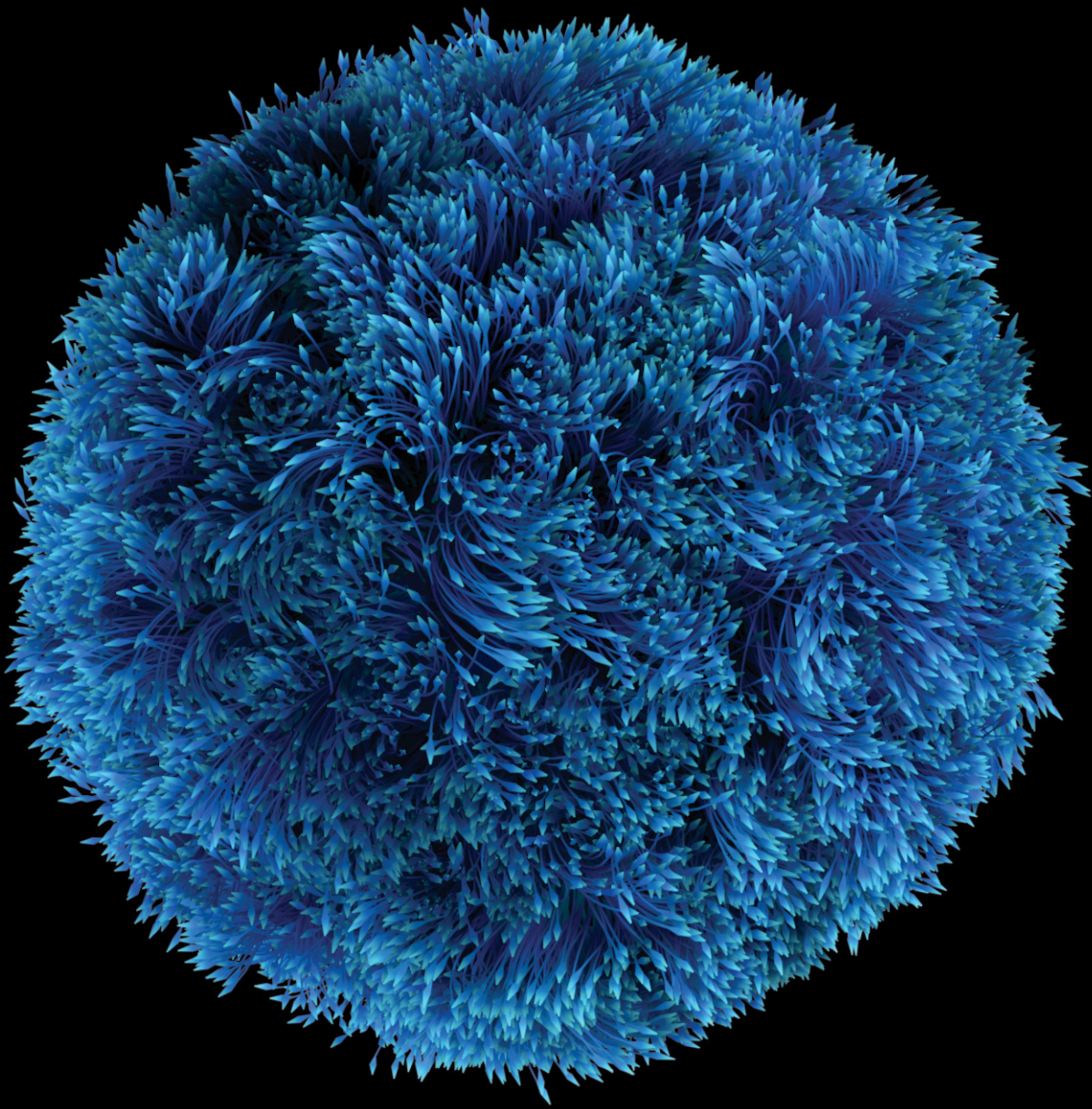

Hong Kong Risk Based Capital
Market readiness survey

September 2019

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The new HKRBC regime will result in the most significant changes that Hong Kong insurers have seen for a generation.

