the executive team.

'There are two styles of challenging. I worked with a firm where the partners considered themselves to be challenging. I thought they were just rude. That's one side of challenging. The other side is where you are giving somebody a challenge of thinking, like: "Can you think about this from the point of view of our competitors? What is their view? Can you remember what happened when we tried this last time? Can you tell us about that and how are you going to address those issues? What is the evidence behind this? Can you give me a bit more evidence? What more would it be useful for us to find out before making a decision?" These questions embody a nice kind of scepticism – constructive rather than just, "Convince me!" Challenging but not being a challenge in the sense of being combative.'

(ACCA-IMA ROUNDTABLE, LONDON).

'I like the word scepticism as it implies you want other scenarios; scenarios that you aren't necessarily prepared to accept. I think it is good to have a little negativity in the sense that "Yeah, I want to hear something that I won't necessarily like".'

(ACCA-IMA ROUNDTABLE, LONDON)

Board meetings need to include regular conversations with executive management about the organisation's risk management process. In doing so, board members would do well to remember that 'if you never disagree you're irrelevant' (Rockwell 2012; 1). A very relevant insight is: 'The best at dialogue...are both totally frank and completely respectful' (Patterson, et al. 2012: 133). Curiously, Patterson notes that "the more important the discussion, the less likely we are to be on our best behaviour. More specifically, we advocate or express our views quite poorly' (Patterson, et al. 2012: 132).

It is vital to avoid 'group think' by a board and situations where directors 'go along with' a strongly opinionated board member or with the chairman and CEO. A former chairman of the board of General Motors made the following statement at the end of a board meeting; it is very relevant to board discussions about risk management.

'I take it we are all in complete agreement on the decision here... Then I propose we postpone further discussion of this matter until our next meeting to give ourselves time to develop disagreement and perhaps gain some understanding of what the decision is all about' (Glover and Prawitt 2012: 5).

Asking questions and engaging in dissent over issues may not be the norm for some boards. In such cases, board members may rationalise their behaviour by saying that they are passive and tend to conform because they have strong trust and confidence in the CEO. An alternative view is that such behaviour, which has been labelled 'violent politeness', develops when a participative culture endorses enthusiasm over dissent. And 'violent politeness often gets stronger the closer one gets to the C-suite' (Petriglieri 2014: 1-2).

'Scepticism is really important. The problem is in some situations [that] the CEOs are in very strong positions, and the board is not doing exactly their role. They can't be just followers. There should be more questioning and more disagreement on the board.'

(ACCA-IMA ROUNDTABLE, DUBAI)

Scott (2004) makes the point that 'leaders must have conversations that interrogate reality'. Acting on such advice, board meetings must 'regularly and thoroughly' interrogate the various views held about the organisation by board members and the C-suite. A way to do that is to 'think of your company as a beach ball' with stripes of various colours. The CEO may see the company from the blue stripe because that is where he lives and works every day. The CFO may see the company from a red stripe while individual board members and other executives may see it from a variety of other stripes. As the various realities (stripes) are revealed, the board is now able to engage in meaningful debate (Scott 2004: xix, 15-16).

'People often think that risk management involves a lot of risk reporting and risk registers but of course the core of it is really professional scepticism at the board level and particularly from non-executive directors. Successful companies just as much as unsuccessful companies must be asked challenging questions by the non-executive board members.'

ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

3. Board diversity and expertise development in ERM

To inculcate a risk challenge culture and perform its responsibilities in risk oversight, a board should embody a diversity of skills and experiences and be knowledgeable about ERM. Without both, the board itself may be a risk factor. A goal should be to have a board with 'different backgrounds, different interests, and different perspectives attempting to learn the business over a period of time from their perspective' (Walker, et al. 2011: 15). With 'complementary and different perspectives' and with knowledge of ERM, board members should be able to practise appropriately professional scepticism in their meetings and ask the C-suite challenging questions about the organisation's risk-management process.

'I think the diversity of the board is critical. Bringing different perspectives to the table, I think many times creates tremendous value. And from a CFO's standpoint, I always welcome the opportunity to have discussions with board members coming from other industries.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

In organising a board, an issue is whether one member should be designated as the 'risk expert' in the same way as a board member is designated as the 'financial expert'. Arguably, in the case of most organisations, it is not possible for one board member to be 'all knowing' about the significant risks facing the company. Therefore, it is critical that all board members be knowledgeable in a holistic approach to risk management such as ERM.

Expertise development for board members on ERM – risk identification, assessment, mitigation, and monitoring – can take several different forms. Individual board members may take the initiative to attend ERM education programmes and conferences to build their risk-management skills. In organisations that are more mature in their ERM implementation, the chief audit executive and/or the chief risk officer may be able to lead education programmes for board members. Consultants can be invited to discuss aspects of ERM, engage the board in scenario planning, or conduct brainstorming sessions on emerging risks for the organisation. Also, such experts may be invited to provide the board with a critique of the company's risk management process as well as the board's risk oversight approach. When this is the agenda, the board and the chairman and CEO must be open to whatever criticism the expert may present.

'I think the biggest part of it right away is for the board to realise they need training'.

'Board training is not a point-in-time exercise; it's an ongoing exercise. It's organic and it evolves. It isn't just: "This quarter we're going to look at it and we're going to wait until we get together as a board next quarter".'

(ACCA-IMA ROUNDTABLE, NEW YORK)

'The chair of the board needs to plant the seed for training. And if that person doesn't get it, it's likely to be suboptimal for the rest of the board'.

'I like to draw a distinction between training in the classroom – a more formal training – versus experiential training'.

'One of things that I've seen experientially done with boards, particularly for strategic risk, is scenario planning. I've seen consultants come in and run the board through a series of scenarios that may be encountered and how they would deal with these. That both serves as a strategy exercise and also experiential learning'.

