Reinsurance Banana Skins 2019





At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 158 countries with over 250,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com.

PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.







Contents

About this survey	5
Executive summary	6
Preparedness	10
Who said what, by region	11
The Top Ten Banana Skins	12
Other prominent themes	23
Reinsurance: The Top Ten since 2011	24
Appendix: The questionnaire	28

Foreword



Stephen O'Hearn Global Insurance Leader, PwC Germany



Andy Moore
Global Insurance
Risk & Regulatory
Leader, PwC UK

Welcome to Reinsurance Banana Skins 2019, a unique survey of the risks facing the industry, which has been produced by the CFSI in association with PwC.

We're delighted to be continuing our support for this initiative, which began with the publication of the first insurance-wide edition in 2007. This special reinsurance edition provides valuable insights into the risk concerns at the top of the boardroom agenda worldwide and how these perceptions have changed as the market evolves and fresh challenges emerge.

Technology has risen to number one in reinsurers' risk register. For reinsurers, techenabled efficiency gains are freeing up vast amounts of underwriting capacity, which can be refocused on emerging risks and closing the global insurance gap. Technology has also opened up a proliferation of data from new sources such as sensors and Internet of Things connectivity, while ushering in ground-breaking advances in risk analytics. The results are revolutionising risk evaluation, underwriting and prevention. The big risk for reinsurers is being left behind as the industry is transformed. In our experience, the front-runners recognise that talent and access to data are as important as the systems themselves in steering successfully through the transformation. Reinsurers' record of innovation and strong data and analytics capabilities also mean that they have an important role to play in leading and advising the insurance industry as a whole.

Cyber risk is second on the list of banana skins, reflecting both the accumulation of exposures and risk of unforeseen losses in their own and cedents' portfolios on the one side and the potential vulnerabilities within reinsurers' increasingly digitised operations on the other. We're already seeing closer engagement with

cedents and direct insureds as the industry looks to strengthen risk understanding and prevention. There are opportunities to take this further through developments such as the introduction of the kind of consistent risk scoring used in property cover and closer collaboration with digital security companies to help boost threat intelligence. The proactive risk management approach could in turn bolster the protection of reinsurers' own systems, data assets and brand reputation.

The impact of climate change is at number three, a new entry in the top 20 and noticeably higher than for the insurance industry as a whole. From floods to wildfires, both the frequency and severity of reinsurers' losses are mounting as once sporadic events become almost commonplace. Even greater risks lie ahead if climate change continues on its current trajectory. Valuable assets could become worthless. Through modelling of the vulnerabilities and their impact, reinsurers have a central role to play in strengthening prevention and resilience worldwide. The industry can also bring hard numbers to the debate over how to tackle this grave and pressing global threat.

If we look at the top five risks as a whole, what's striking is the extent to which they feed into each other – technology is driving change management risks, for example, just as data regulation and cyber threats are heightening technology risks. This underlines the importance of looking at today's fast-evolving risk landscape in the aggregate.

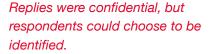
We would like to thank all the participants in the survey for sharing their valuable insights and the CFSI for their perceptive analysis. If you have any feedback or would like to discuss any of the issues raised in more detail, please feel free to get in touch.

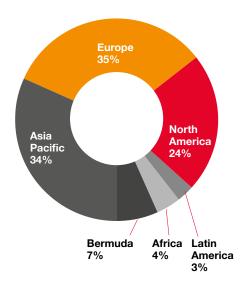
About this survey

Reinsurance Banana Skins
2019 surveys the risks facing the
reinsurance industry in early 2019,
and identifies those that appear most
urgent to practitioners and close
observers of the reinsurance scene
around the world.

It examines responses submitted to Insurance Banana Skins 2019, which was published in June 2019 and examined the global insurance industry – including the life, non-life, composite, reinsurance and broking sectors. In this report we consider the reinsurance industry to be broadly represented by respondents that self-selected into the 'Reinsurance' and 'P&C/Non-life' sectors. It is therefore

based on surveys completed by 320 respondents from 42 territories.¹ The questionnaire (reproduced in the Appendix) was in three parts. In the first, respondents were asked to describe, in their own words, their main concerns about the insurance sector over the next 2-3 years. In the second, they were asked to score a list of potential "Banana Skins", or risks, from one to five, where five was the most severe. In the third, they were asked to rate the preparedness of insurance institutions to handle the risks they saw.





"Tech and cyber dominate reinsurers' risk agenda.

How they manage these risks is critical to the long-term credibility, profitability and capacity for innovation within the industry."

- Stephen O'Hearn - Global Insurance Leader, PwC Germany

Executive summary

This survey identifies the risks, or "Banana Skins", facing the global reinsurance industry in the first half of 2019, as seen by a sample of 320 practitioners and close observers of the scene in 42 countries.

The reinsurance industry shared a number of top risks with the broader insurance response (see chart 1). Most notably, it is dominated by a cluster of three Banana Skins about the industry's ability to deploy new technologies and confront structural change. **Technology** (No. 1) is rooted in concern that the industry is grappling with legacy IT systems as new data sources proliferate. Cyber risk (No. 2) is a particular worry for reinsurers because of the largely unknown liabilities of underwriting cyber policies, as well as the threat of direct cyber-attacks against insurance companies that hold valuable data. At No. 4, **change management** reflects concerns about insurance markets being upended by new technologies, and radical shifts in customer expectations.

In the midst of the top risks was climate change (No. 3), which received its highest ever score. The reinsurance industry expressed much anxiety about the costs of mounting claims from more frequent and severe natural disasters, and the prospect that some risks could become uninsurable. Rounding off the top five was regulation risk, up from No. 8 two years ago, largely due to concerns about a raft of new rules such as GDPR and IFRS 17.

