Insurance

Capitalising on opportunity: A time of change*

The Bermuda Market Survey

Contents

Introduction

Welcome to the 1st Bermuda Market Survey – ‘Capitalising on opportunity: A time of change’.

The global property-casualty industry produced strong underwriting results in 2006, benefiting in particular from a very benign year of natural catastrophes. In the autumn of 2006, PricewaterhouseCoopers[1] surveyed a cross section of insurance and reinsurance companies (encompassing a substantial proportion of the Bermuda market’s 2006 capacity) in order to provide a unique insight into how they are addressing key operational challenges. The results reveal a high degree of consensus regarding the key issues facing survey participants, with most CEOs listing such factors as achieving improvements in underwriting performance, institutionalising effective cycle management, effective monitoring of aggregations of exposure, optimisation of reinsurance spend and protecting and effectively allocating capital among their top priorities. Admittedly, none of these issues are straightforward, but how effective will companies be in realising these objectives? Few would disagree that 2006 was a period of great opportunity in which many capitalised to the fullest extent, but following the losses of 2004 and 2005 many feel that only an adverse hurricane season or a cycle downturn will realistically test the effectiveness and sustainability of the changes companies have made as a result.

The research effort for this report comprised two dimensions:

- In-depth questionnaires from participants who, in combination, provide in excess of 75% of underwriting capacity to the Bermuda insurance and reinsurance market (the ‘Bermuda Market’). Participants were selected to reflect a broad spectrum of capitalisation, product classes, insurance and reinsurance writers, independent businesses and public (and subsidiary) organisations.
- Face-to-face interviews with executives.

The survey findings and interviews were further supplemented by significant desk research.

We are confident that you will find this report thought-provoking and insightful. Copies of this survey, along with our other publications are all available free of charge from our website (www.pwc.com/bm).

If you would like to discuss any of the issues raised in this report, please speak to your usual contact at PricewaterhouseCoopers or one of the editorial board members listed at the end of this briefing. We would also appreciate your feedback on this report as it helps us to ensure that we are addressing the issues you are focussing on and would welcome suggested topics of analysis for future surveys.

1 In this publication, unless the context requires otherwise, the term ‘PricewaterhouseCoopers’ refers to the network of member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.

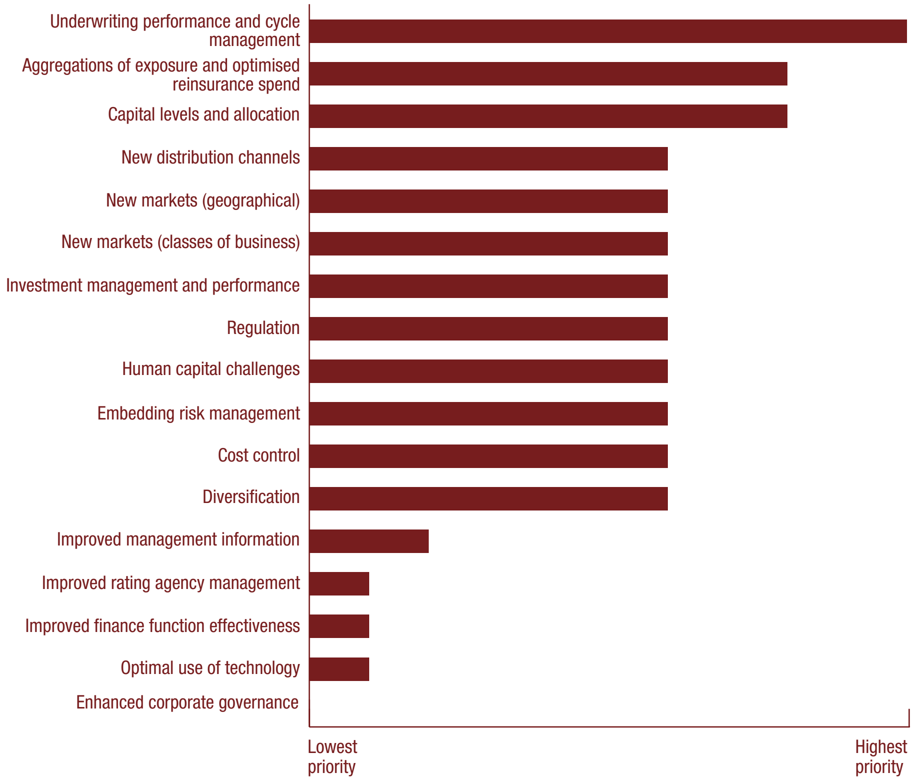
Executive summary

With capital providers and shareholders looking for a strong response to the heavy losses sustained in 2005, we asked CEOs to highlight and rank the top five issues on their agendas in 2006.

Key issues and operational drivers in the Bermuda Market

Record earnings in 2006 resulting from a combination of factors including strong underwriting performance, a light catastrophe load and solid investment income reflected a return to form for many participants following significant capital depletion in 2005. CEOs, therefore, are looking to the future and are focussing on opportunities for growth and improved cycle management. The lessons learnt from the 2005 hurricanes, Katrina, Rita and Wilma ('KRW'), however, still resonate with participants and their capital providers, and this survey unsurprisingly found that most CEOs are particularly focussed on improving underwriting performance, ensuring effective aggregation and monitoring of exposure, optimising reinsurance coverage, and protecting and effectively allocating capital (see Figure 1).

Figure 1 Please indicate the top 5 issues on your CEO's agenda in 2006.



Source: PricewaterhouseCoopers

The Top Five…

Underwriting performance and cycle management

A combination of factors, including nominal catastrophe losses, heightened competition and excess capacity in some sectors highlight that, despite a record year, views are that 2007 will reflect a general softening in prices except in some fairly specific natural disaster prone areas. Top-line growth was not always possible for participants to achieve despite first-rate underwriting profitability. Harder markets tend to mask weaknesses and flatter results. The acid test will come with the cycle downturn. This survey seeks to identify what companies are doing to manage a cycle downturn beyond maintaining 'underwriting discipline'.

Aggregations of exposure and optimisation of reinsurance spend

Whilst the magnitude of KRW losses surpassed anything seen before, perhaps what was more interesting for market observers was the apparent surprise some companies seemed to show at the exposures ultimately hitting their books.
As scientists predict that higher sea surface temperatures are likely to increase the frequency and severity of storms, and that 2006 was in fact more anomalous than the previous few years, reinsurers are re-evaluating their methods of assessing exposure to catastrophes. Participants are no different and this survey highlights in more detail some of the approaches being deployed to protect capital.

2006 also proved an interesting year for the capital markets which provided various alternative opportunities for insurers to offload (primarily catastrophe) risk from their balance sheets, particularly in light of elevated reinsurance costs and depleted capacity in certain zones. Catastrophe bonds and the emergence of the 'sidecar' provided attractive avenues for certain participants. Our survey has revealed several motivations for ceding to sidecars, with executives citing cost effectiveness, capital charge relief, risk reduction and rapid and opportunistic capacity expansion as the most ubiquitous.

Capital levels and allocation

The Bermuda Market demonstrated unprecedented success in attracting significant capital in the latter stages of 2005 and early part of 2006 in the form of existing companies replenishing depleted balance sheets, the 'class of 2005' start-up companies, Lloyd's entrants and approximately $3bn for the sidecars. Following such a 'surge', however, capital management is a topic on the agenda of most CEOs surveyed and 2007 could highlight a return of capital that companies are unable to deploy profitably. For example, as various modelling firms are making changes to their models, most notably to include improved data on 'storm surge' and 'demand surge', companies look increasingly likely to pull back from certain catastrophe zones. Participants are paying close attention to the various modelling changes being contemplated or implemented by the rating agencies and the impacts these have on capital charges. For example, Standard and Poor's has revised the way it applies capital charges relating to significant natural disasters.

New distribution channels

Participants highlighted the sourcing of new distribution channels as a key priority, however, the survey's results show only single digit percentage changes in business sourced from the 'Big 4' of Marsh, Aon, Benfield and Willis, and an overall reduction in business sourced from other brokers. There was a single digit increase in business sourced directly. Various discussions with participants highlighted that while they were keen to explore new distribution channels the practical application was proving harder to deploy.