'The board has to focus on strategic risk management. And that's I think where training should be focused'.

(ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

'I think in terms of training we need to make the board aware of not just what risk management can do, but what it can't do and where the limitations are and where are the risks of risk management.'

(ACCA-IMA ROUNDTABLE, LONDON)

4. Conversations and roles in a risk challenge culture

The requisite roles to lead and sustain a viable risk challenge culture include: the board and its committees; the chairman and CEO; other C-suite executives such as the chief operating officer (COO), CFO, general counsel, chief audit executive (CAE), and chief risk officer (CRO); and operating management composed of risk owners. Although organisational structure and reporting lines vary from company to company, the board (in collaboration with the chairman and CEO) sets the tone from the top regarding the openness and frankness expected in risk management discussions. The tenor of discussions at that level has an impact on the conversations cascading down the management chain.

‘There absolutely needs to be a challenge culture throughout the organisation, and it is critically important that risks are part of the conversations.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

The entire board has responsibility for risk oversight and specifically for strategic risks. In practice, however, the board may delegate responsibility for some risks to its committees. For example, in addition to its oversight of the independent and internal auditors and their plans, the audit committee may be assigned oversight of the ERM process. This arrangement is particularly appropriate when the CAE is serving in an advisory role for the organisation’s ERM process. A board may have a risk committee in which case the oversight of the ERM process would be the domain of that committee.

‘Strategic clarity is such a challenge for so many boards. I heard a member of senior management ask a board member, “Do you feel we’re on track with our strategy?” And the board member said, “Let me know the strategy, and I’ll let you know if you’re on track”.’

(ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

The board, the chairman and the CEO should encourage a rigorous risk-management process including challenging questions at all levels of the organisation in the implementation of ERM. At the same time, they should guard against going too far and creating an unduly risk-averse culture. It has been said that ‘a strong risk culture has solid guardrails that are thoughtfully placed at the riskiest bends of the road’ (DuChene 2013: 4). One of the critical guardrails is the organisation’s risk-appetite statement.

‘The primary responsibility of the board is the clarity of strategy and objectives and the setting of the risk appetite of the organisation.’

(ACCA-IMA ROUNDTABLE, DUBAI)

‘There is a certain part of the process where the board has ownership completely, for example in setting strategy, setting risk appetite, and setting risk tolerance. They can take information or help from management but they are accountable and responsible for those tasks.’

(ACCA-IMA ROUNDTABLE, LONDON)

‘On strategy and objectives that’s joint, 50-50, between the board and the senior leadership team. Likewise in setting risk appetite that’s kind of 50-50.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

A previous research study by the authors revealed clearly that ‘an ERM initiative cannot succeed without strong support at the C-level – CEO and CFO’ (Walker et al. 2002: 12). A recent ACCA-IMA research study, *The Changing Role of the CFO*, states: ‘Tomorrow’s CFOs and their finance functions will be better placed than anyone to calibrate the risks faced by the business and to advise on appropriate actions’ (Lyon and Lawson 2012: 8).

The risk professionals – the CFO and the CRO, if the latter post exists – must have the ‘stature and authority to rein in risk taking when necessary’ (DuChene 2013: 7). Performing that role ‘inevitably involves arguing’ and ‘managing those arguments’ is very important to sustaining a risk challenge culture (Fox 2012: 1).

The CAE and the internal audit function play a significant role in the risk-management process. The authors' research indicated that in some major organisations the internal audit function was the facilitator and owner of the risk-management process but under no circumstances was the internal auditor the owner of the risks identified (Shenkir and Walker 2007: A407–9). The appropriate roles for the internal audit function in the risk-management process have been clearly identified by the Institute of Internal Auditors (IIA), and some activities have been labelled inappropriate (IIA 2004). The IIA has also identified some procedures that internal auditors can perform to assess the effectiveness of the risk-management process (IIA 2009).

Every risk identified must have an owner, and the owner/manager is the first line of defence in an effective risk-management process, the second line is the functions that oversee risks, and the third line is internal audit (IIA 2013). The information about the status of a particular risk should cascade up the reporting chain, and ultimately, if considered significant, be contained in a report to the board and its committees.

In the roundtables, Figure 4.1 was used to focus the discussion on the roles of the board and the C-suite management in the risk-management process. The major steps in an ERM process found in such frameworks as COSO and ISO 31000 are items two through six in Figure 4.1. The various ERM frameworks point out that clarity of strategy or objectives is required before moving to the other steps of the process. No votes of those attending the roundtables were taken to gather specific data on the role of the board and the C-suite. Much of the roundtable discussions focused on sorting out the respective responsibilities.

Figure 4.1: Roles in risk management

Activities	Roles		
	Board	Executive management	Joint (board and management)
1. Setting risk appetite			
2. Clarity of strategy/objectives			
3. Risk identification			
4. Risk assessment, analysis, evaluation			
5. Risk treatment/response			
6. Risk monitoring			

'It's not only important to define the roles; it's absolutely critical. You cannot manage this process effectively if it isn't clear. My view is that there is a shared responsibility in every single one of those roles. Obviously it's to a varying degree. The board has to understand how risks are being identified, measured, mitigated, and monitored. They're not necessarily going to get involved in the granular decisions and activities to accomplish that, but they do have an obligation to understand that and to ask the right questions if there's a concern. Also,

they have to understand how the risk information trickles up from middle management to achieve the right level of prominence or visibility at both the C-suite and the board level. And is there a mechanism in place to make sure the owners of those risks understand them best because they face the risks every day at the middle management or operational level and that the information is properly reported and not just a top-down assessment coming from the board and C-suite?'

