

# **Risk: Elephants in the Room**

**A report on the ERM conversations that haven't been happening effectively**

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## 1. Summary

### 1.1 Introduction

In starting our working party discussions, we had many different thoughts about what risk elephants were. We discovered fairly quickly that they were everywhere with an assortment of names and guises which had developed organically within organisations often taking on lives of their own. Though it was abundantly clear that many risks were being discussed in risk governance structures up and down the land, it was also clear that some weren't. These little discussed risks weren't getting the right visibility by the right people and were therefore becoming risk elephants.

Our proverbial elephant is the unspoken element of many risks present in today's world. Why something is unspoken can vary, but the fact that it is in the shadows highlights an issue with risk management frameworks and their attempt to have open discussions on the entire risk universe. In this paper, we sometimes contrast elephants against tigers. Tigers are clear and present dangers that are generally getting the attention required in order for awareness, risk mitigation and good decision making. It is worth noting that tigers in one firm might be elephants in another. The dividing line is an important concept for us as it touches on the 'effectiveness' of discussion. Ineffective conversations may expose some tigers but leave elephants lurking beneath. Thus, though the presence and concept of an elephant is market wide, what it may look like precisely, is company specific.

Risk elephants do not need to be extreme events or emerging risks. Indeed, many emerging risks should not be elephants as the reason they are not being discussed is that they are not understood and may well not be an issue. Risk elephants really should be known issues. The impact of the elephant may be small or large, though clearly larger elephants are more material.

This topic resonated with many people inside and outside of the working party. Though there were many directions in which we could have taken the work, we have focused on two things. These are highlighting and understanding some risk elephants and then importantly understanding why they have come to be.

The working party don't feel that they have all the answers and so we don't try to lay out a step by step guide on how to expose these elephants. Moreover, the working party's scope has most definitely stayed away from trying to manage or mitigate particular elephants. Focusing primarily on identification starts the process for individuals to take on in their own way these questions within their companies. Unfortunately, some barriers to effective risk discussion are deeply entrenched in our businesses and solutions will not come easily. That being said, risk awareness is a vital and significant step in the risk management journey, and this paper therefore hopes to help the industry by bringing some of these topics into the public discourse.

## 1.2 Objectives

The objectives of the working party are to discuss and identify a number of risk elephants. The working party will then go on to consider if a framework exists to think about these elephants. Moreover, it will aim to establish if there are common reasons or conditions that allow risk elephants to exist.

The working party's aim was to produce a short but useful paper for other risk professionals (whether actuarial or non-actuarial) by autumn 2014.

The working party also presented some interim findings at the Current Issues in General Insurance seminar in May 2014.

## 1.3 Format of the paper

The format of the paper generally follows the thinking and progression of the working party through this topic. This has been as follows:

- It starts with the aim of identifying as many risk elephants as possible;
- It then tries to sort through the herd of elephants to see if there are patterns or themes;
- In particular, it considers how best to frame the elephant discussion with respect to cause, event and risk category;
- It then highlights barriers that contribute to the creation of elephants; and finally,
- It summarises what we could take from this paper.

## 2. Elephants

### 2.1 What is a risk elephant?

To manage risk, companies often work with a common, comprehensive and stable set of risk categories. Even though the more granular versions of the risk categorisation can vary, a common basic risk categorisation is made up of insurance, market, credit and operational risk.

The working party looked at the risk categorisation used by various regulatory authorities and those used by the top insurance companies in the world. The categorisation above came up consistently. It is imperative for any organisation to consider all types of risks ('the risk universe') that could affect the organisation's goals and objectives and this basic categorisation is often accepted as this universe. Though there are sometimes additional categories often discussed in the same vein such as the ICA regime's liquidity or group risk, there is ambiguity about whether these are indeed separate categories.