New markets

Number five of the top five issues on CEO's agendas in 2006 was the penetration of new markets, both geographically and by business class. The survey indicates, however, that geographical markets was more the priority of a smaller number of participants who were considering opportunities in London, US, Continental Europe and Dublin in almost equal numbers, than the preserve of the majority who asserted that they were not considering opportunities in any of these areas. The survey results indicate that both the established participants included within the sample, as well as the new start-ups, were seeking new ‘other lines of business’ opportunities.

…and The Rest!

As might be expected, human capital challenges were high on the agenda and fell just outside the top five issues. A finite supply of local talent has resulted in work permit and term limit issues being faced by almost all participants and, in particular, the new start-ups. Certain expense ratios have faltered under the weight of re-location and local allowance packages and bonus allocations and the survey has found that participants have discovered non-compete clauses being tested as attractive offers have filtered through the market.

On the face of it, the profile of risk managers has never been higher. Regulators have enacted sweeping changes to the way financial institutions handle risk; senior executives are keenly aware of the damage that can be done to their bottom lines if risk is not managed properly; and rating agencies and analysts are scrutinising risk management practices as never before. Yet, in many ways, the discipline of risk management is still somewhat neglected.[2] Embedding risk management remains both a key issue and a key priority for survey participants.

Various other issues remain a focus for most, including investment management and performance, cost control, diversification and regulation.

Interestingly, rating agency management, improved management information, improved finance function effectiveness and optimal use of technology were not generally considered a priority by participants.

2 See PricewaterhouseCoopers FS briefing – Creating value: Effective risk management in financial services (www.pwc.com/financialservices)

Underwriting

Effective planning to ensure improved underwriting performance, defining risk appetite and capital allocation and institutionalising effective cycle management are commonly recognised as top priorities by participants of this survey.

Planning and cycle management

Business planning approach

For most participants, the importance of producing a clearly defined business plan is clear through the high level of involvement from the finance, underwriting and executive management functional areas, with over 85% of all underwriters having had direct and in-depth involvement at the planning phase (see Figure 2).

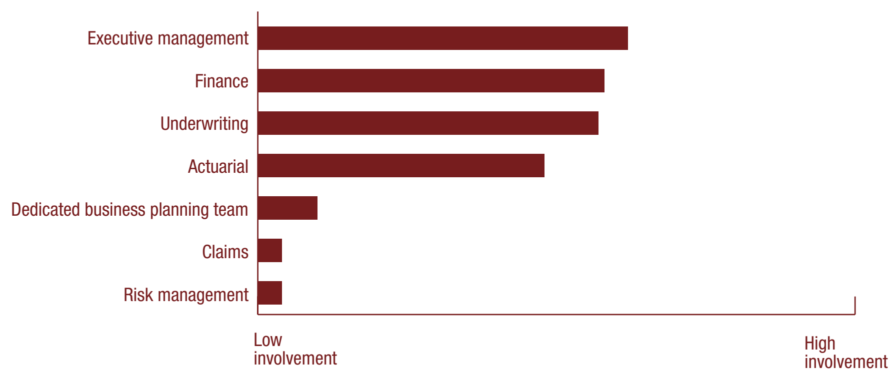
Participants favour both a top-down and ground-up approach, in combination, in producing their business plans, with about a quarter favouring a ground-up approach only. Most business plans are produced four months in advance of the commencement of the following year, with that plan on average being updated quarterly. As would be expected, business plans are fully reviewed by all executive management and most Boards of Directors. About half of all participants surveyed shared their business plans with rating agencies and a quarter with their external auditors (see Figure 3 overleaf).

Risk appetite

As exposure and risk models are revised (mainly in response to KRW) participants are seeing both an impact on premium rates but more importantly exposures in certain zones that have been revised upwards and which are no longer compatible with their risk appetite (see Figure 4 overleaf).

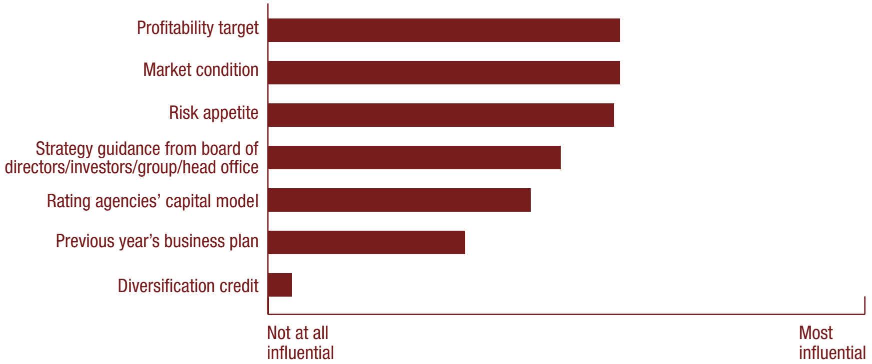
Risk appetite appears to be evaluated by participants mainly at a class of business level, although capital allocation in many cases is performed at an even more granular level (see Figure 5 and 6 overleaf).

Figure 2 Please rate from 1 to 5 the following functional areas on the level of involvement in producing your business plan?



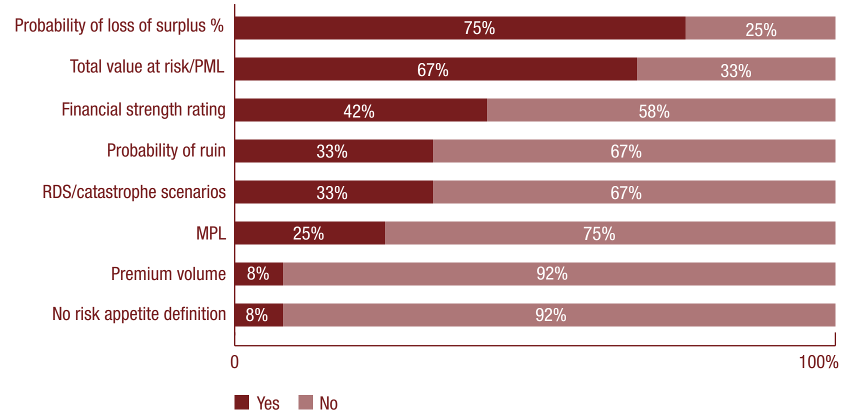
Source: PricewaterhouseCoopers

Figure 3 Please rate from 1 to 5 how the following factors influence your business planning.



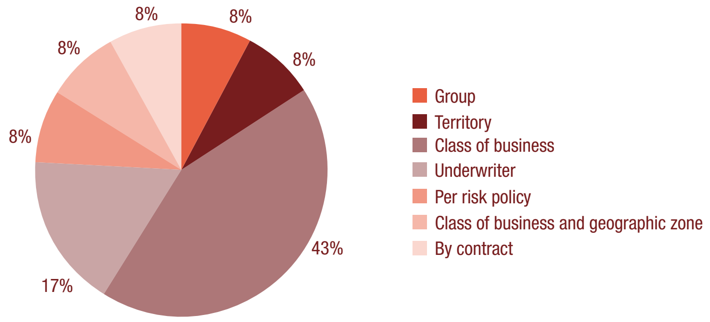
Source: PricewaterhouseCoopers

Figure 4 Which of the following reference points do you consider in your definition of risk appetite?



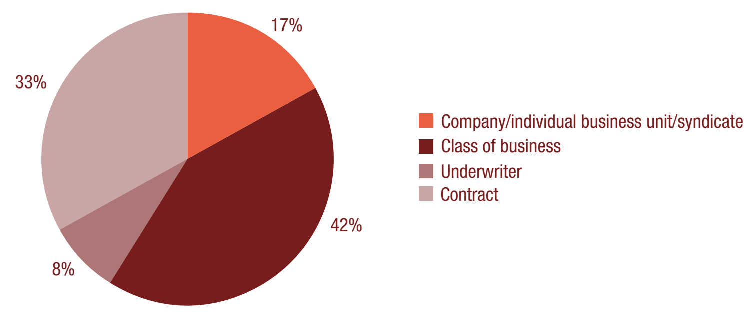
Source: PricewaterhouseCoopers

Figure 5 What is the lowest level at which your risk appetite is considered?