The remainder of the top 10 was comprised mostly of operating risks. At No. 6, investment performance reflected worries that low yields could encourage insurers to take greater investment risks to improve returns. Doubts were raised at No. 7 about the industry's ability to attract and retain human talent, particularly in technical areas. The position of **competition** fell four positions from 2017, to No. 8, reflecting the view that while much disruption is being observed, competition is an opportunity for the industry as well a risk and insurtechs are a partnering opportunity not

a threat. On the other hand, **cost reduction** (up two positions to No. 10) and **reputation risk** (up five positions to No. 13) both rose this year.

Political risk was also slightly higher at No. 9, with protectionism, populism and the spectre of trade wars particular concerns for the reinsurance industry, which has a global reach. However, respondents were more sanguine about the macroeconomic environment (No. 11) and interest rates (No. 14), which were both down significantly from 2017, although they survey was taken early in 2019 before growing concern around current interest rate declines.

In the bottom half of the table governance risks were generally seen as under control, particularly **corporate governance** (No. 18) and **business practices** (No. 15) – though quality of management is more of a concern for the reinsurance industry. The bottom cluster – including **social change** (No. 18), **capital availability** (No. 19) and **Brexit** (No. 20) were largely unchanged from 2017.

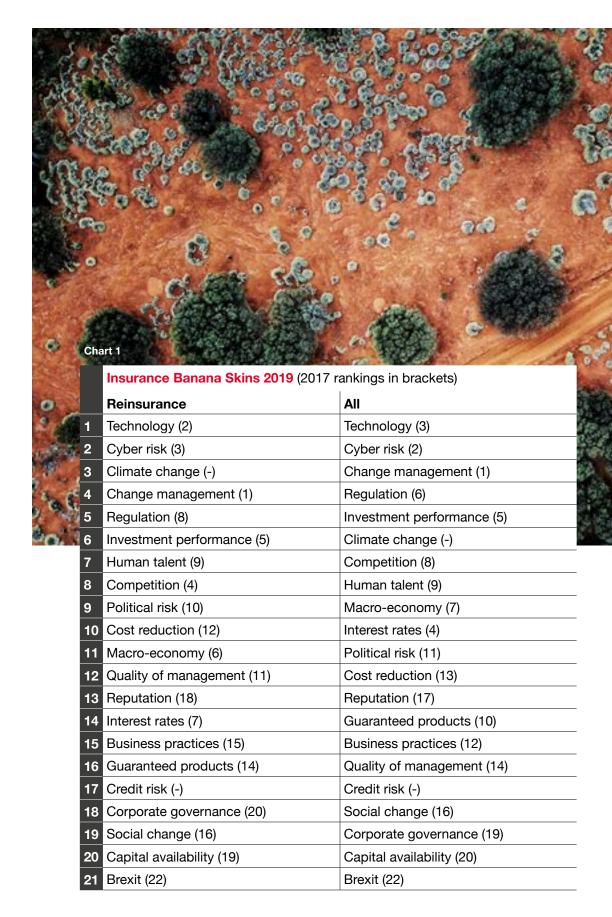
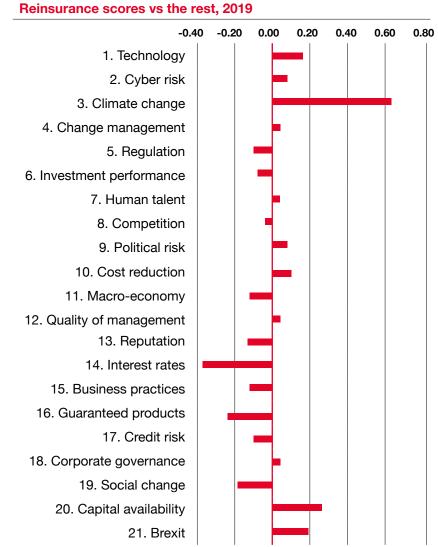




Chart 2



For each Banana Skin, this chart shows the difference in the average score of 5 given by reinsurance respondents versus all other respondents in the Insurance Banana Skins report. A positive score indicates higher reinsurance concern.

Chart 2 illustrates the differences between how Banana Skins were scored by reinsurance respondents, versus their scoring by broking, life, composite and other respondents. The main findings are:

- The reinsurance industry placed a great deal more emphasis on the threat posed by climate change. In fact, the score it assigned to this Banana Skin (3.86) was higher than the score of any Banana Skin ranked by the nonreinsurance response.
- The risks at the top of the table technology and cyber risk - were considered even more urgent within the reinsurance industry than outside it. However, regulation and investment performance were seen as slightly less severe.
- Reinsurers scored political risk a little higher than average, and also saw Brexit as a bigger concern – though it was still bottom of the table.
- The non-reinsurance response was much more concerned about the macro-economic climate – in particular, interest rates and the related risks around guaranteed products. For example, life insurers had interest rates at No. 6.
- The threats posed by credit risk and social change were generally downplayed by reinsurance respondents, ranking low down the table and scoring lower than the wider response.
- Though it was second from last, a markedly higher than average score was given to capital availability, reflecting some level of concern about excess capacity and capital piling in, driving down margins.
- Elsewhere, the main differences were in cost reduction (higher for reinsurance) and reputation and business practices (lower for reinsurance).

Preparedness

We asked reinsurance respondents how well prepared they thought the industry was to handle the risks they identified.