Risk categories are not the only taxonomy that can be used to segment the risk universe. A less common, but equally informative taxonomy is the causal taxonomy. This breaks the risk universe into raw drivers of risk such as the PESTLE framework. PESTLE stands for political, economic, sociological, technological, legislative and environmental. These drivers break down our world into causal groups which underlie any root cause analysis.

The working group found that elephants were more aligned with the causal taxonomy rather than the risk category taxonomy. This was an insightful finding as it re-framed our discussions in a way which more naturally helped the identification and scenario mining which we go on to develop in the next section.

We found that elephants were nearly always causes or events that didn't fit well into a category. For example:

- No one suggested that market risk or indeed interest rate risk was an elephant. It was much more common for the working party to consider that the inability to model complex assets appropriately was an elephant.
- No one considered insurance risk or indeed reserve risk as an elephant. There were of course many potential pitfalls that could drive adverse experience within the reserves. The elephant was more often than not, however, an underlying driver that linked to a political action or legal ruling.

As can be seen from the discussion above, elephants do not sit well with the risk category taxonomy and suit much better a causal taxonomy. We explore this a little more in section three, but it provides a good backdrop to the list of elephants later in this section.

## 2.2 Elephants and tigers

The working party found that in our attempt to understand which risk elephants were lurking in the shadows, we needed to look at the whole room and highlight which risks were actually being talked about. This might seem logical, as to define what isn't being talked about, we should confirm what is being talked about. We concluded that risks were composed of elephants and tigers. The dividing line between an elephant and a tiger was whether the entity managing the risk was sufficiently aware of it and was actively managing it. In some circumstances, it was very difficult to draw the dividing line between the two definitions, but conceptually having a distinction was useful.

The working party discussed a number of these difficult to divide situations, and agreed that there is an underlying 'depth' issue. The depth and quality of discussion was fundamentally the criteria that we were able to use to divide elephants from tigers.

Consider the understanding and modelling of complex assets. For some firms that regularly invest in non-vanilla assets, this would generally not feel like it was an elephant as many of these complex assets may be common place for them. Increasing the granularity of this conversation though, to a particular derivative might expose the company's lack of knowledge in a particular area. The understanding of this particular derivative might be a risk elephant for the company as they may choose to ignore this sub-part of their book which they don't understand as well.

The table below plays out an example of three companies and where each may draw their own elephant vs. tiger dividing line.

	<b>Company A</b>	<b>Company B</b>	<b>Company C</b>
<b>Description</b>	Sophisticated market risk profile and experience in asset classes X and Y.	Fairly sophisticated market risk profile with a good understanding of asset class X. Moving into asset class Y for the first time. Company chooses to group X and Y together as they don't have time to really understand Y though expected returns are good.	Unsophisticated market risk profile with no experience in non-vanilla assets. Asset classes X and Y added to portfolio and modelled with equity which is otherwise their most risky asset class.
<b>Elephants vs. Tigers</b>	Both asset classes X and Y are tigers.	Asset class X is a tiger but asset class Y is an elephant.	Both asset classes X and Y are elephants.

The 'depth' issue is why the working party title has the word 'effectively' in it. Most risks are discussed in part, but are they being discussed as much as they should be? If not they are not being discussed effectively, thereby differentiating a component of the risk as an elephant. That is, for any particular risk area, it is likely that some elements of it are well discussed and understood. There would be others, however, which are more like risk elephants as they aren't being exposed sufficiently.

By adding granularity to an analysis, it is more likely that it will be possible to find elephants hiding amongst tigers. As such granularity is an excellent tool for mining a company's risk profile. For example, the above distinction between asset classes X and Y is only made as they are separated. The conversation without the awareness of differences between X and Y would not lead to this differentiation.

### 2.3 Risk elephant examples

The table below lists some common risks that potentially have elephant like components in them for some firms. As noted by the elephant vs. tiger comments in section 2.2, the elephant component (column two) needs to be defined against a backdrop of commonly discussed risk (column one).

The table includes risks at different levels of granularity to illustrate how granularity can more easily bring elephants out from the tigers they sit beside.