Source: PricewaterhouseCoopers

Figure 6 What is the lowest level at which capital is allocated?



Source: PricewaterhouseCoopers

Cycle management

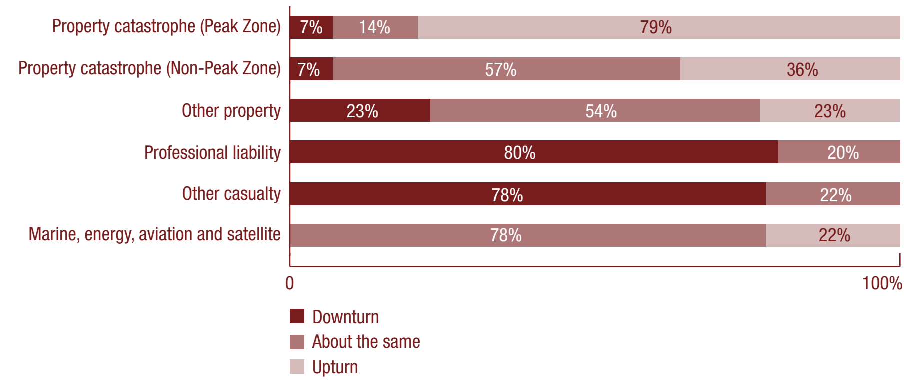
A number of participants were able to take full advantage of some excellent pricing in certain areas but there are strong signs that top line growth is gradually being replaced by declines with strong competition, particularly in the casualty markets, creating sizeable offsets to hard rates in a limited number of catastrophe exposed areas (see Figure 7).

With a variety of drivers responsible for market cycles, the survey asked participants what they thought were the key drivers of the cycle in the Bermuda Market (see Figure 8).

Many of the organisations currently face a clear quandary of how to ensure robust discipline in underwriting whilst ensuring that shareholder value creation remains a priority, particularly after the faith shown by the capital markets in the autumn of 2005. When asked to what extent controls will be used by participants to optimize the opportunities from a cycle downturn, participants identified that most reliance will be placed on monitoring renewal rate movement and premium rate adequacy, as well as placing reliance on underwriting guidelines and pricing guidelines (see Figure 9 overleaf).

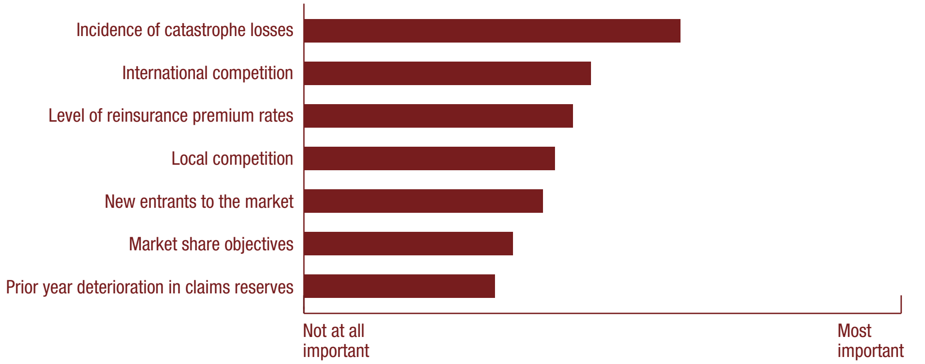
Unsurprisingly, participants perceived difficulties in determining when the underwriting cycle will turn as the top barrier to an effective underwriting cycle management strategy within their organization (see Figure 10 overleaf).

Figure 7 What stage in the underwriting cycle do you see the following classes of business?



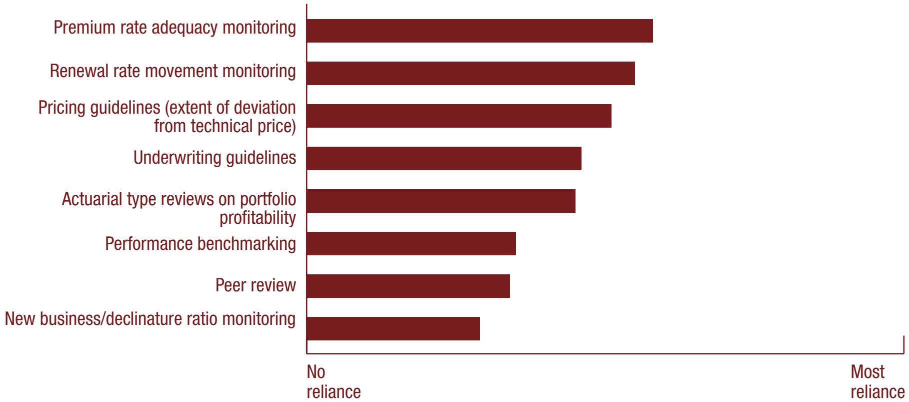
Source: PricewaterhouseCoopers

Figure 8 Please grade by level of importance the factors that you consider to be the key drivers of the underwriting cycle to the Bermuda Insurance/Reinsurance Companies.



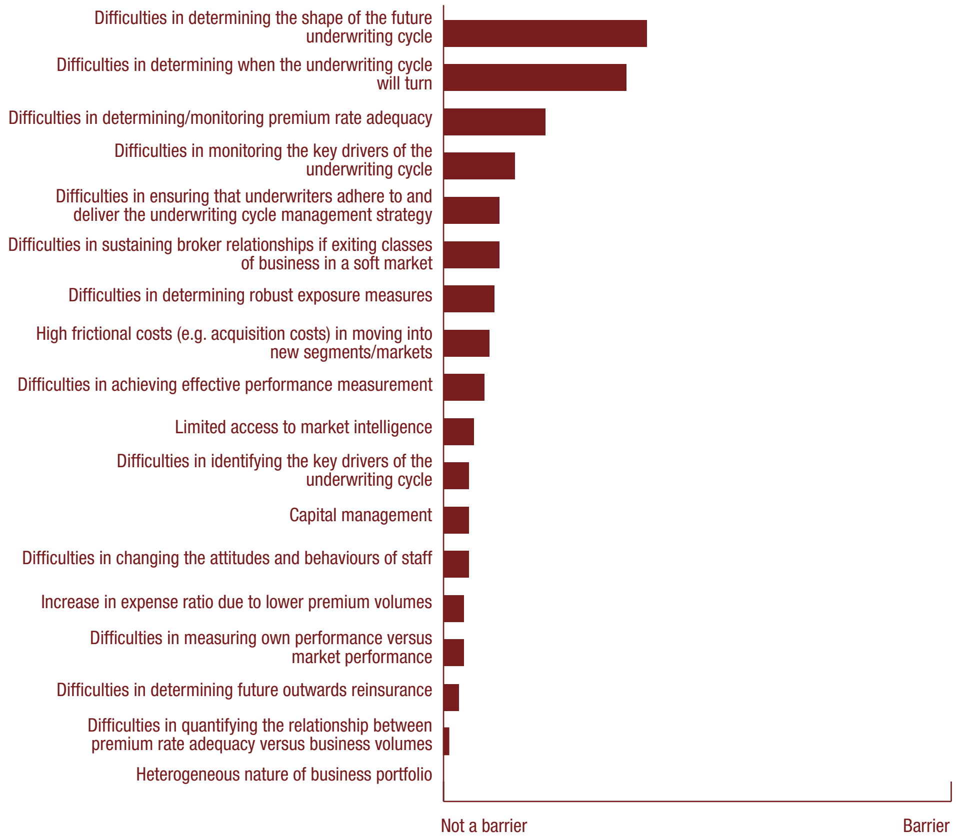
Source: PricewaterhouseCoopers

Figure 9 To what extent will the following controls be used by you to manage a cycle downturn?



Source: PricewaterhouseCoopers

Figure 10 Please select the top 5 barriers you perceive to an effective underwriting cycle management strategy within your organisation.