On a scale of 1 (poorly) to 5 (well), they gave an average response of 3.17, which is substantially higher than the

average response of 3.02 in 2017. This also indicates a higher degree of preparedness than the broader insurance industry, which gave an average response of 3.11 this year (up from 3.02 in 2017).

A breakdown by region and sector is given below (2017 score in brackets):

Preparedness by region	,	Preparedness by sector			
Africa	3.38 (-)	Reinsurance & P&C	3.17 (3.02)		
Asia Pacific	3.19 (3.06)	Composite	3.08 (3.10)		
Europe	3.19 (3.02)	Life	3.05 (3.04)		
North America	3.11 (2.97)	Broking/Intermediary	2.90 (2.88)		
Latin America	2.91 (2.80)				

Of the territories we surveyed with 10 or more responses, the most prepared were Turkey (3.58), South Africa (3.40), and Singapore (3.39). The least prepared were the US (3.09) and Canada (3.00).

Views on preparedness:

3/5:

"It is dependent upon whether the areas of risk are areas where insurers can directly affect the outcome, e.g. costs and products, or whether they are out of their direct control, e.g. climate change."

Senior vice president, reinsurance company, Canada

3/5:

"A lot more work is needed. We are a mature industry that is slow to respond to change. That has to change."

Chief business development officer, reinsurance company, US

3/5:

"The industry will trundle along until hit with a shock. Those with resilient models will recover and thrive."

Chief technical officer, P&C insurer, UK

5/5:

"I think the big insurers are very well aware of the market conditions and the risks they face and are investing in the right areas to face those risks"

Chief executive, P&C insurer, Singapore

Who said what, by region

A breakdown of the results by region shows strong common concern around technology risk and the industry's ability to manage it, against a background of rising cyber risk. Climate change is also prominent in every region. Higher than average Banana Skins in particular regions include reputation risk in Asia Pacific, and human talent in North America and the Caribbean.

Asia Pacific

Cyber risk			
Technology			
Climate change			
Change management			
Reputation			
Competition			
Quality of management			
Cost reduction			
Regulation			
Investment performance			

The reinsurance sector in the Asia Pacific region shared global concerns about technology and associated cyber risks, but two points made it distinctive: one was the high place of climate change following a series of natural catastrophes in the region the other was reputation risk due to well-publicised cases of poor conduct. Management risks also ranked high, often because of poor understanding of the challenges posed by change. Striking was the absence from the top ten of major concerns about the macroeconomic environment and the prospect for interest rates.

Europe

1	Technology
2	Cyber risk
3	Change management
4	Climate change
5	Investment performance
6	Macro-economy
7	Competition
8	Political risk
9	Cost reduction
10	Interest rates

The challenges of technological change, along with associated cyber risks, topped the European response, together with concerns about the industry's ability to handle a difficult period of transformation. Climate change also featured high on the list. Europe was the only region where macro-economic risk made the top ten mainly due to growing uncertainty. This helped push up concern about investment performance. Political risk featured in the top ten as a consequence of both Brexit and Trump-related effects.

North America and Caribbean

1 Tachnology

1	recnnology
2	Climate change
3	Human talent
4	Cyber risk
5	Change management
6	Regulation
7	Political risk
8	Investment performance
9	Competition
10	Cost reduction
	-

The impact of new technology on the insurance market was the chief concern of respondents from the North American and Caribbean regions, in line with the global response. There was also scepticism about the industry's ability to manage it successfully. The response was distinctive for the high scores given to the risks associated with climate change and to human resources. Regulation also featured higher as a concern than in other regions. However macroeconomic risks did not make the top ten.



Technology (3.97)

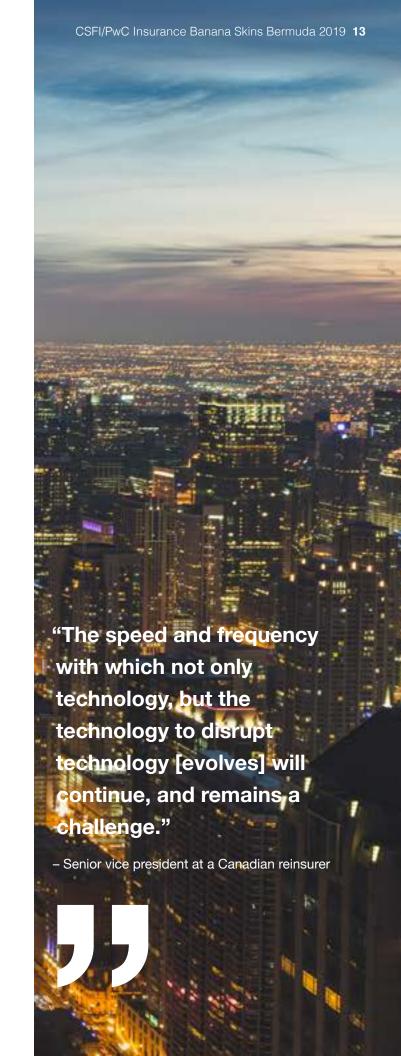
Ranked No.1 in IBS 19, with a score of 3.86
Ranked No.2 for reinsurance in 2017, with a score of 3.86

The reinsurance sector shared the broader industry's top concern about the pressing need for business and technology modernisation. In fact, it gave it an even higher score out of five, underlining the importance of this Banana Skin.

Comments focused on the difficulty of updating legacy systems, the costs, and uncertainty around which technological solutions to opt for. "All manner of legacy systems [are] a drag on expenses and slowing down innovative behaviour", said the chief financial officer of a UK-based underwriter.