Risk	Potential risk elephant component	Why is it an elephant in some firms?
Agency risk	Management should act in the best interests of the shareholders. This doesn't always happen with any deviation being agency risk. Most of this could be an elephant as it is little discussed around risk committees.	There is an inherent conflict in that those with most influence to subject a company to agency risk (CEO) will ultimately be responsible for reporting risks to independent directors and shareholders.
Conduct risk	Conduct risk is high on many agendas now, but there will undoubtedly be conduct issues currently hidden from view which are not being exposed. Elephants in this area are perhaps around new products.	New products that are profitable that could in future be targeted by the FCA may exist and be actively promoted within businesses. Often it is in the interest of all those involved to not discuss the potential conduct risk unless challenged.
Systemic risks	In the market, there might be areas where insurance companies are all doing the same thing which is a source of systemic risk. For instance the reliance on ratings agencies. This is often not spoken about in risk committees.	Systemic risk is entrenched in an industry where companies strive for market or best practice. Challenge of market practice in turn becomes weaker as there is always implicit buy in of the status quo, leading to an acceptance of potentially inaccurate or misleading approaches.
Model risks	Models are a way to increase risk awareness and understanding albeit all models are wrong. The elephant is whether there is sufficient discussion about how wrong the models could be.	Model complexity may contribute to those from non-modelling backgrounds just accepting results. Misinformation and over-reliance is a large risk to the industry. A common recent question in the actuarial profession challenges if the 1 in 200 is really a 1 in 200?

Best estimate biases	<p>Business plans can tend to be optimistic whilst reserves can tend to be prudent. If this is not managed transparently, there is silent recognition that there is a stated position and a 'real position'.</p> <p>Manifestations of the 'real position' may surprise those who were led to believe the stated position.</p>	<p>When reporting on risk, it is commonly assumed that the business plan and booked reserves are the base point. Unless explicitly identified, any biases that were implicit in the original selection can be lost and are therefore inadequately discussed.</p>
Cyber risk	<p>Cyber risk awareness is high on many agendas now, but very little is still being done to fix it. The elephant in this area is most likely the potential severity and ease of an event.</p>	<p>Though cyber risk is discussed, it is often dismissed at senior levels in an organisation. Even if not dismissed entirely, the size and scale of actions to prevent cyber risk may be inadequate.</p>
Strategic risk	<p>If strategic risk is the taking of large strategic decisions affecting the company, these do tend to be taken by some parties actively and with full information. Could elements of strategic risk be an elephant because some teams within the business are not being aware of what risks are being taken?</p>	<p>There may be elephants within strategic risk where underwriting decisions are affecting business strategy, but other functions such as finance or risk are not being made aware. A greater risk is of course if the Board are also not aware.</p>
Reputational risks	<p>The risk of an insurance company running into serious financial difficulties due to a reputational issue seems not to receive enough attention.</p>	<p>Severe operational risks such as reputational risk do not always get the right airtime in committees. They tend to have low modelled values, and if not covered sufficiently in reverse stress testing work may be missed altogether.</p>
Non-vanilla asset class issues	<p>Valuation methods for non-vanilla asset classes can manifest in misunderstanding if not familiar to the company. Though some companies can model such asset classes, some may not be able to do so adequately. It has the potential to misinform valuation and asset strategies significantly.</p>	<p>Modelling of complex assets is difficult and may require particular skills and understanding that a company does not possess. Where this is the case, there may be a temptation to ignore the issue and generalise the risk with other better known asset classes.</p>
Demographic issues	<p>Societal factors such as changing demographics can adversely impact general insurers in many unanticipated ways. These broad issues are not always discussed but should feed into short and long term business considerations.</p>	<p>This is an elephant, but reluctance to plan and act accordingly are almost because the issue is too big. There is a risk that because there is little a company can do, they don't sufficiently plan ahead.</p>
Judicial and political issues	<p>The impact on the company may be significant from changes in policy or government. The EU gender ruling is an example of a legislative process that created new risks for companies. Other elephants may exist which are not yet spoken of or planned for.</p>	<p>Similar to the demographic issues, these risks may feel too large and thus contingency planning might be ignored. The EU gender ruling is a good example of a situation where a number of companies were insufficiently prepared.</p>