Source: PricewaterhouseCoopers

There are strong indicators that the undersupply of capacity during 2006 in the property catastrophe market was a market dislocation that has subsided quickly to a position of some surplus of capacity and, with the casualty markets continuing a path of high competition, premium pressure has been prevalent throughout the 2007 renewals season.

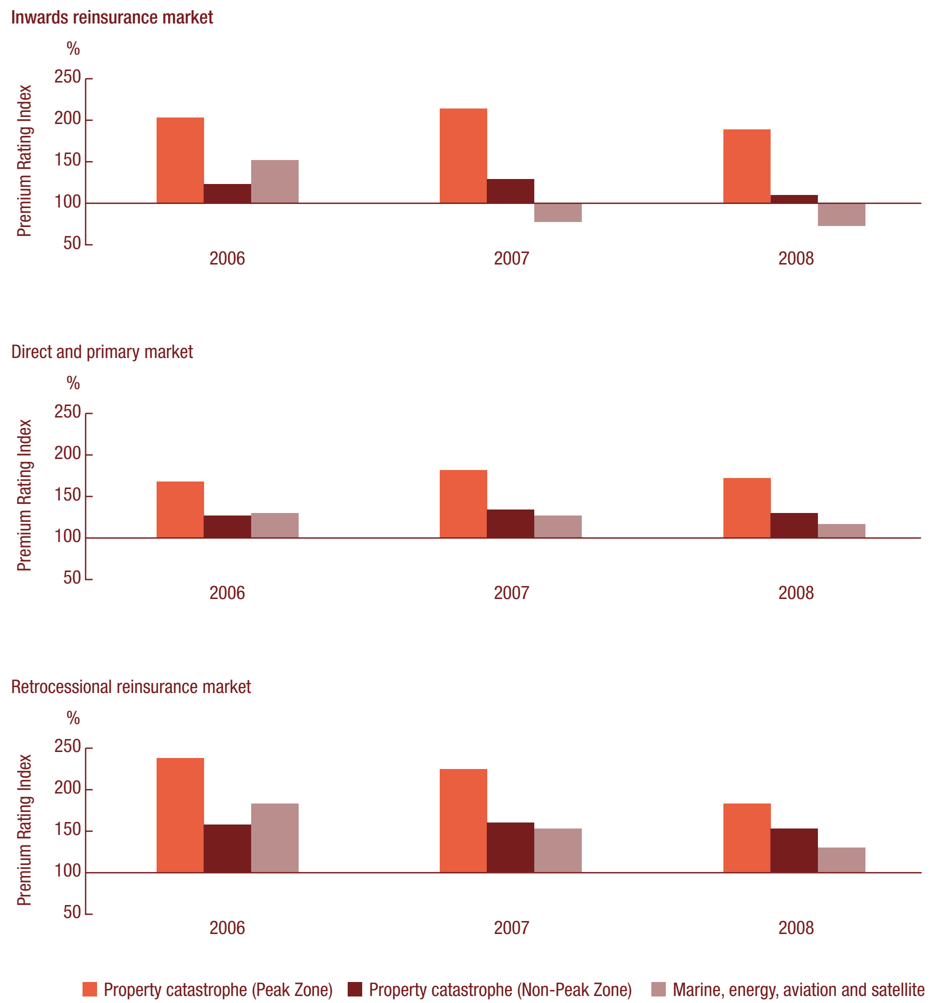
Premium rates and pricing

This survey asked participants to provide their sense for premium rating through 2008. It should be noted that early indications for 2007 may temper some of the anticipated rate increases recorded by participants in the autumn of 2006 (see Figure 11).

Only 8% of all participants surveyed experienced an overall percentage rate change decline in the 2006 renewals over 2005 business underwritten, with almost 60% showing a percentage-rate change increase in excess of 25%. Over 90% of participants saw increases in excess of 50% being achieved in property catastrophe (peak zone) business (see Figure 12 overleaf).

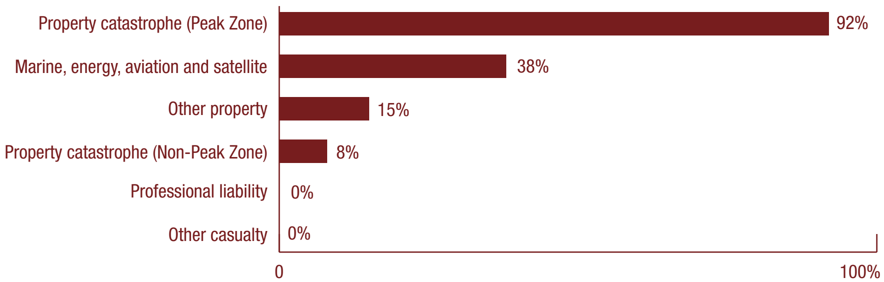
An average of 99% of participants' primary risks and 96% of inwards reinsurance risks are rated according to documented technical pricing. The application of statistical exposure-based rates is the most common pricing approach for primary risks and inwards reinsurance business (see Figure 13 overleaf).

Figure 11 If the market premium rating is normalised to 100 for the 2005 underwriting year, what level do you expect the market premium rating to be for the 2006, 2007 and 2008 underwriting years?



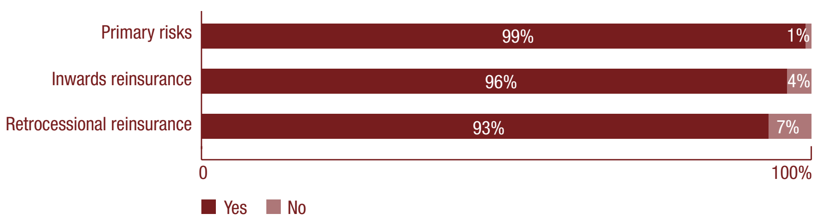
Source: PricewaterhouseCoopers

Figure 12 In which classes are increases in excess of 50% being achieved?



Source: PricewaterhouseCoopers

Figure 13 What percentage of your business (by 2005 gross written premium) was rated according to documented technical pricing?



Source: PricewaterhouseCoopers

A benign 2006 hurricane year provided some respite for the Bermuda Market. Early predictions 'foresee an above-average Atlantic basin tropical cyclone season in 2007 and anticipate an above-average probability of United States major hurricane landfall'.[3] With a forecast of three intense hurricanes, the measures companies established following KRW may be tested.

Catastrophe risks and risk aggregation

Catastrophe risks

Participants were able to provide a very frank assessment of the impact of the 2005 hurricane season; this survey particularly focussed on participants' use of exposure-based catastrophe modelling packages (see Figure 14).

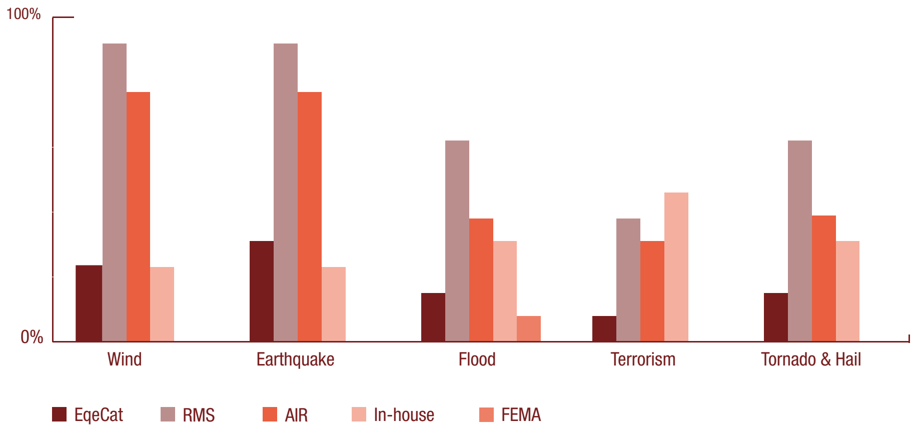
'Storm surge' and 'demand surge' accounted for significant differences between actual versus modelled results, but many participants pointed to concerns over the quality and performance of the models used, as well as allowances made for their limitations, as the main reasons why the magnitude of certain exposures was not anticipated (see Figure 15).