(ACCA-IMA ROUNDTABLE, NEW YORK)

'The key is the degree of shared responsibility. Let's say management identifies a risk and it is competition. Management does an assessment and let's suppose the risk treatment is that we should merge or create a joint venture. Clearly, the risk treatment has to involve a deep, deep conversation with the board.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

'My observation is that boards aren't really trained to do risks identification and assessment, analysis and evaluation. Their role is to lead and direct and say the right thing at the right moment.'

'Risk identification needs to be done by people in the front line. For each risk, you identify people who are most in tune with risk on the ground and make sure that their views are not going to be distorted by going through the lens of management.'

(ACCA-IMA ROUNDTABLE, LONDON)

5. Information asymmetry and risk reporting

Information asymmetry between executives and the board means that some never see all the information, or they may get the information too late to influence their decisions. In their board risk-oversight report, the NACD (2012: 5) points out that asymmetric information risk is a problem. Unfortunately, the NACD (2012:5) notes that the gap between what the executives know and what the board knows is growing larger.

‘From a CEO’s perspective, it is a challenge. You want to do the right thing and you want to collaborate. But I will tell you in my job I have to make decisions whether it’s an issue that surfaces. Who do I tell? When do I tell them? Do I try to solve it? Is it a small issue or big? Because sometimes small issues can become big issues.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

Information asymmetry can occur because executives filter what the board sees or because they delay passing the information to the board. Some risks can materialise so quickly that delay can be devastating for a company. Several participants in the roundtables noted that excessive filtering of data that goes to the board is a serious problem. Ensuring that

boards have extensive access to management is one way to mitigate filtering. Increased access is generally agreed to be a good idea. Boards should also ask if there is a trickle-up mechanism in place – so that key risk information does not get stuck with middle management.

‘I’ve been involved with public companies where the board talks to nobody privately but the CEO.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

Information asymmetry can also occur when the ERM process stagnates and becomes a ‘tick-the-box’ approach. One potential sign of information asymmetry is when a risk event occurs that was not on the organisation’s risk profile or when an emerging risk is identified too late. A board risk challenge culture should ask how that occurred. Additionally, for risks that materialise, boards should ask whether the risk was properly assessed beforehand. These are moments for improving ERM and the risk oversight processes and for decreasing future information asymmetry.

‘We think it’s all about having one risk-management framework but...it’s more about having one that is implemented properly and people believe in.’

(ACCA-IMA ROUNDTABLE, LONDON)

‘There has to be up front clarity on what the parameters are. If this comes up, tell me right away. If not, don’t bother me till Monday. There has to be a conversation.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

One way to minimise information asymmetry is to get initial agreement on the mutual expectations of the executives and the board. Some noted that making sure the board agenda does not get in the way is a valuable practice. Other board members agreed that it was important to pay attention to who does the most talking at board meetings and who controls the agenda – the CEO or chairperson. Excessive CEO agenda control can be a bad sign. To minimise filtering, the NACD encourages boards to work with their internal auditor and to consider getting increased access to information or using internal audit to review risk reporting.

‘Everything that goes to the board – risk or certain information – is pre-reviewed by internal audit.’

(ACCA-IMA ROUNDTABLE, DUBAI)

Board members who take the time to understand how the business works will improve their ability to understand the real business risks and are more likely to know whether the risks and the related reporting are comprehensive. Some

board members mentioned conducting board risk oversight by walking around and getting out to talk to the front-line people about customers and the business. Having this better feel for the business helps a board know if information asymmetry is occurring. Another idea mentioned is to schedule board meetings at strategically important locations – to encourage the board to learn more about the location, people, and processes.

Since board members also rely on the ERM process, boards should get the process reviewed and benchmarked to ensure that ERM is fully implemented and working. The board and management need to understand that large risk events that materialise and were not previously identified are not only a sign that ERM is not working, but might also be viewed by investors as a sign of management incompetence and a warning that other problems may occur. On the other hand, if numerous previously unidentified risk events materialise it could signal the difficulty of risk identification in that industry. In those cases, the focus may need to shift to risk velocity, robustness, and resiliency. Mapping risks on the basis of velocity and impact is a valuable way to understand large, fast-moving risks.

Ultimately, participants indicated that it is the board's job to ensure that information asymmetry does not prevent risk information from getting to the board. According to the NACD, boards average about 24 hours of training a year. Perhaps boards need to start considering how much of that training is on ERM, risk oversight and a risk challenge culture that does not limit them in fulfilling their responsibilities.

'But the point is, that often times when results are good, life is good, why ask the tough questions? And the board, and the leadership team on the other side [have] to commit that that's not going to happen, because business is tough. It's getting tougher and tougher.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

6. Decision making and cognitive biases

A significant impediment to the success of a risk challenge culture is the set of cognitive biases that can commonly affect decision making. Pioneering work by Kahneman and others documented the existence of such biases and demonstrated the negative impact they could have on the decision-making process.

Some of the more common biases applicable to risk issues are:

- anchoring: an overreliance on one trait or piece of information
- loss aversion: being more aggressive in avoiding losses than in seeking gains
- overconfidence: exaggerated faith in one's own solution to problems
- confirmation: the tendency to seek out evidence that confirms an initial decision
- rushed problem solving: an over-eagerness to solve a problem quickly.

Anchoring could cause a focus on old, outdated risk information and a failure to update it. 'Black swan' workshops and arranging for a mix of participants in risk discussions to minimise 'group think' are ways of controlling anchoring.

Loss aversion could lead an organisation to become overly conservative in accepting risk. In certain sectors, such as technology, this is actually a very risky strategy itself. Sound, cautious, reasoned and informed risk analysis can offset this bias.