1. Introduction

HKRBC readiness survey
Welcome to the Deloitte RBC readiness survey report.

We have surveyed Hong Kong insurers to understand how prepared they were for the implementation of the new Hong Kong Risk Based Capital (RBC) solvency regulations. Our survey looked at how firms were preparing for the Pillar 1 quantitative technical challenges as well as the qualitative implementation challenges of Pillar 2. This report summarises the results of the survey.

The Hong Kong Insurance Authority (IA) is moving the solvency assessment for Hong Kong insurers onto a three-pillar RBC framework. In 2018, the IA carried out the Second Quantitative Impact Study (QIS2) to field test the new Pillar 1 requirements and consulted on Enterprise Risk Management (ERM) proposals for Pillar 2. In 2019, the IA conducted a second round of consultation on Pillar 2 ERM requirements and released GL 21 'Guideline on Enterprise Risk Management'. On 9 August 2019, the IA released a circular to insurers for participation in QIS3.

While the "go live" date for Pillar 1 is still unclear, Pillar 2 is set to be effective from 1 January 2020, with the first Own Risk and Solvency Assessment (ORSA) report, a new requirement, to be submitted to the IA from 31 December 2020.

The move by the IA to implement an RBC framework will bring Hong Kong regulation in line with international standards. Regulators in North America, Europe, China, and other countries in Asia Pacific have already implemented similar frameworks. Some countries are even working on second phase evolutions of existing regulations. While individual countries have varied their frameworks to reflect their local markets, it is clear that the trend in modern insurance regulation is moving towards RBC frameworks.

Insurers active in Hong Kong have varying degrees of experience with three-pillar RBC frameworks. Some insurers – typically those that are part of a multinational group – will already be familiar with comparable frameworks like C-ROSS in China and Solvency II (SII) in Europe. These insurers may already have the appropriate systems and resources that could be repurposed for local, Hong Kong-specific RBC implementation. For other insurers, the RBC changes will be sweeping and wholesale - Pillar 2 requirements bring into focus a broad collection of risks and the expectation that firms have sufficient measures in place commensurate with the size, sophistication, and complexity of their business. These companies can benefit from lessons learned by peer firms operating under other comparable RBC regimes, particularly where risk, actuarial, and technological challenges have already been resolved. However, firms new to the RBC framework may find other areas challenging - recruiting staff that have sufficient expertise to help them comply with the new regime is but one example.

Compounding matters, the IA's RBC framework is being implemented while insurers are also working to comply with the new accounting requirements of IFRS17. In a sense, the simultaneous implementation of two different reporting regimes is a uniquely Hong Kong phenomenon - most other jurisdictions implemented changes to reporting and solvency regimes at different times. This means that Hong Kong insurers' RBC and IFRS17 projects will potentially compete for budget and resources, the latter of which is finite within the local market.

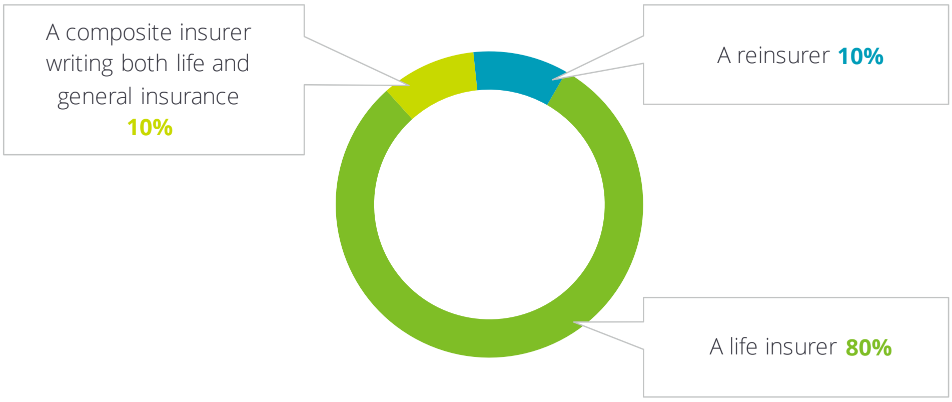
This report sets out the results of our survey and looks at how Hong Kong insurers are getting ready for the new RBC framework and responding to these and other challenges.