Underwriting discipline remains the industry 'buzzword'; participants have translated this in their reaction to underwriting strategy around catastrophe risks in 2006 (see Figure 16 overleaf).

It is not surprising, therefore, to see that new versions of models by RMS, AIR Worldwide Corp and EqeCat Inc were released in 2006. Standard & Poor's has said that capital requirements for primary property/casualty insurers will 'increase substantially because a requirement for natural catastrophic risk is being included as a hard test' and introduced their revised capital model in 2007 with exactly that focus (see Figure 17 overleaf).

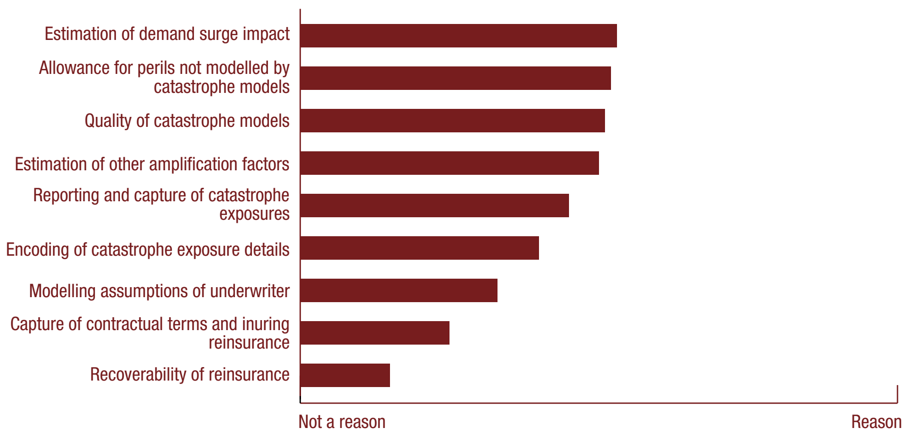
3 Extended Range Forecast Of Atlantic Seasonal Hurricane Activity And U.S. Landfall Strike Probability For 2007: Department of Atmospheric Science Colorado State University

Figure 14 Which exposure-based catastrophe modelling packages do you use?



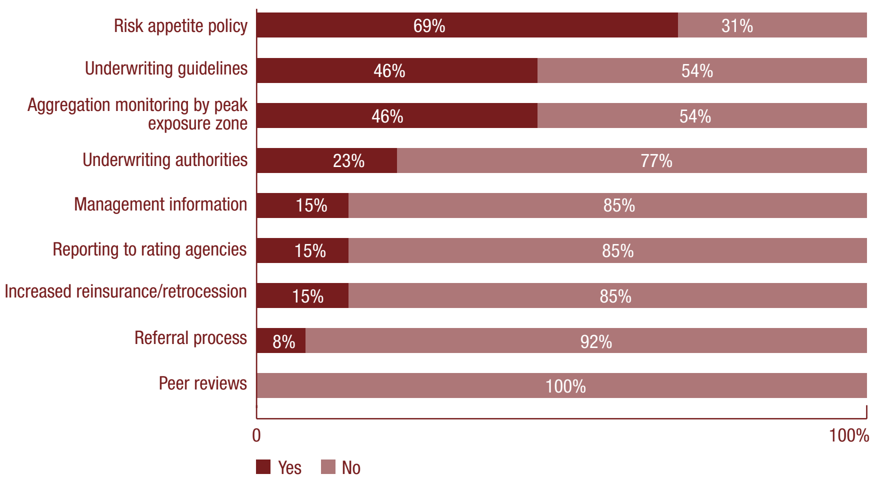
Source: PricewaterhouseCoopers

Figure 15 In your view, what were the main reasons, if any, for the differences in the actual versus modelled results in 2005?



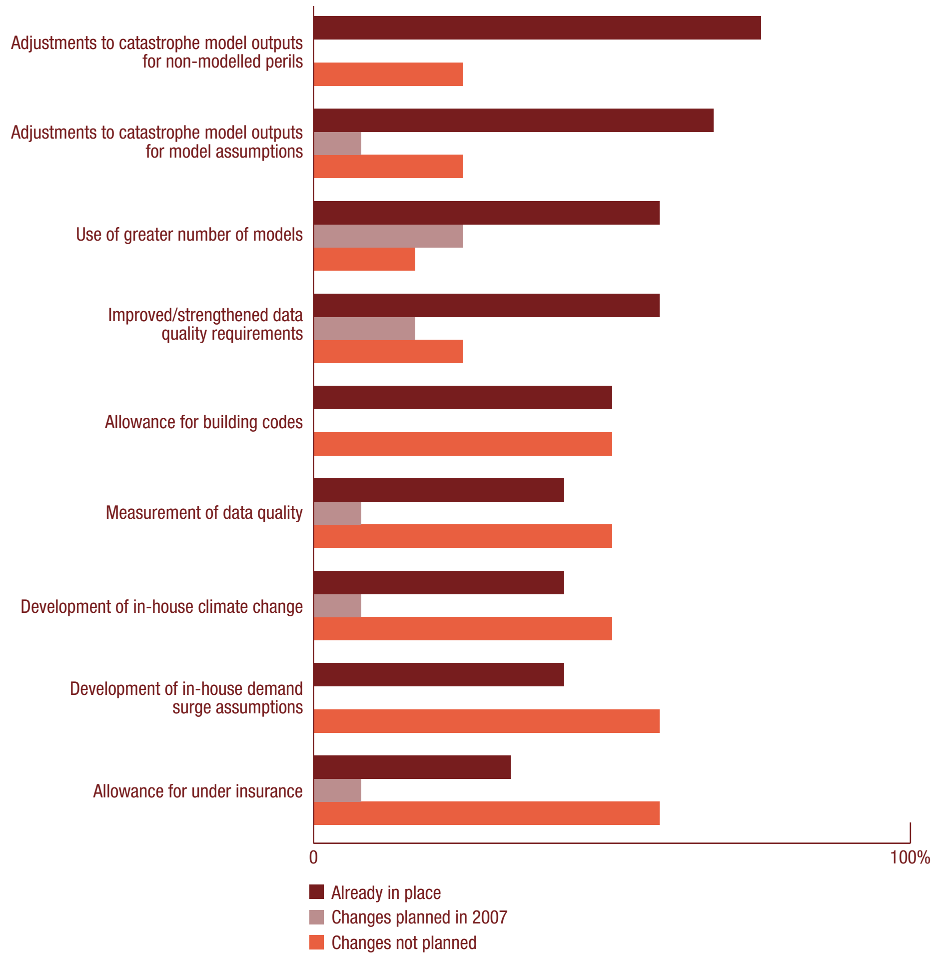
Source: PricewaterhouseCoopers

Figure 16 What areas have you amended within your underwriting strategy around catastrophe risks in 2006?



Source: PricewaterhouseCoopers

Figure 17 What changes to the modelling of catastrophe risks do you anticipate in 2007?



Source: PricewaterhouseCoopers

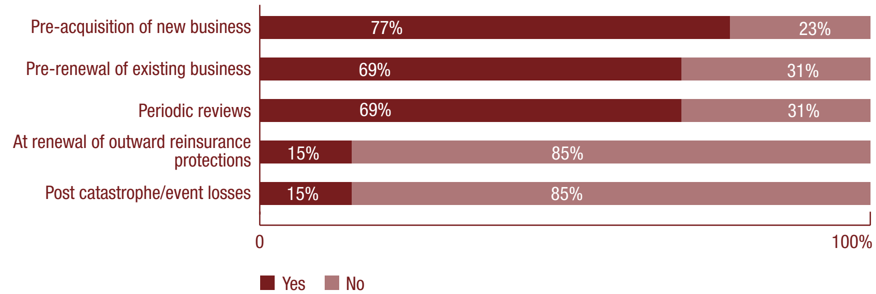
Risk aggregation

Embedding risk and capital management into the day-to-day running of the business has emerged as one of the key priorities for survey participants. Too often the definition of risk is too narrow and a closer focus on risk reflects the increasing complexities and uncertainties facing participants when dealing with the fallout from climate change and other extreme and unpredictable forces. The survey has recorded a general tightening of policies and procedures in the specific area of risk aggregation (see Figure 18).