Some respondents made the point that the sector is making technology modernisation a priority. The managing director at a Belgian insurer said: "most insurance companies are aware of the need to adapt the way of working and to deal with digital and Al solutions", while a chief risk officer in the UK said: "legacy technology challenges [are] a known issue that gets attention, although low returns and cost reductions make it harder to attack fast".

On a more damning note, the chief financial officer of an insurer in Luxembourg said: "Modernisation requires significant investments with long term returns. Many companies are short-term driven and have no appetite to overhaul technology infrastructure. A reinsurer in Canada said that when it comes to technology many insurers are "dripping with hubris".



2 Cyber risk (3.92)

Ranked No.2 in IBS 19, with a score of 3.80 Ranked No.3 for reinsurance in 2017, with a score of 3.79

Cyber risk is seen as an exceedingly urgent risk for reinsurers, especially in the Asia Pacific region, where it ranked No. 1.

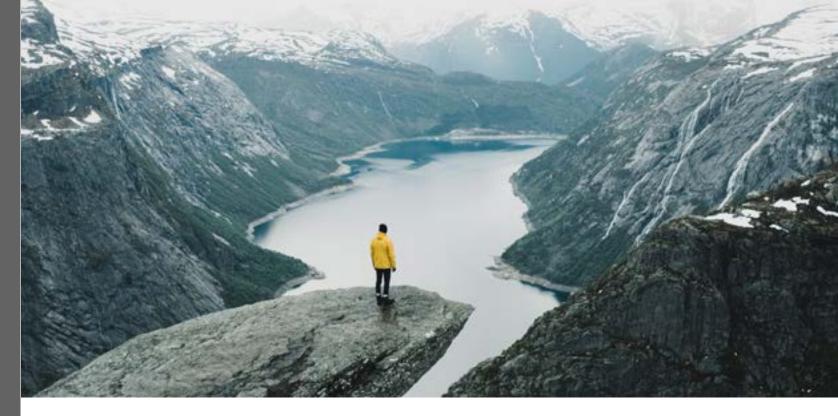
In particular, comments from this sector emphasised the potential costs of underwriting cyber insurance more strongly that the wider insurance industry. "We can protect ourselves as insurance companies. We cannot prevent extensively our customers from being hit by cybercrime. As such we can be severely hit by loss of customers who do not recover from cybercrimes", said Christoffel van Riet, board member & chief operating officer at Klaverblad Verzekeringen in The Netherlands. The chief executive of a reinsurance company in the UK, said: "the unknown exposure, either accepted willingly or passively, will affect the industry", while a respondent in the UK spoke of "a huge protection gap".

We also received several comments about direct attacks by cybercriminals on the industry, which were being observed "on a daily basis". A respondent in Canada said: "Insurance is not taking this seriously enough; the insurance industry is due for a wide scale breach". A chief actuary in New Zealand warned of: "Large reputational risk if there is a failure to keep client information safe. Cybercrime that sees higher levels of identity theft may be more concerning in the short term."

"[A main risk to the industry is] cyber accumulation from an insurance perspective.

Accumulations for reinsurers are unknown where exclusionary language does not exist."

- Chief Risk Officer, P&C insurer, UK



3 Climate change (3.86)

Ranked No.6 in IBS 19, with a score of 3.45 Ranked No.3 for reinsurance in 2017, with a score of 3.79

Climate change is seen to pose a major threat to reinsurance business models – much more so than to the life side of the industry. "It's absolutely the number one major risk", said an actuary in the Netherlands. "The risk is of increasing natural disasters and crippling claims charges, but also the risk of failing to provide good solutions or coverage against these risks (massive reputational risk)."

EeLain Ong, chief financial officer at DHL Insurance in Germany, said: "Climate change has been shown to trigger unprecedentedly heavy damage through increased severity and frequency of natcat events. This will continue to be a growing issue unless greenhouse gases are severely reduced".

We received many comments on the impact of climate change on the pricing of natural catastrophe risk, and the likelihood that some risks might not be insurable in the future. Respondents warned that: "the frequency and severity of weather events will cause revaluation of accepted risks or specific exclusions", and "greater volatility will have to be paid for by customers".

"Many P&C insurers are not having adequate reinsurance protection as they want to reduce the cost of protection. This may result in sizeable financial impact to their capital."

- Chief executive, reinsurance company, China



Ranked No.3 in IBS 19, with a score of 3.76 Ranked No.1 for reinsurance in 2017, with a score of 3.87

The risk that inadequate response to change will damage insurers was scored slightly lower by reinsurance respondents than the broader industry, but it is still a major consideration in the face of significant disruption. A respondent in Canada said: "This is probably one of the most significant risks given the speed and breadth of change in the industry".

We received a number of comments on technologies that are transforming insurance markets, such as advanced data analytics techniques, the Internet of Things (IoT), and driverless cars. A respondent at a reinsurance company in New Zealand said: "Rising insurance premiums in New Zealand, based on greater use of science based individual risk modelling and less use of cross subsidization, [could lead to] to unaffordability of insurance for assets highly exposed to natural perils". Others noted that the growth of autonomous vehicles and trends such as shared ownership will force a strategic rethink of the insurance product proposition.

Several respondents observed a conspicuous shift in customer expectations, especially concerning the use of modern distribution channels. "Customers now are more demanding – they prefer good service, accessibility and low price at the same time. Inability to respond to these needs may result to losing business/clients", said the director of a P&C insurer in the Philippines. On a more optimistic note, the chief executive of a Spanish reinsurer said: "I am confident that the industry will respond, but the response will be heterogeneous".

["A main risk is] adapting to the changing marketplace as the buyers change their ways of evaluating and purchasing insurance and reinsurance. The impact of direct internet purchasing, bypassing brokers and agents as well as nontraditional companies entering the marketplace, may provide unforeseen competition."