Data quality issues	Data quality is often bemoaned in insurers, but often little is done. Dismissing it or ignoring it as a risk is potentially very dangerous though, as the impacts of poor data can be widespread and material. At the very least, poor data represents greater uncertainty which itself has a cost often not priced.	The impact of poor data is seldom discussed in the senior meetings where hard figures are required. The data conversation is a distraction from the real conversation and can get marginalised.  This is particularly the case as the data conversation could indeed be in every conversation. An implicit assumption is that judgements have been made that 'fix' data inadequacy.
Errors and omissions issues	High workloads or poor quality staff may lead to mistakes or over simplified solutions. Elephants in this area could include an inclination to hide or cover up issues.	Perceived issues in a person's own work may not be flagged leading to errors cascading through an analysis. Though professional expectations may suggest that errors are flagged and corrected, this may be hidden.
Uninformed ERM team	What if the ERM team were too isolated and did not understand the business sufficiently to report on it? This might also include a capability issue. This risk might be similar to agency risk.	This would be an elephant as ERM teams might not be able to diagnose their own failings. Firms might rely on internal audit functions to opine on the efficacy of ERM teams.

## 2.4 Past elephants

This section considers past elephants. Past elephants may seem obvious now, but we should consider the risk landscape and understanding that was present at the time in which the issue manifested.

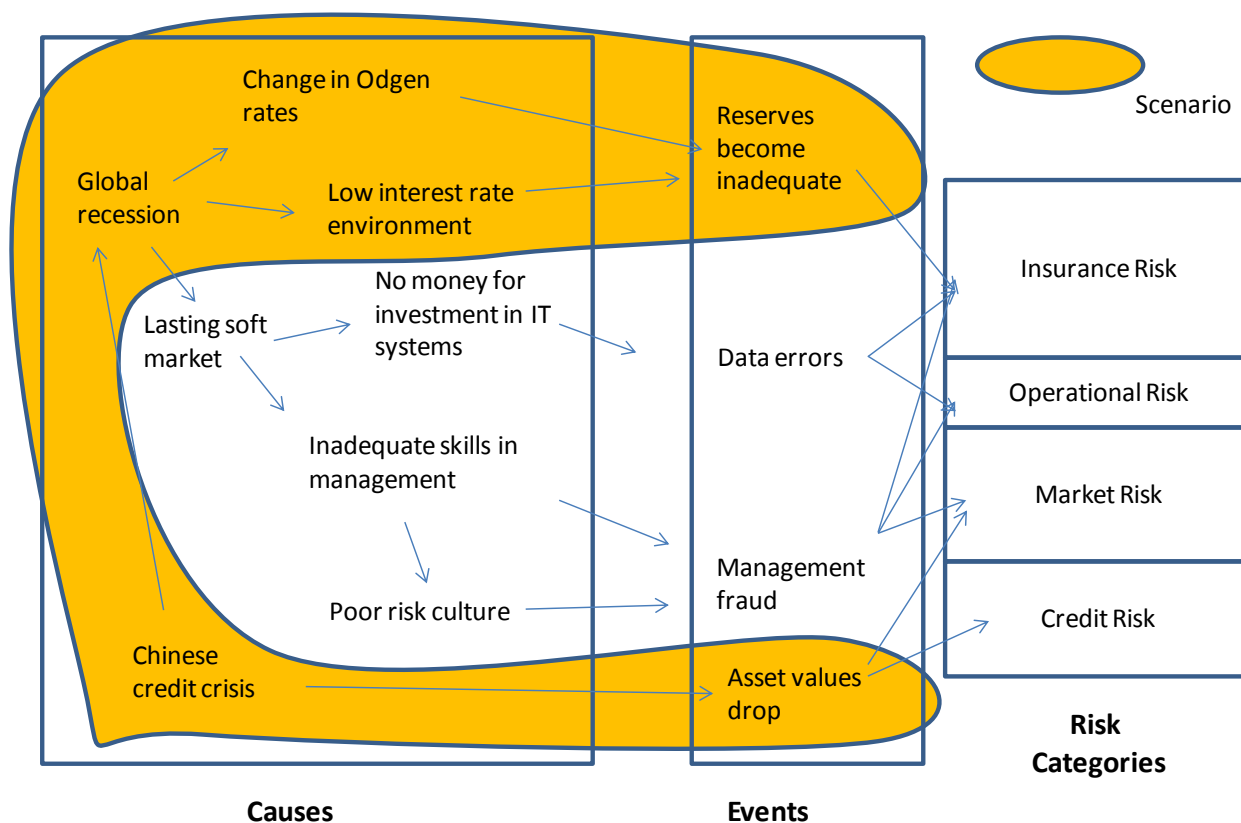
The London Market spiral is an interesting example of a risk elephant which unfolded in the early 1990s. The common practice of reinsuring other London Market companies without fully understanding the underlying book created a complex web of cessions that made the underlying risk very opaque. This practice in the market lasted many years and was an elephant as all participants knew exactly what was happening, but didn't choose to do anything about it.