Timely and regular monitoring of aggregations has consistently proven to be the key (see Figure 19).

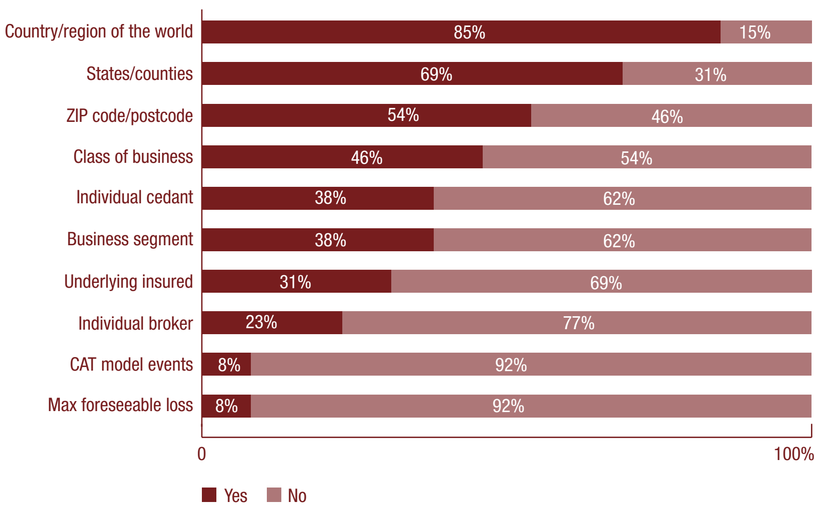
Risk management is a top level priority for the Bermuda Market, with regular discussions being held at the board level and almost all surveyed having some sort of risk function (see Figure 20).

Figure 19 When are aggregations of risk typically assessed/monitored?



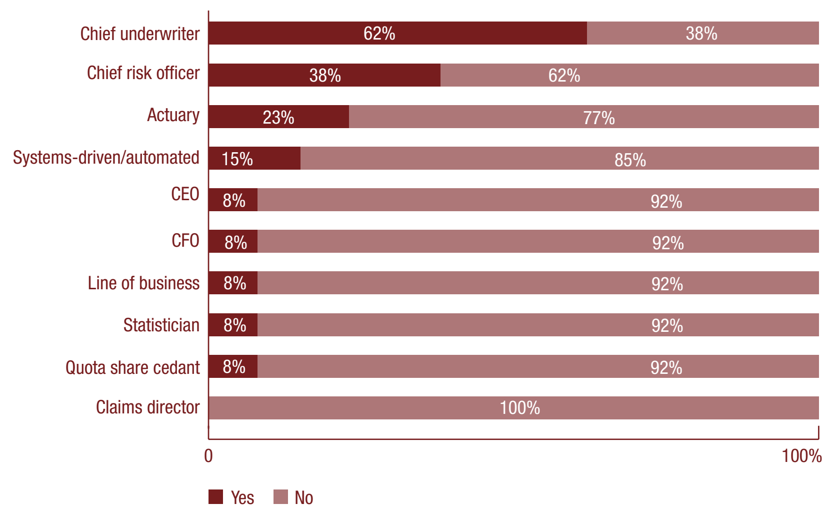
Source: PricewaterhouseCoopers

Figure 18 Which of the following aggregations of risk are monitored?



Source: PricewaterhouseCoopers

Figure 20 Who is primarily responsible for identifying, monitoring and managing the aggregations of risk?



Source: PricewaterhouseCoopers

Upwards of $8bn of capital flowed into sidecars and catastrophe bonds in the Bermuda Market in 2006 proving that specialist investors are speedily reactive to market dislocations and that the capital markets were swiftly able to provide cost effective, collateralised non-traditional protections.

Reinsurance

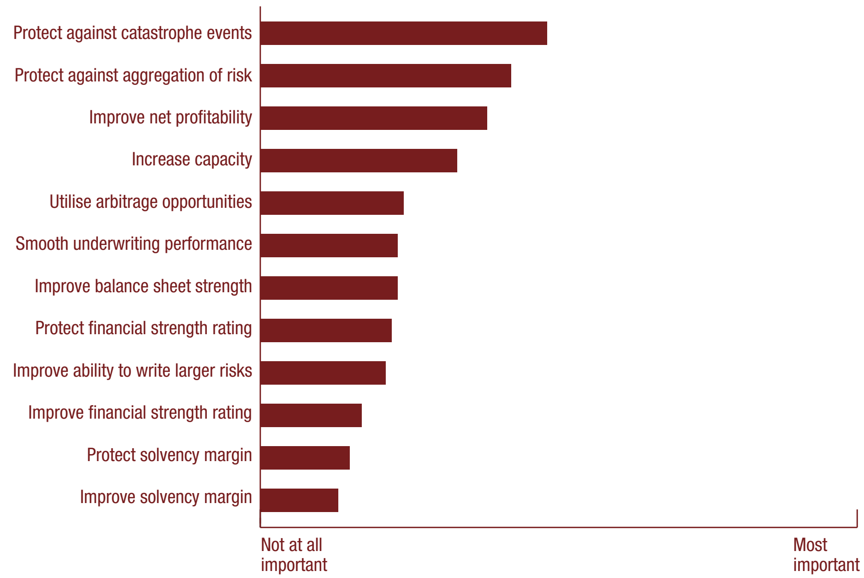
In addition to exposure management, optimisation of reinsurance spend was the second most important issue for the CEOs of the Bermuda Market in 2006 (see Figure 21).

For the survey group, no stranger to using the capital markets for risk transfer, 2006 was a year in which the attractiveness of new opportunities particularly resonated (see Figure 22 overleaf).

There has been a diversity of capital markets risk transfer products available to participants but clearly 2006 was the year of the sidecar (see Figure 23 overleaf).

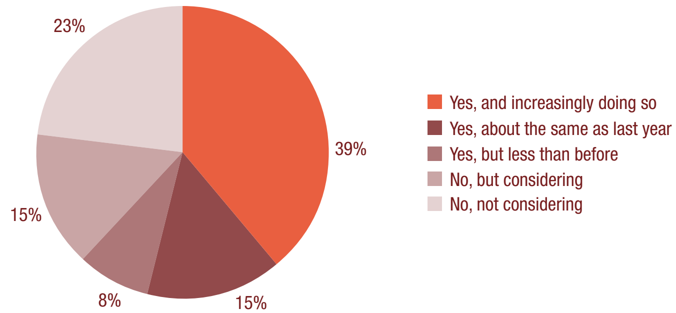
There is a clear upside to both the use of sidecars and catastrophe bonds by participants. However, the extra attention being paid to both products by rating agencies (in particular A.M Best's modelling with respect to catastrophe bonds) and the potential both for the collateral behind the sidecars to disappear as quickly as it appeared and for the 'host' companies to change their risk retention appetite every few years, raises questions about their longevity.

Figure 21 Please grade the following reasons for purchasing outwards reinsurance.



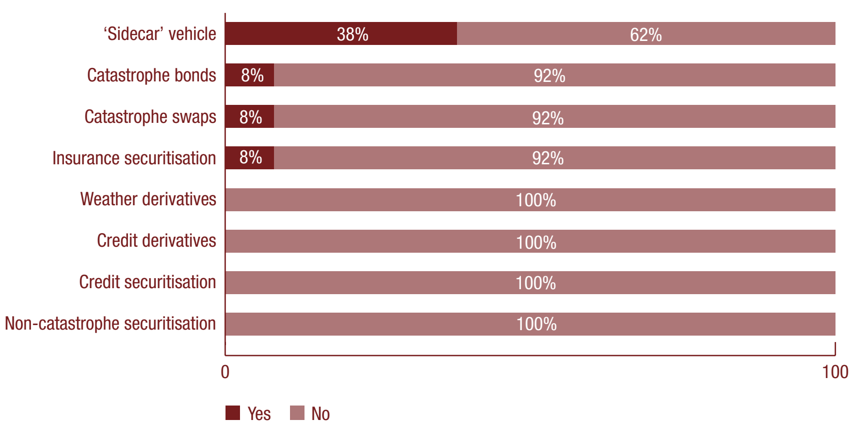
Source: PricewaterhouseCoopers

Figure 22 Did you use, or are you considering using, the capital markets for risk transfer in 2006?