2. Survey background

Respondent's firm business type

The survey is based on responses from 10 insurance firms covering a variety of insurance market sectors. The majority of respondents were life insurers writing business directly. Although small in scale, the survey provides a representation of the local market and the intentions of different players.

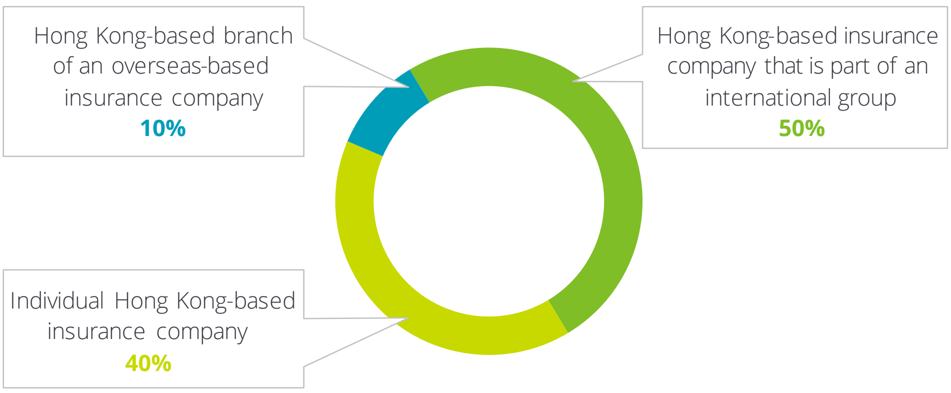
2.1 Company business



Respondent's firm structure

Half of the respondents' insurance firms were part of an international group and most of the remaining firms were local Hong Kong firms. This gives us a broad perspective allowing us to see both local and global views of the HKRBC reporting standard.