Another example of an elephant is the known systemic dependency on a few proprietary catastrophe models. Version changes from the providers can completely change the pricing and perceived risk accumulation of a market. It is widely known that there is a great reliance on these providers and though some firms are moving away from just one provider, many do not. Companies that continue to use one provider run large risks from version changes as was the case over the past few years. After these changes occurred, there were complaints to the model providers; however, fault should be more evenly distributed as the elephant was always in the room.

### 3. Looking for elephants

#### 3.1 Risk lineage

To find a way to identify elephants and importantly separate them from tigers, the working party would suggest building off best practice in scenario analysis. A normal scenario analysis might utilise a risk lineage analysis. This type of analysis can be thought of as opposite to a root cause analysis. It aims to start with a catalyst and play through a series of potential consequences. A root cause analysis would be to start with an event and try to understand its origins. Both are, of course, very similar.



The above diagram shows how causes map into either other causes or into events. The events can map into risk categories. The shaded orange area represents a scenario which is a selection of causes and events that follow from a particular starting point. In this case, the starting point is a Chinese credit crisis. Eventually, the flow of causes and events needs to be mapped into risk categories which the diagram illustrates on the right hand side.

In terms of the search for elephants, risk lineage analysis helps frame the question by way of what the risk drivers are of any particular event. Indeed, even if a cause is established to be the determining factor of an event, that cause will almost certainly have a predecessor. This disciplined understanding of risk scenarios helped the

working party to see how elephants can appear at many different places within a scenario. If specifically challenged to think of elephants whilst creating a scenario, it was surprisingly easy to find a cascade of risk events dominated by elephants. There is no better way of discussing elephants than in the context of a scenario and within a complex web of interlinked causes and events.

### 3.2 Scenario analysis as a tool

The detailed example below has been included to illustrate the risk lineage approach. The example is a detailed scenario analysis first and foremost. That being said, with the right frame of mind, the exercise can be steered towards the identification and discussion of elephants which is what we bring out in this paper.

The diagram is fairly descriptive, and the commentary will focus on company XYZ's journey of discovery. The example is broken down into three levels to help illustrate the cascading structure of most scenarios. These cascades add complexity to the risk lineage but are relevant in understanding the whole story to explore the more subtle elephant conversation.

XYZ is a general insurance company. It has a fairly mature risk management framework but would like to understand if there are elephants worth exposing and discussing. It chooses to play through an example of a UK change of government. This risk had been discussed in its risk committee though not in great depth. It was felt to be an elephant and a good starting point for a scenario.