 Audit committee chairman, P&C insurer, Bermuda



S Regulation (3.54)

Ranked No.4 in IBS 19, with a score of 3.62 Ranked No.8 for reinsurance in 2017, with a score of 3.42

The reinsurance sector ranked regulation as No. 5 among its risks, slightly lower than the global ranking of No. 4. There was a significant drop in score from the top four Banana Skins.

The comments focused on the impact of a raft of new regulations such as IFRS 17, Solvency 2 and – in Australia – the follow-through from the Royal Commission on Financial Services, all of which were expected to raise costs and increase compliance risk without necessarily adding to safety. A senior UK-based reinsurer commented: "Over-regulation continues to be a huge burden on the expense through cost and management time".

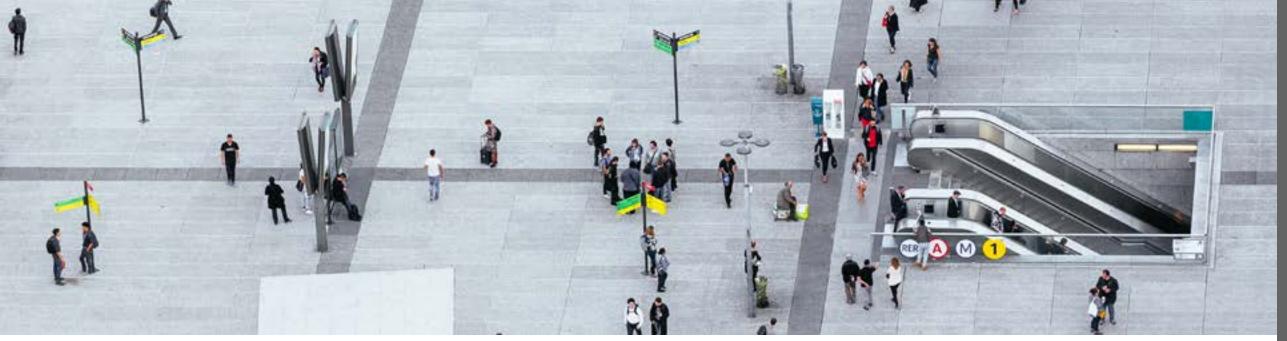
Specific issues raised on the reinsurance front included regulatory fragmentation (i.e. differences or inconsistencies in the global marketplace, as well as within federal markets). A Canadian reinsurer said: "With insurance and reinsurance being a global business for many groups operating around the world, regulatory harmonization is not only important but crucial. However we do see regulatory splintering occurring that has the potential to dislocate and fragment parts of the industry."

William Fischer, chief executive of Harrington Reinsurance in Bermuda, said that regulators and rating agencies needed to be educated on "how to look through product descriptions to volatility profiles when they apply capital charges." Other sources of regulatory concern for reinsurers in Bermuda included blacklisting as an offshore centre by the EU and US proposals to extend the tax reach to the island.

But there was also support for regulatory progress. A Bermuda based reinsurer said: "While regulations have become burdensome and onerous, this is a necessary evil for the protection of the industry." "IFRS 17: the many and important assumptions used to build the cash flow models can be inconsistent across the market, confusing regulators, reinsurers and investors."

- Chief financial officer, P&C insurer, Brazil





Investment performance (3.49)

Ranked No.5 in IBS 19, with a score of 3.52 Ranked No.5 for reinsurance in 2017, with a score of 3.55

The reinsurance sector scored this risk slightly lower than the global average, where it ranked No. 5.

The responses threw up two main causes of concern. The first was that global political and economic uncertainty would depress investment markets and hit insurance company profitability. A Bermuda reinsurer feared there would be "a recessionary event in the US combined with continued political upheaval globally [producing] weak investment returns."

The second was that poor returns in existing market conditions were pushing insurers to take on more risk. Pedro Herrera Nogales, chief executive of Nacional de Reaseguros in Spain said that "the lack of profitability on traditional insurance industry assets and poor technical margins, [create a] need to invest in higher yield assets, in exchange for an increase in global portfolio risk exposure".

However, some respondents felt that good could come out of this if it forced insurers to focus on underwriting profitability. A UK reinsurer said: "It is clearly harder to achieve significant investment returns – which may lead to riskier investment strategies being deployed. However poor investment returns should continue to encourage underwriting focused on underwriting results."

"the lack of profitability on traditional insurance industry assets and poor technical margins, [create a] need to invest in higher yield assets, in exchange for an increase in global portfolio risk exposure."

 Pedro Herrera Nogales, CEO of Nacional de Reaseguros in Spain



Human talent (3.46)

Ranked No.8 in IBS 19, with a score of 3.44
Ranked No.9 for reinsurance in 2017, with a score of 3.35

The reinsurance sector scored this Banana Skin very similarly to the wider insurance response. The key question is whether it is attractive enough to attract and retain the talent it requires, particularly in technical areas.

"Insurers are highly bureaucratic institutions. Personal initiative is being stifled. The industry attracts people who are low on creativity and initiative", said a division head at a reinsurance company in the US. A senior vice president at a Canadian insurer said: "Talent is being pulled to other industries that require similar skills (such as data analytics").

Some respondents worried that the industry is too backward-looking when identifying the type of skills it needs. A chief actuary at an insurer in New Zealand said: "The risk may be as much in failing to identify the change in talent required to operate in the changing environment". Taking a more optimistic view, the chief risk officer at a UK-based P&C company saw: "Opportunity for a new generation of leaders and underwriters to emerge who can use and deploy new technology and techniques"

"The world is under threat from potentially irreversible environmental changes. Through modelling and advice, reinsurers have a key role to play in global efforts to address the threats, reverse the impact and boost understanding, protection and resilience worldwide."