Overconfidence and confirmation could cause the frequency or likelihood of risks to be badly assessed. Risk workshops, the use of voting technology and 'deep dives' into underlying support data can mitigate the impact of overconfidence, while scenario analysis, risk maps and opportunity maps can act to control confirmation bias. Diversity in the composition of boards is also helpful.

'You're so confident that you can do this... but our past tells us that we have difficulty implementing these kinds of things, and what's changed that makes this so much easier?'

(ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

'In my mind, one of the big mistakes an organisation can make is to have the board member demographics be pretty much... uniformity. I think that diversity is absolutely essential.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

Rushed problem solving can lead to decisions that have not been thoroughly examined. An insistence on healthy debate and careful agenda scheduling can help control this trap.

'One of the things I've noticed that I think is very healthy is that there's a turnover that takes place, and you bring in fresh ideas, new ideas, at the board level. It's not just the same folks who are there – quarter after quarter, year after year, who begin to kind of form a pattern.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

'One (CEO) bragged that they got a strategic plan approved in nine minutes. Another bragged that on a very complex issue they had unanimous agreement of 80 or 90 people – unanimous, on a complex issue – in several minutes – and that's the tendency to rush to solve problems.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

Bias in reporting risk information to the board can also be a critical problem. Effective boards will have alternative means of corroborating and validating the information.

A recognition that these types of bias exist is a good first step in managing them in a risk challenge culture. They tend to be surprisingly pervasive and can cause serious harm to the risk-management process.

'We're usually under some pressure to think more widely...about potential future scenarios...they tend to de-bias us; they make us see outside possibilities as more likely than we did before.'

(ACCA-IMA ROUNDTABLE, LONDON).

7. Risk culture: assessment, diagnostics and signs

When the risk culture is working properly, there is an alignment of the common purpose and attitudes towards risk. Risk culture (Institute of Risk Management 2012:7) is 'the values, beliefs, knowledge, and understanding about risk shared by a group of people with a common purpose'.

ERM itself has been linked to better profitability, fewer surprises, less volatility, and overall improved performance because it enables organisations to make better decisions. It has been suggested that culture can drive the results (and performance) obtained. The explanation is that organisations with more mature risk-management practices perform better than others because they have a deep understanding of the risks, strategy, and alternatives – thereby enabling them to position the company's risk response more appropriately than companies without this understanding. Furthermore, the more mature ERM companies do not have a 'fear of reporting negative results' and this enables these companies to perform better because they can investigate their risks thoroughly and use this knowledge to manage each risk better in the future.

A misaligned risk culture can reveal itself in negative events. Such a culture allows risk taking to get out of control and may even mask excessive risk taking. Recent articles in the business press describe the efforts of CEOs at some companies in trying to fix the culture of an organisation in trouble (with the presumption that a 'culture fix' will lead to better performance). Risk culture misalignment can also lead to excessive (and grossly negligent) risk taking, such as the case alleged by the US federal government's lawsuit against

one company's CEO during the financial crisis (see FDIC vs Kerry K. Killinger et al.)

Furthermore, risk culture misalignment can reduce a company's willingness to take good (or the right) risks and so achieve its optimum performance, without which it may lose competitive advantage. The Wall Street Journal (August 25, 2013) suggested a major software company's culture needs to be fixed, and the company needs to adjust the balance between taking the safe course and innovating. A misaligned risk culture is a key risk indicator of future problems.

'In terms of risk culture, you're not wanting to avoid risk taking. You're wanting to have responsible risk taking. So your risk culture needs to make sure that people understand that innovation, new ideas, creative thinking, all of those things are still important.'

(ACCA-IMA ROUNDTABLE, LONDON)

CFOs must possess a different portfolio of skills – one that includes strategy, process, and performance measurement. Given the number of risk culture failures that have occurred, it seems that an additional useful skill might be the ability both to build a risk-enhancing culture and to know when that risk culture is not working. To know when risk culture is not working requires examination of the indicators of failure.

Some suggested indicators of the state of a company's risk culture include the nature of its risk leadership, the way it responds to bad news, its risk governance and risk transparency, the resources and competence of those dealing with risk, the decisions made and the way that appropriate risk taking is rewarded. Board meetings that appear to have been 'scripted' can be a bad sign. In addition, board members may want to meet employees and talk to people to determine whether the culture is fear-based or employees are able to share their concerns openly without retribution.

The ERM process itself can also indicate the state of the organisation's risk culture. Companies that 'bolt-on' ERM as opposed to integrating it are more likely to be companies with a misaligned risk culture. Another indicator of a poor risk culture is where risk events materialise without being properly identified or assessed. Additionally, rushing the risk reporting that goes to the board or adding risk to the end of a strategy (at the last moment), as opposed to actually linking the two, are signs of a poor risk culture. Some have suggested that risk culture can be gauged by simply watching the dialogue or interaction when there are disagreements (among management or board members, or between the company and the investing community).

'Watch how management disagrees or responds with the CEO.'

(ACCA-IMA ROUNDTABLE, DUBAI)

To alter their risk culture, organisations need first to understand and measure it. Krivkovich and Levy (2013) recommends a series of related 'risk dashboard' metrics for regular board review. Risk culture metrics could include a people survey, operational incidents, or a summary of customer complaints. Financial performance, internal control, and corporate governance are measured and some indicated it is time to start measuring the risk culture. Krivkovich and Levy (2013) also suggests that some companies should establish some risk-value statements (to ensure that risks are considered in key decisions).

'The real assessment [of culture] begins with [whether] you trust what you're being told.'

(ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

8. Risk appetite

It seems obvious that an organisation cannot manage risk effectively if the decision makers do not know how much risk it is willing to assume in pursuit of gain. Yet studies have shown that fewer than a third of organisations have developed and implemented formal risk-appetite statements. The majority of those that have done so are in the financial services sector, presumably because of increased regulation there.