#### Level 1

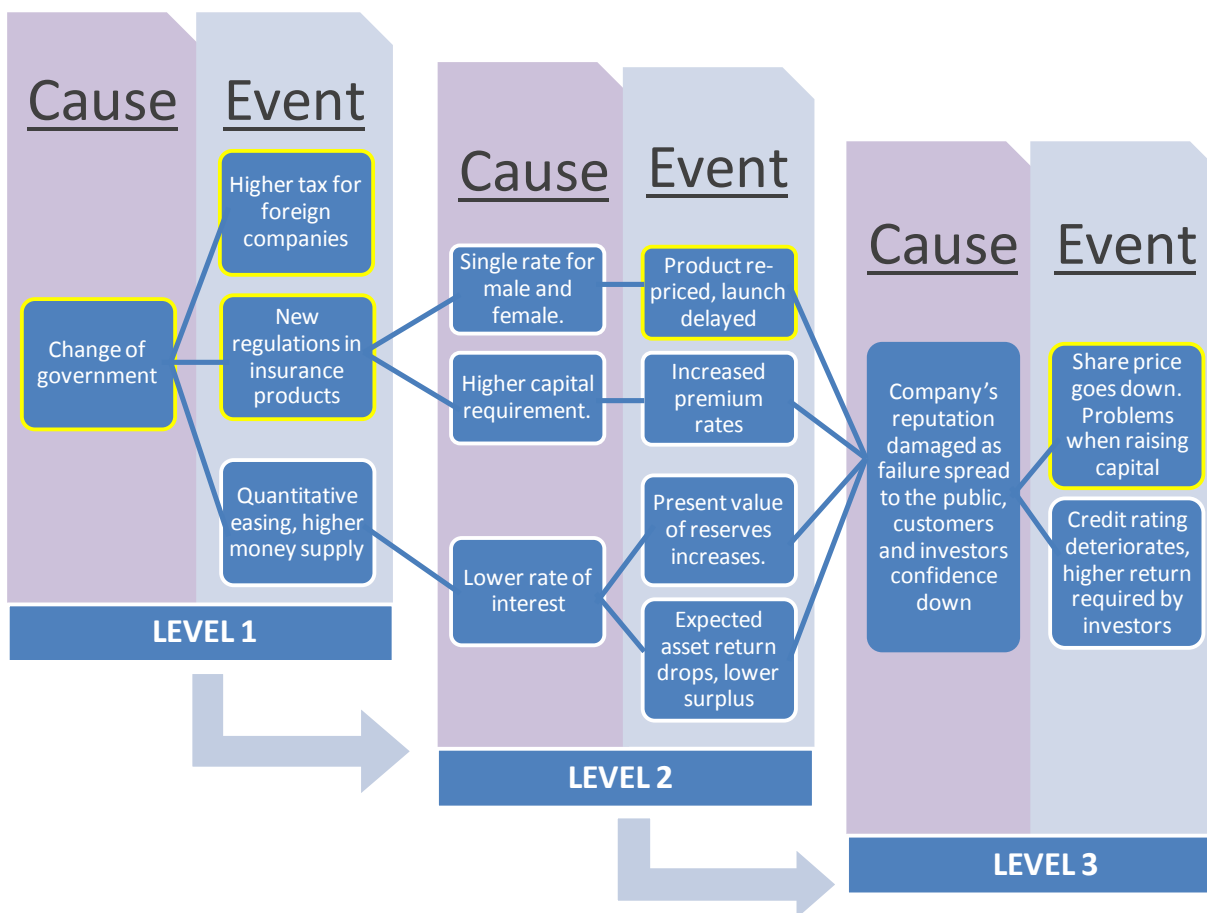
In the brainstorming exercise, XYZ identifies a few likely policy changes that may come from this new government:

- The new government could increase tax level on premiums for foreign companies, giving a pricing advantage to domestic companies.
- The new government could make or accept new regulations that have an impact on the insurance market.
- The new government could initiate quantitative easing, increase money supply to ease market illiquidity.