 Andy Moore, Global Insurance Risk & Regulatory Leader, PwC UK

> Learn more

"Underwriting and analytical skills remain important and are in short supply.

Data and technology skills are critical, and insurers are competing with sexier sectors for talent."

William McDonnell, Group chief risk officer,
 RSA Insurance Group, UK



8 Competition (3.43)

Ranked No.7 in IBS 19, with a score of 3.44 Ranked No.4 for reinsurance in 2017, with a score of 3.60

Competition was seen by the reinsurance sector as both an opportunity and a threat, largely depending on whose perspective it is viewed from. An independent director at an Australian reinsurer said: "It is a high risk to existing players but not to the industry", while others noted that acquisitions and partnerships will likely protect many incumbents. "The ecosystem will work itself out. Competitors can be partners", said a respondent in Canada. On the other hand, the chief risk officer at a Swiss reinsurer said: "Increased rates may make alternative investments more attractive for third party capital, reducing competition within the reinsurance space".

There was some debate about whether the main disruptive force is coming from inside or outside the traditional insurance industry. "I see the evolution of insurtech to emerge from existing players rather than as a disruptive force from outside the industry", said the chief financial officer at a reinsurance company. Others, however, focused on competition from internet giants with access to vast stores of consumer data.

Several respondents downplayed the disruption posed by insurtech start-ups on the wider industry, questioning whether business models were viable and suggesting they would need to partner with incumbents to survive. On the other hand, the chief risk officer at a P&C insurer in South Africa said: "The risks [to incumbents] include losing part of the business to fintechs, loss of margin, loss of market share, and lack of responsiveness to new market trends. While most traditional insurers are aware of the fintech revolution, most have not employed fintech in their core strategy. Incumbent insurers face the possibility of losing out significantly in the emerging insurance arena".

"New actors from other industries, more advanced in the digital transformation process, could become unexpected new competitors in the insurance market."

- Finance director, P&C insurer, Argentina



Political risk (3.41)

Ranked No.11 in IBS 19, with a score of 3.36 Ranked No.10 for reinsurance in 2017, with a score of 3.31

The reinsurance sector gave a higher score to political risk than the global average, where it ranked No. 11.

This was largely because reinsurance, with its global reach, feels especially vulnerable to political tensions of the kind that currently aggravate international relations. Many reinsurance respondents referred to trade wars and sanctions as a concern, as well as "politically motivated measures". A risk manager at an insurer in the Netherlands said: "Protectionism and populism will decrease stability and increase chance of trade conflicts. A shrinking economy will prompt more P&C claims". Brexit was also viewed as a constituent of political risk.

One respondent said that countries "are struggling between protecting their domestic markets and allowing access to a wider range of insurance solutions for their people and businesses."

"Protectionism has a particularly negative effect on reinsurance which tends to be operated on a global or at least regional scale."

 Marcel Omar Papp, Director, Swiss Re, Malaysia



Cost reduction (3.38)

Ranked No.12 in IBS 19, with a score of 3.32 Ranked No.12 for reinsurance in 2017, with a score of 3.29

The challenge of cost reduction ranked higher as a risk for the reinsurance sector than the global average where it was No. 12.

The need for cost reduction was not challenged in the responses, though the industry's ability to achieve it in the face of rising technology and regulatory costs was widely questioned. A chief financial officer in Singapore said: "There are very limited ways to make further cost reductions. Most insurers are encumbered by existing legacy IT systems, and it costs a lot more to try to build something on top of it." Some said the cost reduction issue was especially applicable to the Lloyd's market.

Cost reduction was said by many to be an important driver behind consolidation in the reinsurance sector, and more mergers/acquisitions were predicted.

"[There is a] lack of recognition that the reinsurance market is vulnerable despite the seemingly strong capitalisation level historically. Recent years have seen multiple large CAT **losses in North** the market has not adequately reacted in pricing and terms and conditions adjustments."

Singapore





Other prominent themes

A number of broad industry themes emerged from the reinsurance responses. These included:

Consolidation. Many respondents expected the process of consolidation in the sector to continue, even accelerate, under the pressures of cost and competition. The need to bring down general and administrative (G&A) expenses was a matter of "survival of those with scale", as one put it. The pressures of competition were seen to be coming more from the drive for market share, often at the expense of profitability, than from industry change. The pressures from insurtech were described as less intense than those facing insurers in the retail market.

Capacity. The problems of excess capacity featured in many areas of response, including competition, pricing, risk of volatility and vulnerability to changes in interest rates. These were generally traced back to the low interest rate/low yield environment, and opportunistic capital. Respondents commented that these problems were hampering the healthy growth of the sector, and might affect its ability to adapt to changing industry circumstances. A respondent at a reinsurer in New Zealand said: "Too much capital with poor results may lead to a sudden withdrawal which may harm the industry. A bit less but more dedicated long term capital leads to better long term health."

Globalisation. Many responses indicated that reinsurers see themselves as part of a globalised market with business and competition operating with less regard for national borders than retail insurers. This created a stronger focus on concerns such as level playing fields in regulation and tax, the threat of protectionism, blacklisting of financial centres etc.