‘I think it all goes back to the training and being able to properly assess risk. I’m not sure how you could set your appetite if you don’t know how to measure it and assess it to begin with.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

In a risk challenge culture, there should be a mechanism in place for the board and senior management to communicate to all levels of the organisation how much risk the organisation is willing to accept (appetite), and how much risk it is able to take on and still operate prudently (tolerance). Organisations will tailor their approaches to this communication process according to their own unique characteristics – standardisation is not necessary, or perhaps even desirable.

‘For a lot of people, before you can even have the risk-appetite discussion, you’ve got to get their heads out of compliance, because people who are stuck in compliance are never going to be able to have an appetite conversation.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

There is a recognition that a combination of qualitative and quantitative guidelines and measures of risk appetite is ideal but, in the early stages of implementation, qualitative approaches alone can be effective. This is true even if the risk-appetite statement is relatively short and general. It seems almost impossible to imagine risk-appetite guidance being effective unless it is formally adopted by the board and senior management. Otherwise, the organisation expects decision makers to gauge excessive risk exposure by some sort of ‘I’ll know it when I see it’ test. How can constituents exercise their duty to challenge risk issues if there are no established guidelines against which to measure the risks?

‘Risk appetite needs to be developed and then cascaded down. It becomes a part of your culture. Every manager is a bit of a risk manager.’

(ACCA-IMA ROUNDTABLE, DUBAI)

9. Strategy and risk

Strategy and risk are inextricably linked; they may even be viewed as two sides of the same coin. There are countless instances of organisations setting strategy without performing a thorough risk analysis – with disastrous consequences. Consider the large retailer with a new CEO who wanted to attract younger, more affluent customers but succeeded only in alienating older customers, repelled by the revamped business model. The result was a potentially ruinous outcome.

‘A public company is like a big oil tanker. Things take a long time to change once the direction has been decided strategically. So it’s very difficult to actually stop a massive risky and dangerous strategy. They’re all risky, but is that risk dangerous? I believe a lot of risk training needs to happen at the large company level.’

(ACCA-IMA ROUNDTABLE, LONDON)

Organisations ignore the strategy–risk linkage at their own peril. It can be argued that one of the fastest paths to massive value destruction is to undertake a strategy without a thorough consideration of the attendant risks. Studies have pointed to enormous drops in public company stock prices that were tied to strategic

risk-taking gone wrong. (See Economist Intelligence Unit (2001) for a description of a pioneering study.) The technology sector, especially, is littered with the remains of companies that took ill-considered strategic gambles and lost.

Frameworks and guidelines promulgated by COSO (2004), ISO 31000 (2009) and others explicitly recognise the strategy–risk linkage and its importance to sound overall risk management. Participants in a challenge culture should demand that the linkage be constantly at the forefront in strategy deliberations and continually updated. Both strategy and top-level risk oversight are the responsibility of the board, ultimately. It is incumbent on the board to ensure that the culture encourages and rewards this linkage.

‘It’s often the case with successful companies that the non-executive directors sometimes get a little bit cowed by the performance of the executive directors. They assume that a company making money must be doing the right strategy and must be doing the right things and shouldn’t really be challenged too much.’

(ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

‘We actually use a framework in our company that clearly starts with our mission and our strategic goals, environmental scan, risk, strategy maps, balanced scorecard. It’s a framework but that’s not going to guarantee success because it’s all about the execution. It’s a darn good start because it forces the connection: if you’ve got objectives, the next logical question is, “Tell me the risks relative to achieving those objectives. How you, as a management team, are going to address those objectives? What opportunities do you find on the upside as a part of that process?” But without having that framework, that natural connectivity, risk management is still very much ad hoc and situational.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

'There are statistics that say something like 70% of strategies fail; so the 30% are doing something right. There are reasons that you fall off the rails – you get too cozy, too comfortable, life is good. Then disruption hits and you're totally unprepared, both in terms of your balance sheet and your culture. So you have to go in with the mindset that this is serious stuff – I want to be one of the 30%, and if that means upsetting the CEO, then tough.'

(ACCA-IMA ROUNDTABLE, NEW YORK)

10. Incentives and risk

Incentive systems, around the time of the financial crisis of 2008, were an experiment of a sort. What behaviours would be induced by unbalanced rewards/penalties? The outcome was hardly surprising – some huge risk taking that paid off handsomely on the upside with very little personal penalty on the downside. Decision makers were betting the farm, so to speak, and were winning big. When they lost, however, their employer could literally vaporise à la Lehman Brothers. One scary fact was that those charged with oversight evidently did not realise that the risks they were taking could be ruinous to the organisation.

Almost everyone would agree that the linkage between incentives and risk can, and should, be carefully crafted and managed, but in reality the linkage can yield volatile and sometimes unpredictable results.

‘The problem with incentive systems that try to link up to risk is often you’re forced to develop some sort of threshold system, and the thresholds themselves become sort of artificial and become part of the problem.’

(ACCA-IMA ACCOUNTANTS FOR BUSINESS FORUM)

In a challenge culture, participants must be fully prepared to anticipate the behaviours motivated by the incentives and assess whether they are consistent with the organisation’s risk appetite and overall strategy. The consequences of not doing so can be potentially devastating to the organisation,

especially in this era of volatile and complex derivative contracts and extremely rapid technological changes.

A major problem in this effort, however, is the conundrum that the challenger may possess incentives that could be affected negatively by the challenge itself. For example, a director holds a contract along with the other directors that provides a bonus if certain risky targets are met by the organisation. It would take a bold, unselfish director indeed to challenge a lucrative contract that benefits that very director.