XYZ hadn't really thought about the first two events but accepts that they could be deemed elephants that fit into the 'too difficult to think about' grouping. The risks had never been prioritised as the change in government hadn't looked likely. They felt that quantitative easing is within their current discussions on the economic environment.

Level 1 events resulting from a political risk elephant will turn into new causes in level 2.

Throughout the diagram, elephants have a yellow outline.



### Level 2

The new rules on gender discrimination had been on their agenda for some time and new rating factors had been prepared. After some thought, XYZ concluded that even with new rating factors, an operational issue might make it difficult to implement new factors quickly and that might affect the launch of a new product. This was deemed an elephant as on further investigation, the operations team had been aware of the problem for some time but had not escalated it. The other events in level 2 weren't thought of as elephants.

### Level 3

XYZ's scenario then assumes that some of the events in level 2 become known to the public, damaging the company's reputation. In particular, they had planned to raise capital via equity and debt in the following year. XYZ hadn't considered that the cost of the financing was so easily swayed.

Within the overall scenario exercise, five separate elephants were identified which hadn't been previously discussed in the appropriate forum.

## 4. Quality of discussion

### 4.1 What makes a good discussion?

Being aware of risks and having some level of discussion on them in the right forum is a significant part of the challenge. If the discussion isn't the right type of discussion or isn't conducted in the right way, then the effectiveness is significantly compromised. In some instances, having the discussion but in the wrong way can misinform committee members and can unfortunately prove to be worse than not having had the discussion at all.

Risk committees are certainly now ubiquitous in most general insurers, but there is a significant range in the effectiveness of these conversations. Where effectiveness is low, this creates the environment for risk elephants.

After establishing that there were risk elephants in a number of areas, we sought to understand why they existed and indeed if there were common contributing issues. Where we understand the issues that act as barriers to effective risk discussion, then we are better placed to try to break them down. This section highlights a number of common issues.

### 4.2 Barriers that lead to elephants

The working party has broken down the barriers of good risk conversations into three areas. The table below outlines a few ways of considering these component barriers to help articulate the distinction between them. Though this paper considers these barriers in the narrower elephant context, it can be said that barriers that lead to risk elephants contribute to a number of other issues typically affecting risk teams within organisations.

The sub-heading of "a report on the ERM conversations that haven't been happening effectively" was chosen after some discussion as there were many alternatives available. We chose this sub-heading as it was the broadest and included within it three potential narrower sub-headings. These narrower sub-headings are included below and neatly map to the barriers which can cause elephants.

<b>Barrier</b>	<b>Reframed sub-heading</b>
Poor risk culture	A report on the ERM conversations that people are less <b>willing</b> to have...
Ineffective communication	A report on the ERM conversations that companies don't have the <b>ability</b> to have...
Risk framework biases	A report on the ERM conversations that risk <b>frameworks</b> make difficult...

#### 4.2.1. Poor risk culture

Risk culture is a very large topic that is discussed in numerous other comprehensive papers. The Financial Stability Board (“FSB”) and Institute of Risk Management (“IRM”) have issued documents (highlighted in the references section) that are some of the most authoritative. The working party suggests the reader spend some time with these documents to get a more complete picture of the impact of poor risk culture. This paper therefore doesn’t attempt to discuss this topic in any great depth.

Poor risk culture is very likely to cause an environment that reduces the likelihood that risks, whether they be elephants or tigers, can be aired in a free and open forum. Looking back to our list of elephants in section two, nearly all the elephants can be said to have been influenced by culture. The culture will not only affect the incentives and advantages of risk elephant awareness, but go further and penalise risk escalation. Very apparently, these features can all create barriers for elephant awareness.