Source: PricewaterhouseCoopers

Figure 23 If applicable, what capital market risk transfer products have you used?



Source: PricewaterhouseCoopers

Tellingly, divergence in practice at the sharp end of underwriting can often be translated into bottom line performance; quality control around guidelines and review are often the acid test.

Controls and processes

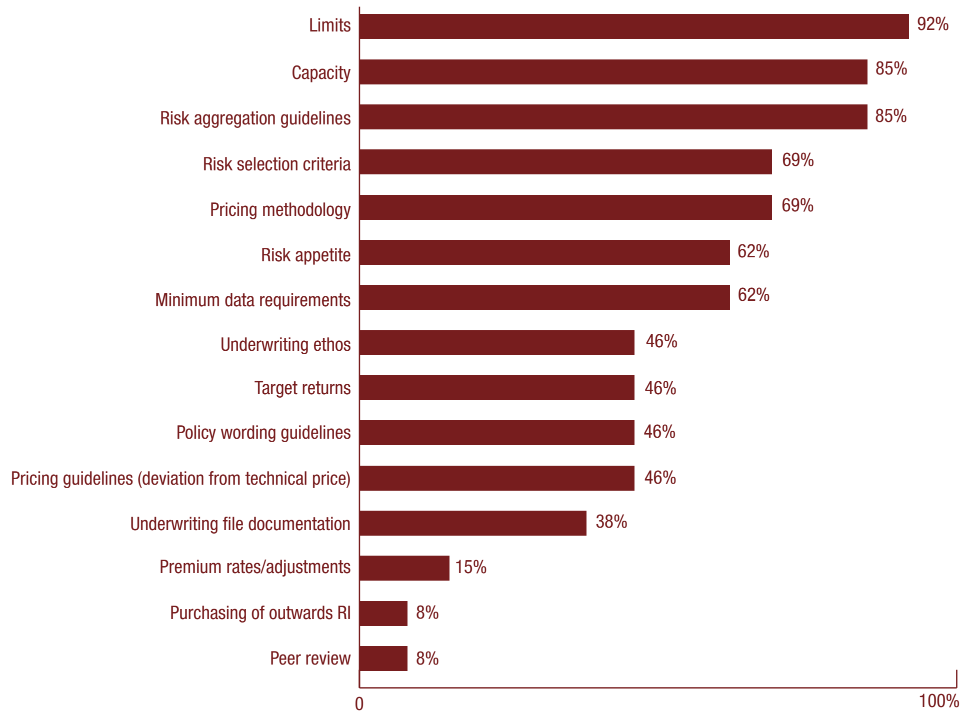
Underwriting guidelines and meetings

With a clear elevation of focus on quality underwriting the survey explored some of the controls and processes surrounding the front end of the underwriting process, in particular guidelines and authority limits (see Figure 24).

Participants review guidelines periodically (generally every six months), however, the level and extent of those reviews appear to vary in practice, with very often little substantive revision. By and large, underwriting guidelines typically cover criteria such as historical claims experience, as well as the size and location of risk, to identify whether policy risk management is used. Interestingly, 20% of participants surveyed did apply policy risk management methods. There is a relatively consistent view of what is required to define authority limits, however, certain participants used a more extensive range of criteria (see Figure 25 overleaf).

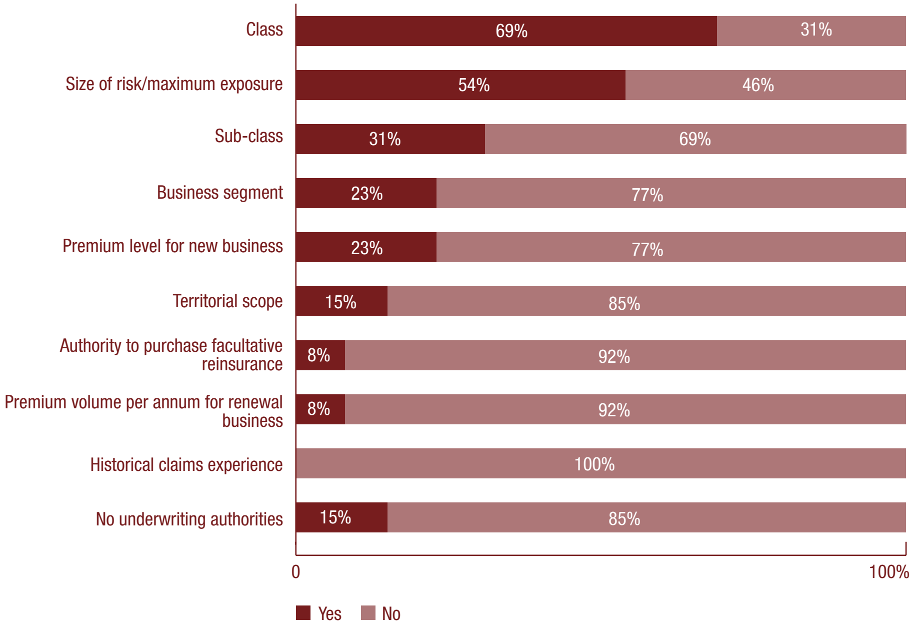
80% of participants use internal audit to monitor underwriters' individual authority limits, with underwriting systems checks and external reviews also being relied on. Just under half of participants surveyed hold weekly underwriting meetings (10% hold daily meetings), with about a third holding monthly meetings and the remainder (a not de minimis number) holding meetings on a quarterly basis (see Figure 26 overleaf).

Figure 24 What is included in your underwriting guidelines?



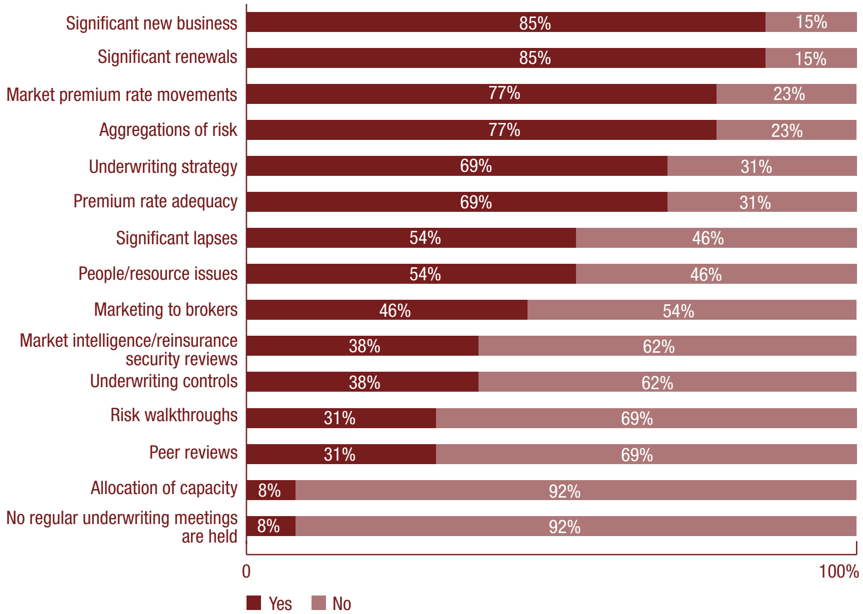
Source: PricewaterhouseCoopers

Figure 25 Which of the following criteria are used to specify the level of underwriting authority given to your underwriters (e.g. criteria for underwriting authorities/licenses)?



Source: PricewaterhouseCoopers

Figure 26 Which of the following are discussed as a formal agenda item at regular underwriting meetings?