2.2 Location of company

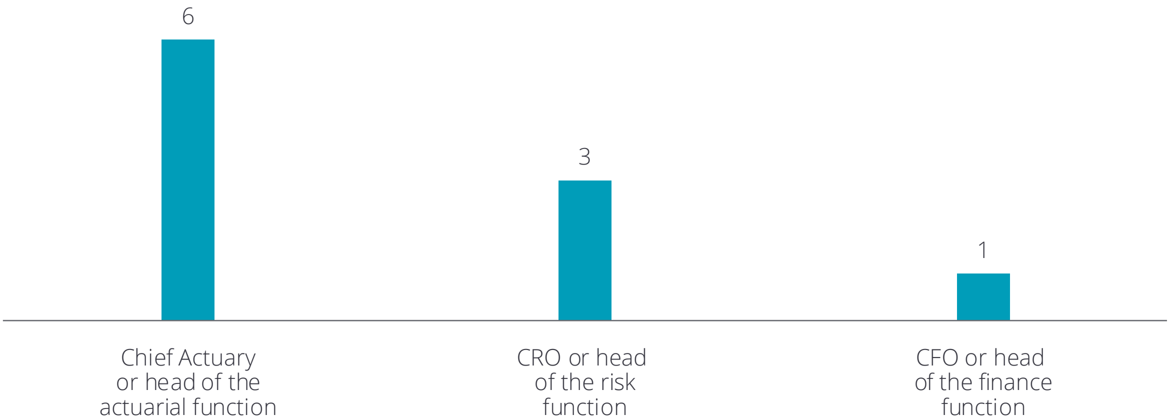


Involvement in HKRBC

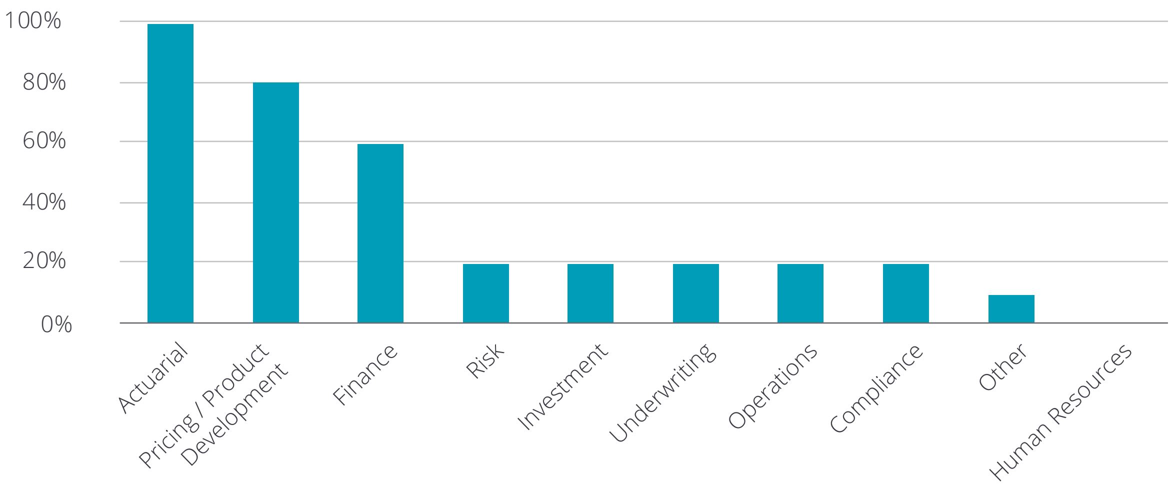
Most respondents indicated that their Actuarial, Risk, and Finance teams were primarily involved with the HKRBC implementation. This broadly mirrors the nature of Pillar 1, Pillar 2, and Pillar 3. It is not surprising that most respondents were from the actuarial function.

However, some respondents believe that many different parts of the organisation will have to be involved. We think this is likely because the changes to the solvency assessment will affect many of the metrics that insurers use to manage their operations. As a result, the changes will mean activities as diverse as new product development and performance management could be impacted by the HKRBC changes.

2.3 Respondents' position



2.4 Which teams are involved in the developments related to the new HKRBC requirements?



3. Industry readiness

While insurers are at different stages of readiness to prepare a risk based capital solvency assessment, it is clear that a considerable amount of work remains to be done developing the required actuarial models.

Similarly, the industry is in a mixed state of preparedness for the forthcoming regulatory changes around ERM. Current ERM frameworks will require review, revision, and fine-tuning.

Solvency assessment and capital calculations (Pillar 1 needs)

The industry is at different stages of preparedness and there is considerable work to do.

Valuation readiness

We saw that only 20% of respondents are intending to develop a new valuation model for HKRBC. This is surprising as the requirements set out in the quantitative impact studies so far require a very different capital and liability assessment to the current CAP41 regulations. However, this may be indicative of the flexibility of current modelling capabilities.

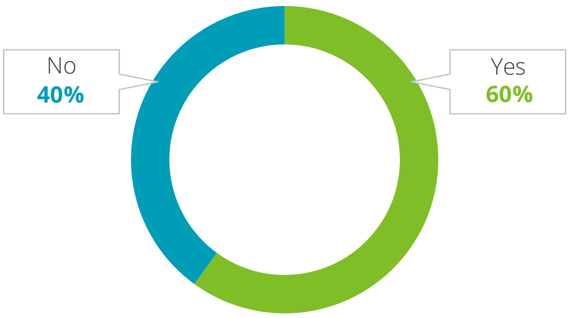
We also saw that half of the companies do not have an existing economic capital framework.

This suggests that many Hong Kong insurers are not familiar with risk based capital.