#### 4.2.2. Ineffective communication

There are many current issues with the way in which risks are communicated to the wider business. These issues may cloud the purpose of a risk conversation.

##### *Communication limited because of risk culture*

Overlapping with risk culture, the most obvious ineffective communication is when it doesn’t happen at all. This is partly a risk culture point, but culture is not the only reason that the conversation is not happening. The sheer ability to have the conversation is often constrained by time and available information.

##### *Complexity can alienate audiences*

Good risk communication is often hampered by discussions which can be overly complex and quantitative. Risk conversations that focus on scenarios are intuitively a lot simpler to rationalise as they are real world. Moving in this direction will help expose elephants that can easily hide in the background when the debate is heavily technical and it is difficult to step back and see the wood from the trees.

##### *Regulatory perspective tunes out many business executives*

The background to most of the recent risk conversation has been a regulatory agenda. Though many would quite rightly see great benefit in what this agenda is and hopes to achieve, the approach to implementation of the agenda is often questioned. Elephants suffer from the lack of engagement and effective challenge in these environments.

There is a severe risk that the dryness of the topic given the need to provide a detailed evidential analysis, is often difficult to navigate through. This can leave even the battle hardened and willing Board member exhausted and defeated.

### 4.2.3. Risk framework biases

Biases exist throughout the way in which risk is communicated in our businesses. From the very categorisation we use to the use of quantification, framework biases can change the way in which risk is explained and rationalised.

In the context of elephants, we explained in section three that elephants are best considered by way of scenarios in a causal taxonomy. The nature of many existing frameworks encourages quantification in a category driven taxonomy. This very mismatch can hide the real insights.

Structural biases don't involve particular people's decisions but essentially decisions or focus dictated by a framework. This can be because of particular KRIs or output reports. There is an adage, 'what gets measured gets done' and so any inadvertent biases in a system might mean areas not in that system get missed.

#### *Over-reliance on quantification*

Where a risk is quantified, this can cause a type of complacency. In particular, low frequency and high severity events don't often get much discussion if the expected value is small. Some of these dismissed risks and become risk elephants.

Companies should further embrace qualitative risk management tools such as scenario analysis. Understanding elephants is a complex problem. Complex problems cannot be unpacked into smaller simpler problems without losing the integrity of the original problem. This working party is therefore supportive of using scenarios as the most effective way to think about and discuss elephants.

Though scenarios do get good use in many existing risk management frameworks, their use could be further promoted. Most certainly the risk elephant conversation should further encourage extended scenario use. The spark for the scenario can come from the Board or the risk team, as long as the cascade is purposefully looking for unusual risk areas which aren't currently being discussed.

#### *Risk taxonomy biases*

The common risk category taxonomy breaks down the risk universe in a particular way. This is very suited to risk reporting though less effectual for the identification of risk elephants. A causal taxonomy would make people think about a problem differently.

An inappropriate categorisation may essentially mean that the wrong people are in the room leading to risk conversations being less effective.

#### *Knowledge biases*

Biases come in many forms but in particular, a knowledge bias can move conversations onto areas which are more comfortable for the presenter. To the converse, less comfortable topics might not be discussed. For example, some actuaries may not be comfortable with market risk and this might then be marginalised in the risk conversation.

## 5. References

### **Background on risk taxonomy and risk identification:**

*A common risk classification system for the Actuarial Profession*  
POJ Kelliher et al, *British Actuarial Journal*, Vol 18, part 1.

*Measuring Causal Influences in Operational risk*  
Richard Cech, *The Journal of Operational Risk*

*Creating Value from Risk Events*  
Oliver Wyman on behalf of ORIC

*Cognition: Minding Risks*  
Lloyd's Emerging Risks team

### **Risk culture papers:**

*Risk Culture Under the Microscope – Guidance for Boards*  
Institute of Risk Management

*Guidance on Supervisory Interaction with Financial Institutions on Risk Culture*  
Financial Stability Board