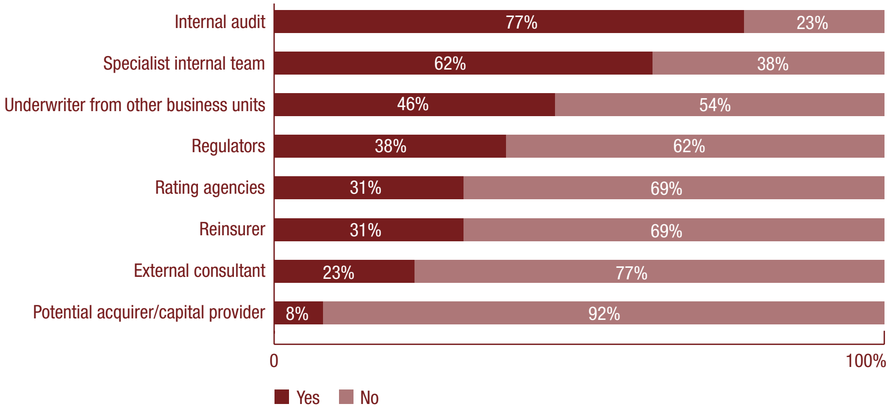


Source: PricewaterhouseCoopers

Underwriting reviews

The survey has found that on average 88% of underwriting files (by gross written premium) for direct and primary risks are peer reviewed each year, with 75% of underwriting files (by gross written premium) being reviewed (see Figure 27).

Figure 27 Which of the following has undertaken a review of your underwriting operations in the last 3 years?



Source: PricewaterhouseCoopers

The attraction and retention of highly skilled employees represent significant challenges for participants. In particular, focus on the recruitment and retention of quality underwriting staff has been identified as a top priority.

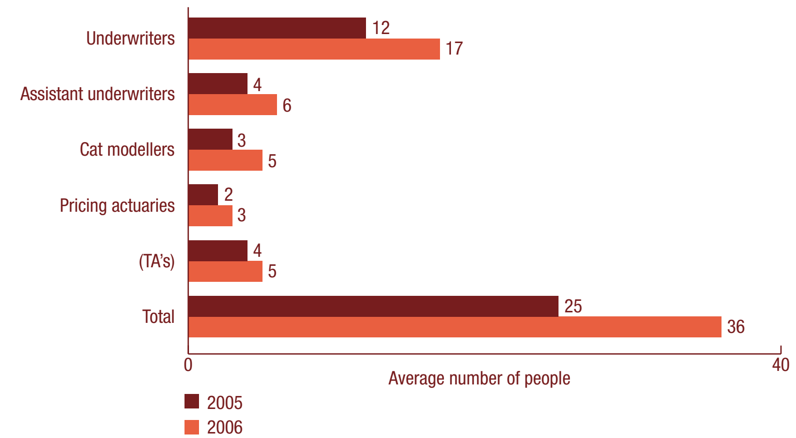
Underwriting teams

Despite very significant human capital challenges many participants have been successful in growing their underwriting teams (see Figure 28).

In spite of the heavy pull by new start-ups in the market, 50% of participants experienced no turnover of underwriting staff, with 41% experiencing only minimal turnover. Where turnover was experienced, 81% of participants cited new entrants to the market as being the primary cause, with the high marketability of good quality underwriting staff and expatriate repatriation also representing key causes (see Figure 29 overleaf).

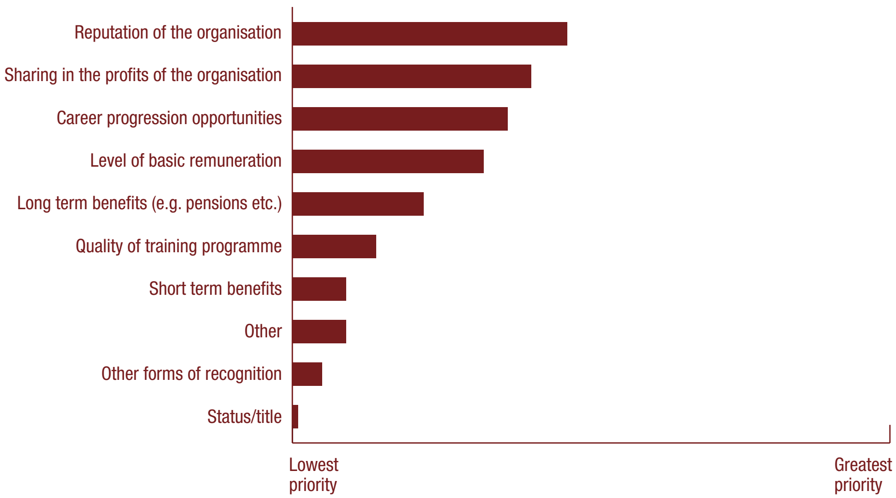
The survey sought participants' views on the quality of their underwriting staff versus that of their competitors. Interestingly, no participant felt that their staff was less than comparable to the market and 83% felt they were above the average market standard (see Figure 30 overleaf).

Figure 28 What is the size of the underwriting department within your Bermuda organisation, including underwriting support teams?



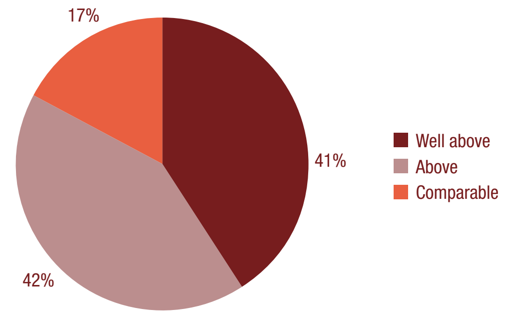
Source: PricewaterhouseCoopers

Figure 29 Please highlight the top 5 factors in attracting and retaining the right underwriters for your organisation.



Source: PricewaterhouseCoopers

Figure 30 What is your perception of the quality of your underwriting staff versus that of your competitors?



Source: PricewaterhouseCoopers

The Bermuda Market

What is the Bermuda Market?

A commercial insurance and reinsurance market in which various entities participate:

- Bermuda domiciled insurers and reinsurers; and
- Bermuda subsidiaries and branches of US, European and international insurers and reinsurers.

Bermuda is referred to as the 'world's risk capital', a reference to the innovation, entrepreneurialism and leadership of Bermuda insurers and reinsurers and the Bermuda government that has fostered the growth of this business.

Bermuda's response to three global shortages of insurance and reinsurance capacity in the past 20 years has made the Island what it is today;[4] the fourth largest reinsurance market in the world, with 13 of the world's top 40 reinsurers based on the Island.

The Bermuda Reinsurance market tripled in size to approximately $28 billion in 2005, from approximately $9 billion in 2001 while gaining market share.

Bermuda is the largest Property Catastrophe reinsurance market; Bermuda's reinsurers provide an estimated 40% of US property catastrophe reinsurance capacity.

4 Standard and Poor's Reinsurance Highlights Report 2006

Contacts

If you would like to discuss any of the issues raised in this report, please speak to your usual contact at PricewaterhouseCoopers or one of the editorial board members listed below:

Caroline J. Foulger
Partner
Phone: +1 (441) 299-7103
Email: caroline.j.foulger@bm.pwc.com

Colm A. Homan
Partner
Phone: +1 (441) 299-7116
Email: colm.homan@bm.pwc.com

Arthur Wightman
Senior Manager
Phone: +1 (441) 299-7127
Email: arthur.wightman@bm.pwc.com

Survey participants

We would like to take this opportunity to thank all those organisations and executives who agreed to participate in the development of this survey. We are extremely grateful for the time that they gave us, especially for the openness with which they discussed the key issues facing their industry.

Production

The development and production of this survey involved a number of people and we would like to thank those listed below for their valuable contribution:

Elanor Lewis
Kelley Dunne
Louise Hayter
Lara Correia
Hannah deCosta

For information on other insurance and financial services related publications or if you would like additional copies of this survey, please contact Louise Hayter, Senior Manager, Bermuda Marketing, on +1 441 299 7184 or email louise.hayter@bm.pwc.com.