‘It’s very difficult, isn’t it – to challenge and to simultaneously talk about your own personal gain?’

(ACCA-IMA ROUNDTABLE, LONDON)

There is also another incentive that should be at work in the risk arena – basic incentives to establish a risk-management structure that removes the deficiencies of the pre-ERM mindset. The deficiencies include lack of risk coordination among business units and the old ‘silo’ approach to risk management. It is the responsibility of the governing board to ensure that these incentives exist. A challenge culture would demand that.

The design and execution of incentive systems that align risks and rewards effectively is a daunting task but critical to the success and continuity of organisations. In fact, it may be one of the most difficult assignments the organisation can tackle. Success or failure, prosperity or ruin? The participants in a challenge culture can determine the outcome, and it is not a mission for the faint of heart.

‘One general objective is to un-silo the organisation to achieve the greater good, and that includes risks in silos. For every single person in our company in terms of their bonus incentive – it’s the same formula: 75% company-wide metrics and 25% individual or departmental. That’s from the CEO throughout the company. But life isn’t always smiley face with seemingly simple approaches like that. The metrics have to be sufficiently [effectively] constructed. They have to be balanced. They have to have risk-reward built into them. They have to have some element of forward [thinking]. Setting metrics is easier said than done.’

(ACCA-IMA ROUNDTABLE, NEW YORK)

11. Conclusion

It is very difficult for a board member or manager to question policies or decisions critically when their organisation is earning outsized profits or enjoying unprecedented growth. Even with an ERM system in place, few want to listen to a Cassandra spreading doom and gloom, especially when they have bonuses on the horizon or stock options to exercise.

The key to this problem seems to lie in creating a different sort of culture for risk management: a culture not just of ERM acceptance and endorsement but a culture in which dissent and a questioning mindset are not only tolerated but welcomed, expected and rewarded. A risk challenge culture is such a culture.

This report has identified nine key areas that are paramount in the design and implementation of a risk challenge culture.

A risk challenge culture requires that board members and the C-suite approach their risk oversight responsibilities with a 'questioning mind' and make 'critical assessments' of the effectiveness of their organisation's risk-management process.

The board, if it is to avoid being a risk itself, should reflect diversity in skills and experience, and be knowledgeable about ERM. Formal training may be necessary to acquire the requisite knowledge.

The responsibility for leading and sustaining a viable risk challenge culture lies in the board and its committees, the C-suite and risk-owning operating management. The board, in concert with the CEO, sets the tone for the top regarding the openness expected in risk discussions.

It is important to minimise information asymmetry between the CEO and board in risk reporting. It occurs when the board fails to receive key risk information on a timely basis or at all.

Cognitive biases in decision making can be a serious impediment to developing an effective risk challenge culture. It is essential to recognise that these biases exist – and they are well documented in the literature – and put mechanisms in place to minimise their impact.

When a risk culture is effective, there is an alignment of the common purpose and attitudes towards risk. Signs that a risk culture is lacking or in need of remediation include: weak risk leadership, poor risk transparency, and rewarding inappropriate risk-taking.

Even though only a minority of organisations have promulgated a formal statement of risk appetite, it is critical that all other organisations begin the process of establishing their risk appetites and risk tolerances, and communicating them to all organisational levels, and then furnishing updates as needed.

Strategy and risk are inextricably linked. Setting strategy without performing a thorough risk analysis has often led to massive value destruction. It is the board's responsibility to ensure that this linkage is strong and re-evaluated frequently.

As recent history has shown, faulty, unbalanced incentive plans can lead to misguided, excessive or even ruinous risk-taking. Incentives should be carefully constructed to induce behaviours that are appropriately aligned with strategy and risk appetite/tolerance.

Following risk debacles or major financial crises, there is always a cry for better risk management and ERM gains even more traction. Yet an ERM policy is meaningless without a committed, engaged board and C-suite. A risk challenge culture is potentially a very effective way of ensuring that ERM evolves beyond a compliance exercise or hollow 'programme du jour.'

This study presents a way of establishing a risk challenge culture that allows participants to speak freely and to question openly their organisation's risk-management effort. There is much evidence that in the past people were reluctant to speak up and engage in critical dialogue when evaluating potentially risky, or even catastrophic, decisions. The stakes are high in this effort. The world has never been riskier but there are effective tools out there to tame the risk-beast and even make it work to one's advantage.

Appendix 1: Questions used in the roundtables and forum

1. What is your opinion about professional scepticism as an approach by the board and the C-suite to assess the risk management process?
2. What do you see as the key issues and priorities for a board of directors and the C-suite in performing their respective risk oversight responsibilities?
3. What additional suggestions do you have for board training in risk management?
4. How can a board be assured that it has the expertise to fulfil its responsibilities in risk oversight?
5. What is your opinion concerning the roles of the board and management in the various ERM activities listed in Figure 4.1?
6. Which biases are more dangerous to an organisation and how can an organisation best guard against these biases?
7. How will organisations know if decisions and oversight are biased?
8. How can organisations best assess risk culture and potential misalignment?
9. What are the best techniques for improving risk culture?
10. In which areas does information asymmetry cause the most damage to the organisation?
11. How can board members and executives best decrease information asymmetry to improve risk-based decision making?
12. Given its importance to ERM, why has risk appetite remained one of its less-developed components?
13. How explicit should a risk-appetite statement be to make an effective contribution to ERM?
14. How important is the strategy-risk linkage in your organisation?
15. Which methods are best for improving the strategy-risk linkage?
16. Describe how incentive plans in your organisation motivate appropriate risk taking.
17. What are the difficulties in establishing risk-appropriate incentive plans?
18. What incentives are likely to help induce the coordination of risk management across disparate segments of an organisation?