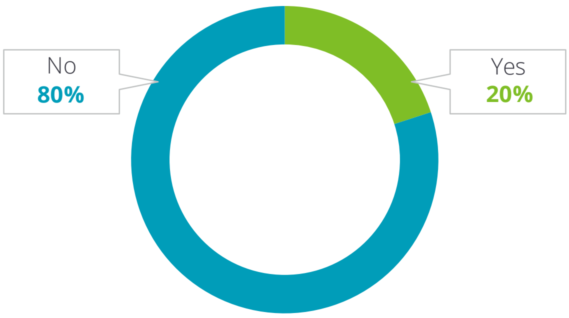
As a result, we believe that there is a considerable amount of development work to be done to ensure that compliance is achieved.

Our survey also showed that 40% of respondents had not yet started work on building an actuarial valuation system for risk based capital, something which will increase time pressure on insurers. As well, in the next few years, insurers will have to develop and implement HKRBC models and frameworks alongside those required for IFRS 17. This will put additional pressure on the specialist resources needed and costs incurred.

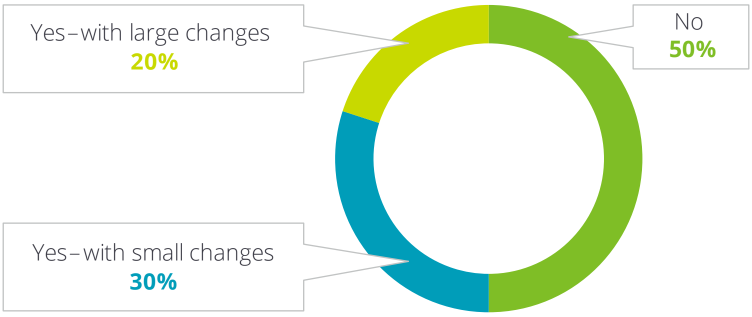
3.1 Started to work on actuarial valuation system for HKRBC?



3.2 Developing a new valuation model for HKRBC?



3.3 Have an existing economic capital framework to be leveraged for the implementation of HKRBC



ERM readiness is varied across the industry (Pillar 2 needs)

The industry is in a mixed state of preparedness to comply with the IA's new ERM framework requirements and lagging in a few important areas. Key survey findings for ERM preparedness are laid out below, while detailed findings are contained in Section 6 of this report.

The industry demonstrated a need to align across the organisation for RBC transformation, preparing various risk governance units as well as allocating resources and talent for the transformation.

Respondents generally felt somewhat or fully prepared for RBC requirements on Risk Appetite and Risk Management policies. However, respondents also indicated that they do not have policies in place for monitoring and managing several of the risks mentioned within the regime, demonstrating that the industry may be over-estimating its preparation for these pillars.

ORSA, the Own Readiness and Solvency Assessment, stands out as a key gap for RBC implementation. No respondents felt prepared to implement an ORSA program; few felt even somewhat prepared, with many identifying several gaps within ORSA requirements that will pose a particular challenge. Moreover, a strong majority felt that they needed a solution for building expertise in order to manage ORSA whether through external or internal pathways for talent.

Finally, business intelligence and peer benchmarking was a leading response for perceived roadblocks to implementation, as was competition for internal resources. No respondents thought that organising a transformation under RBC would be free from roadblocks.

4. HKRBC impacts

HKRBC will significantly impact ALL aspects of an insurer's business. This is the intention of the 3-pillar framework. While the improved management of risk should bring additional benefits to shareholders, there will also be additional costs. Insurers expect that HKRBC will have significant impacts on their solvency positions as well as their internal operational and decision-making processes.

Financial and operating needs

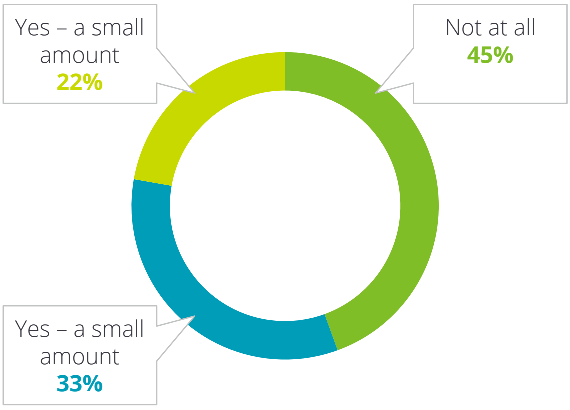
Over half of the survey respondents expect they will have to raise capital to comply with HKRBC. This is perhaps an indication of how the two quantitative impact studies have informed expectations in this area.