... But macroeconomic risks scored lower. The reinsurance industry was less concerned about macroeconomic conditions - and in particular, interest rates – than other sub-sectors of the insurance industry. The chief financial officer of a reinsurance company said: "The macroeconomy threatens prospect for premium growth and earnings yield but will likely result in increased investment in insurance space as risk or recession grows due to its lower correlation to broader equity markets... Insurers have managed well through recent sustained period of low interest rates". However, another Bermuda-based respondent said that: "Traditional markets may continue to be impacted by alternative structures if low interest rates persist".

Reinsurance: The Top Ten since 2011

	2011		2013		2015
1	Regulation	1	Natural catastrophes	1	Cyber risk
2	Natural catastrophes	2	Regulation	2	Regulation
3	Macro-economic trends	3	Investment performance	3	Natural catastrophes
4	Capital	4	Climate change	4	Change management
5	Investment performance	5	Macro-economy	5	Macro-economy
6	Talent	6	Quality of risk management	6	Interest rates
7	Corporate governance	7	Actuarial assumptions	7	Distribution channels
8	Actuarial assumptions	8	Business practices	8	Market conditions
9	Management quality	9	Long tail liabilities	9	Investment performance
10	Long tail liabilities	10	Quality of management	10	Guaranteed products

	2017	2019
1	Change management 1	Technology
2	Technology 2	Cyber risk
3	Cyber risk 3	Climate change
4	Competition 4	Change management
5	Investment performance 5	Regulation
6	Macro-economy 6	Investment performance
7	Interest rates 7	Human talent
8	Regulation 8	Competition
9	Human talent 9	Political risk
10	Political interference 10	Cost reduction

Credit risk:

"There is no longer any AAA counterparty credit risk from a reinsurance company perspective, so all are impacted."

President, Broker, USA



If Global Warming increases the number of disasters, reinsurance pricing could produce shocks for the insurance industry."

Consultant, India

Competition:

What are other sectors saying about the reinsurance sector?

"Reinsurance companies [are] working with huge companies like Amazon, Google, Facebook, etc. Insurers will become obsolete."

Chief executive, Composite insurer, Netherlands

Concentration:

"[There is] concentration of reinsurance risk in a few global players. Are they too big to fail?"

Head of Taxation, Composite insurer, New Zealand

Some risks come and go; others are hardy perennials, as shown by **Chart 3**, the Top Ten Banana Skins in the reinsurance sector since 2011.

Chart 4 shows how the position of each Banana Skin we surveyed this year has changed in each of the surveys since 2011. Red represents a higher ranking; blue a lower ranking (i.e. in the top half); blue a lower ranking (i.e. in the bottom half).

Like the broader insurance industry, the emphasis of reinsurers has shifted emphatically to technology risks in the past two surveys – the necessity of upgrading antiquated and fragmented legacy IT systems, and rapid technology-driven change in insurance markets. Cyber risk emerged as a priority a little earlier, topping the survey for the first (and so far, only) time in 2015.

Regulation has been consistently high-ranking throughout – though it has topped just one of the reinsurance rankings since 2011, compared to three of the overall Insurance Banana Skins surveys. Investment performance has, with the exception of 2015, always placed in the top cluster, but not with quite the same urgency as other subsectors of the insurance industry.

While the position of climate change has varied, it has never before scored as highly as this year. Note, however, that the risk of natural catastrophes was in the top three from 2011-2015 (including No. 1 in 2013), showing that the mounting economic destructiveness of disastrous events has been an urgent concern for many years for the reinsurance industry.

Other Banana Skins have emerged recently as significant threats. The risk of failing to attract and retain suitable human talent has been up and down,

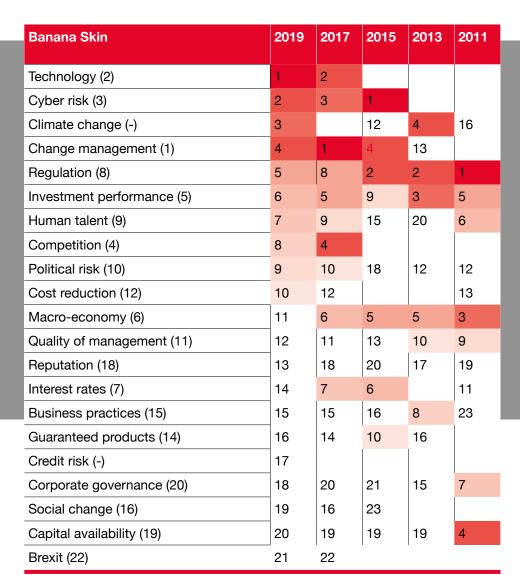
but looks once again to be climbing. The challenge from competition and disruption, introduced to this survey two years ago, has not ranked below No. 8. Reputation risk, usually among the bottom few, has gone up considerably this year.

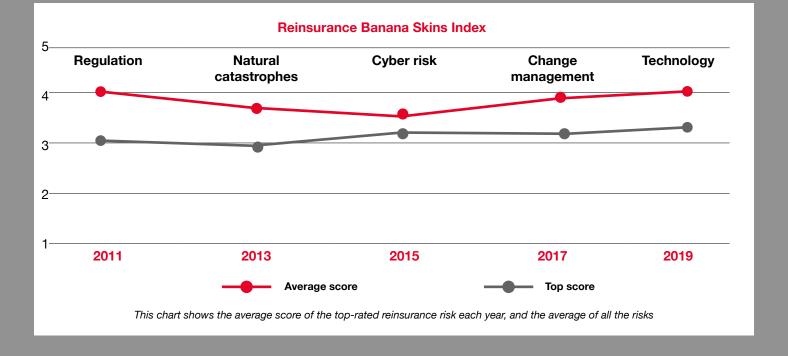
On the other hand, macroeconomic risk – a major theme in the reinsurance response in previous years – has time fallen out of the top ten for the first. Concern about interest rates has also dropped significantly from two years ago – while the related risk around

guaranteed products, which breached the top ten in 2015, have since receded.