Appendix 2: Board assessment of the organisation's risk challenge culture: a tool

This assessment tool is provided to assist board members in continuously improving their risk challenge culture. The objective of this assessment tool is to stimulate conversation with and among board members and with the C-suite.

1. The board has engaged in active discussions exhibiting an attitude of professional scepticism in its deliberations.
2. Board members have demonstrated a questioning mind in their discussions of critical issues.
3. New board members receive training on ERM and on their risk-oversight responsibilities.
4. The chairman and CEO are strong advocates of regular training for board members.
5. The board has a well-established risk-oversight process which is continuously improved.
6. There is focus on complementary skills and experiences needed when selecting new board members.
7. The board and its committees have frequent opportunities to meet with key employees involved in the implementation of ERM.
8. The oversight of risk by the board is under the leadership of a specific board committee that assigns responsibility for specific risk to other committees except for strategic risk, which the entire board oversees.
9. Conversations about the organisation's risks among board members and with the chairman and CEO are regularly scheduled board agenda items.
10. The board believes it has sufficient time to review strategic decisions and significant risks.
11. The board is confident that all relevant risk information has been included in the board risk reports.
12. The board has unlimited access to management, employees and operations.
13. The board and management are confident that the ERM process is working and all major risks have been identified (as much as is possible).
14. The board understands the major decision biases (planning fallacies, rushing, overconfidence, confirmation bias, etc) that can occur and attempts to combat them.
15. The board seeks independent and non-biased advice on major strategic decisions and risks.
16. The ERM process is integrated into the fabric of the company (rather than appearing to be 'bolted on' at the end).
17. The board has developed a method for assessing the risk culture.
18. The board members trust what management tells them.
19. The organisation has established its risk appetite and tolerance, and communicates them to the various levels of management on a timely basis.
20. The organisation developed or is developing a formal risk appetite statement.
21. The board knows when the risk appetite or tolerance is being exceeded.
22. Strategy and risk are firmly linked.
23. Strategic changes are accompanied by a thorough risk analysis.
24. The organisation is aware of the dangerous, even ruinous, consequences of inadequate consideration of risk in establishing strategy.
25. Incentives are carefully crafted to ensure that they induce behaviours consistent with risk appetite and tolerance, and with overall strategy.
26. Directors are prepared to challenge actions and circumstances that represent imprudent risk-taking even when their own incentives may be at stake.
27. Senior management has incentives to enact a strong risk-management programme and operate it effectively.

References

- Adams, M. (2009), *Change Your Questions Change Your Life* (San Francisco: Berrett-Koehler Publishers, Inc).
- COSO (2004), *Enterprise Risk Management — Integrated Framework*.
- COSO (2009), *Strengthening Enterprise Risk Management for Strategic Advantage* <<http://coso.org/guidance.htm>>.
- DuChene, C. G. (2013), 'Remarks before the American Bankers Association Risk Management Forum', Baltimore, Maryland, 25 April.
- Economist Intelligence Unit (2001), *Enterprise Risk Management – Implementing New Solutions*.
- Federal Deposit Insurance Corporation vs Killinger et al. (2011), *Complaint for gross negligence, negligence, breach of fiduciary duty, fraudulent conveyance, and injunctive relief*.
- Fox, J. (2012), 'Managing Risks Means Managing Arguments', 23 May <http://blogs.hbr.org/cs/2012/05/managing_risks_means_managing.html>.
- Glover, S. M. and Prawitt, D. F. (2012), *Enhancing Board Oversight: Avoiding Judgment Traps and Biases* (COSO).
- Institute of Internal Auditors (2004), *IIA Position Statement: The Role of Internal Auditing in Enterprise-wide Risk Management*.
- Institute of Internal Auditors (2009), *Practice Advisory 2120-1: Assessing the Adequacy of Risk Management Processes*.
- Institute of Internal Auditors (2013), *The Three Lines of Defense in Effective Risk Management and Control* (IIA position paper).
- Institute of Risk Management (2012), *Risk Culture: Under the Microscope Guidance for Boards*.
- ISO 31000 (2009), *Risk management – Principles and guidelines*.
- Krivkovich, A. and Levy, C. (2013), *Managing the People Side of Risk* (McKinsey & Company).
- Lyon, J. and Lawson, R. (2012), *The Changing Role of the CFO* (ACCA and IMA).
- Myatt, M. (2013), 'The Power of "What If,"' *Forbes*, 8 February <<http://www.forbes.com/sites/mikemyatt/2013/02/08/the-power-of-what-if/>; accessed 26, July, 2014>.
- National Association of Corporate Directors (2012), *Advisory Council on Risk Oversight, Summary of Proceedings*. <<http://www.nacdonline.org/files/applications/secure/index.aspx?FileID=71907>>.
- Patterson, K., Grenny, J., McMillan, R. and Switzler, A. (2012), *Crucial Conversations: Tools for Talking When Stakes are High* (New York: McGraw Hill).
- Petriglieri, G. (2014), 'Why Work is Lonely', HBR Blog Network, 5 March <<http://blogs.hbr.org/2014/03/why-work-is-lonely>> accessed 26, July, 2014.
- Public Company Accounting Oversight Board (PCAOB) (2012), 'Maintaining and Applying Professional Skepticism in Audits', *Staff Audit Practice Alert No. 10*, 4 December.
- Rockwell, D. (2012), 'Twenty Ways to Disagree with your Boss' 8 May <<http://leadershipfreak.wordpress.com/2012/05/08/20-ways-to-disagree-with-your-boss>>. accessed 26, July, 2014.
- Scott, S. (2004), *Fierce Conversations* (New York: Berkley Books).
- Shenkir, W. G. and Walker, P. L. (2007), *Enterprise Risk Management* (Washington, D.C.: BNA).
- Walker, P. L., Shenkir, W. G. and Barton, T. L. (2002), *Enterprise Risk Management: Pulling it All Together* (Altamonte Springs, FL: Institute of Internal Auditors Research Foundation).
- Walker, P. L., Shenkir, W. G. and Barton, T. L. (2011), *Improving Board Risk Oversight Through Best Practices* (Altamonte Springs, FL: Institute of Internal Auditors Research Foundation).
- Wall Street Journal (2013), 'Next CEO's Biggest Job: Fixing Microsoft's Culture', 25 August.