Capital availability was ranked No. 4 back in 2011, but has since been relegated to a lower order risk – though excess capacity is a theme that was emergent in reinsurance responses this year. Governance risks have also consistently been in the bottom half of the table. The highest ranking of these have been about the quality of management

and risk management, but corporate governance and business practices have generally been among the bottom cluster of Banana Skins – perhaps suggesting some complacency. Brexit, a factor during out last two surveys, has ranked bottom each time, suggesting that insurance is still overwhelmingly a domestic business.





In **Chart 5,** the blue line shows the average score given by reinsurance industry respondents to the basket of risks in our questionnaire. The red line shows the risk which achieved the highest score. This year both the average and top scores are higher than over the past eight years – signifying that the overall tone of the responses this year is the most negative we have seen since before 2011.

Appendix:

The questionnaire

Biennially, we ask senior insurers and close observers of the financial scene to describe their main concerns about the insurance industry as they look ahead. We'd be very grateful if you would take a few minutes to complete this latest survey for us

Question 1. Who you are:

- Name
- Position
- Institution
- Country
- Which part of the insurance market do you represent?
- Broking/intermediary
- Life
- P&C/Non-life
- Composite
- Reinsurance
- Other (please state)
- Are you willing to be quoted by name?

Question 2.

Please describe what you see as the main risks facing the insurance industry over the next 2-3 years.

Question 3.

Below are risks in the insurance industry that have been attracting attention. Please score them on a scale of 1 to 5 where, in your opinion, 1 is a low risk to insurers and 5 is a high risk. Use the column on the right to add comments. Add more risks at the bottom if you wish.

Economic environment

- 1. Macro-economy: To what extent does the current macro-economic environment present a threat to the insurance sector?
- 2. Interest rates: How large is the risk that insurers will be damaged by movements or lack of movement in interest rates?

3. Credit Risk: To what extent does the risk of credit deterioration present a threat to the insurance sector?

Public environment

- 4. Political risk: How great is the risk that political pressures will damage insurers, e.g. through protectionism, populism, interference in business practices?
- 5. Brexit: How great is the risk that the UK's decision to leave the EU will harm the international insurance market?
- 6. Regulation: To what extent could the current wave of new regulation on conduct of business and capital requirements have damaging effects on insurers?
- 7. Reputation: How severe is the risk that the industry will be damaged by poor reputation or by social media?
- 8. Social change: How great is the risk that insurers will fail to meet social pressures such as greater longevity and the demand for health care/ pensions products etc.?

Operating risk

- 9. Capital availability: To what extent is the current surplus of capital a risk to insurance providers?
- 10. Investment performance: What is the risk that insurers will be harmed by poor investment performance?
- 11. Change management: How likely is it that insurers will be damaged by inadequate responses to change, e.g. in markets, products, customer demands, distribution?.
- 12. Cost reduction: What is the risk that insurers will fail to achieve the necessary cost reductions to remain competitive?

- 13. Technology: What is the risk that the insurance industry will fail to address technology modernisation effectively?
 - 14. Competition: What is the risk that the insurance industry will fail to meet the challenge from disruptive competitors such as the Insurtech industry?
 - 15. Guaranteed products: With the low interest rate environment persisting, how much risk is there to insurers' capital and solvency from guarantees in products?
 - 16. Human talent: How likely is it that insurers will have difficulty attracting and retaining talent in the present environment?
 - 17. Cyber risk: How severe is the threat of cybercrime to the insurance industry?
 - 18. Climate change. How severe a risk do you think climate change poses to the insurance industry?

Governance

- 19. Corporate governance: How likely is it that weakness at board level will lead to poor oversight and control of insurance companies?
- 20. Quality of management: How likely is it that insurance companies will be harmed by poor business and risk management?
- 21. Business practices: How high is the risk that insurers will incur losses as a result of poor sales and other conduct of business practices?

Please add other risks that you feel are significant to the insurance industry.

Question 4.

How well prepared do you think insurers are to handle the main risks you identified in this survey, where 1 = poorly and 5 = well? Please add comments if you wish.

Thank you



Our global reinsurance expertise:

- Risk & Regulation
- Customer & Strategy
- Operational Transformation
- Productivity

- M&A
- · Run-off
- IFRS 17 and insurance modernization
- ·ILS



Stephen O'Hearn
Global Insurance Leader,
Partner, PwC Germany
+49 (89) 3800 69688
stephen.t.ohearn@pwc.com



Andy Moore,
Global Insurance Risk &
Regulatory Leader, PwC UK
Tel: +44 (0)7702 677 654
andy.moore@pwc.com



Heiko Röhrig
Partner, Financial Services,
PwC Germany
+49 (89) 5790 5237
heiko.roehrig@pwc.com



Paul Delbridge
Partner, London Market
Leader, PwC UK
+44 (0) 207 212 3085
paul.p.delbridge@pwc.com



Roy Clark
Partner, PwC Switzerland
+41 (79) 885 6722
roy.c.clark@pwc.com



Arthur Wightman
Territory and Insurance
Leader, PwC Bermuda
+1 (441) 299 7127
arthur.wightman@pwc.com



Gero Matouschek
Partner, PwC Germany
+ 49 1516 732 6502
gero.matouschek@
strategyand.de.pwc.com



Jimmy Zou
Partner, PwC France
Financial Services
Consulting & Insurance
Market Lead Partner
+33 1 5657 7213
jimmy.zou@pwc.com