Further reading

- Aguilar, L. A. (2013), 'Shareholders Need Robust Disclosure to Exercise Their Voting Rights as Investors and Owners', speech by SEC Commissioner Aguilar <<http://www.sec.gov/news/speech/2013/spch022013laa.htm>>, accessed 26 July 2014.
- AIRMIC, Alarm, IRM (2010), *A Structured Approach to Enterprise Risk Management and the Requirements of ISO 31000*.
- Anderson, R. (2012), *Risk Appetite and Tolerance: Guidance Paper* (London: Institute of Risk Management).
- Aon plc (2013), *Risk Maturity Index Report*.
- Barsky, N. P. and Catanach, A. H. (2013), 'What Makes a CFO "the Best"?' , *Strategic Finance*, April.
- Barton, T. L., Shenkir, W. G. and Walker, P. L. (2002), *Making Enterprise Risk Management Pay Off: How Leading Companies Implement Risk Management* (Upper Saddle River, N. J.: Financial Times/Prentice Hall PTR).
- Barton, T. L., Shenkir, W. G. and Walker, P. L. (2010), 'ERM After the Financial Crisis', *Financial Executive*, April.
- Bernstein, P. (1998), *Against the Gods The Remarkable Story of Risk* (New York: John Wiley & Sons).
- Dealbook (2009), 'Reducing Incentives for Risk-Taking', *New York Times*, 12 October.
- DeLoach, J. (2013), '10 Questions to Shape 2013 Risk Agendas' <<http://www.directorship.com/41518/print/>>, accessed 26, July, 2014.
- FERMA (2012), *Risk Management Benchmarking Survey* <<http://www.ferma.eu/blog/2012/10/ferma-risk-management-benchmarking-survey-2012-the-results/>>, accessed 26, July, 2014.
- Financial Stability Board (2013), *Principles for An Effective Risk Appetite Framework*, 17 July.
- Frigo, M. L. (2008), 'When Strategy and ERM Meet', *Strategic Finance*, January: 45–9.
- Gates, S., Nicolas, J. and Walker, P. (2012), 'Enterprise Risk Management: A Process for Enhanced Management and Improved Performance', *Management Accounting Quarterly*, 13 (3): 28–38.
- Conrad, L., Walker, P. and Willaert, J. (2013), 'Leading Risk Culture Change', *Harvard Business Review*, 15 May, <<http://www.ferma.eu/app/uploads/2013/07/executive-summary-leadership-risk-management-webinar-final.pdf>>, [HBR Webinar].
- Heffernan, M. (2012), 'Dare to Disagree' <http://www.ted.com/talks/margaret_heffernan_dare_to_disagree.html>, accessed 26, July, 2014.
- Hindson, A. (2013), *Risk Culture and Enterprise Risk Management*, IRM Risk Culture Seminar, 28 February.
- HM Treasury (2006), *Managing Your Risk Appetite*, November.
- Institute of International Finance (2012), *Governance for Strengthened Risk Management* (Washington, D.C.: Institute of International Finance).
- Institute of Internal Auditors (2012). 'Eight Priorities for 2013' *Tone at the Top* 59, December 2012/January 2013: 1–4.
- Institute of Risk Management (2012), *Risk Culture: Under the Microscope Guidance for Boards* (London).
- King, A. M. (2013), 'Tone at the Top: Why Investors Should Care', *Strategic Finance*, March: 25–31.
- KPMG (2013), *Expectations of Risk Management Outpacing Capabilities – It's Time For Action* <<http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/risk-management-outpacing-capabilities/Documents/expectations-risk-management-survey-v2.pdf>>.
- KPMG (2008), *Understanding and Articulating Risk Appetite* <<https://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/documents/Risk-appetite-O-200806.pdf>>.
- Kuehn, K. (2008), 'Seven Habits of Strategic CFOs', *Strategic Finance*, September: 27–30.
- Leitch, M. (2012), *The Reality of Risk: Culture, Behaviour, and the Role of Accountants* (London: ACCA).
- Lublin, J. S. (2013), Can a New Culture Fix Troubled Companies? *Wall Street Journal*, 12 March.
- Mishra, B. and Rolland, E. (2011), 'Enterprise Risk Management: Combating a Growing Organizational Threat', *Journal of Accountancy*, February <<http://www.journalofaccountancy.com/Web/20103102.htm>>.
- National Association of Corporate Directors (2009). *Key Agreed Principles to Strengthen Corporate Governance for U.S. Publicly Traded Companies*, White Paper: Series I – Risk Oversight, Transparency, Strategy and Executive Compensation (Washington, DC: NACD).
- Oliver Wyman (2007), *What's Your Risk Appetite?*
- Ovide, S. (2013), 'Next CEO's Biggest Job: Fixing Microsoft's Culture', *Wall Street Journal*, 25 August.
- Protiviti (2011), *Formulating an Initial Risk Appetite Statement*.
- Rittenberg, L. and Martens, F. (2012), *Enterprise Risk Management: Understanding and Communicating Risk Appetite* (COSO).

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