While there is currently no indication of the regulatory deadlines imposed by Pillar 3, 80% of survey respondents believe that they will need to revise their reporting processes. This could be an indication that Hong Kong insurers are aware of the onerous reports similar 3-pillar regimes have required elsewhere. This could also indicate that the base balance sheet used for risk based capital calculations is quite different to the current solvency balance sheet and requires substantially more work.

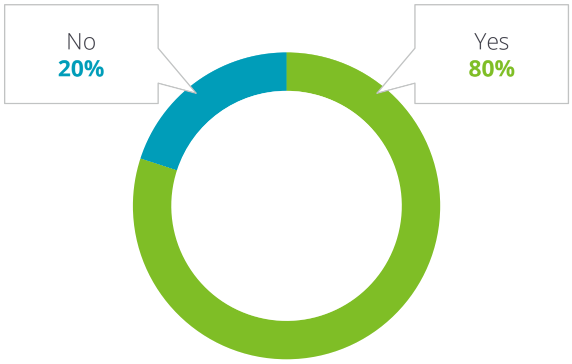
In addition to these operational changes, the metrics used for decision making will change. At one level this is a direct result of changing the solvency assessment and swapping one set of KPIs for another. However, as the solvency assessment is also risk based, other indicators and metrics need to be incorporated into internal and management reports.

Respondents to our survey recognise this, with 60% indicating that they will use new metrics under HKRBC for decision-making. Of these, two-thirds expect to calculate both old and new metrics in parallel for an initial period to facilitate the transition. While desirable, this will require that the OLD and NEW calculations be run at the same time. It will be interesting to see if this expectation persists closer to the implementation date.

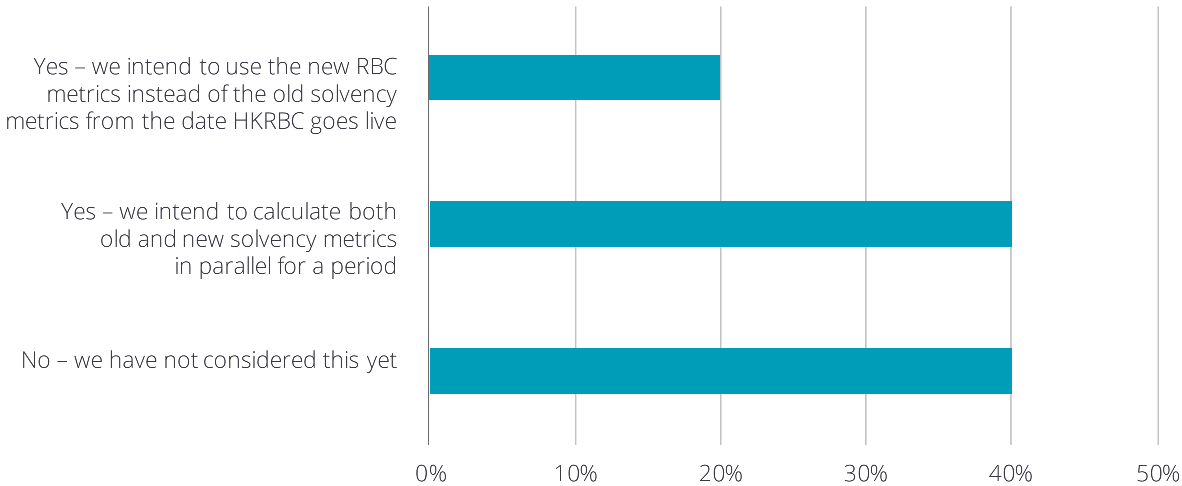
4.1 Expect to raise capital



4.2 Reporting processes will have to be reviewed



4.3 Will the new solvency metrics from HKRBC Pillar 1 be embedded in business operations?

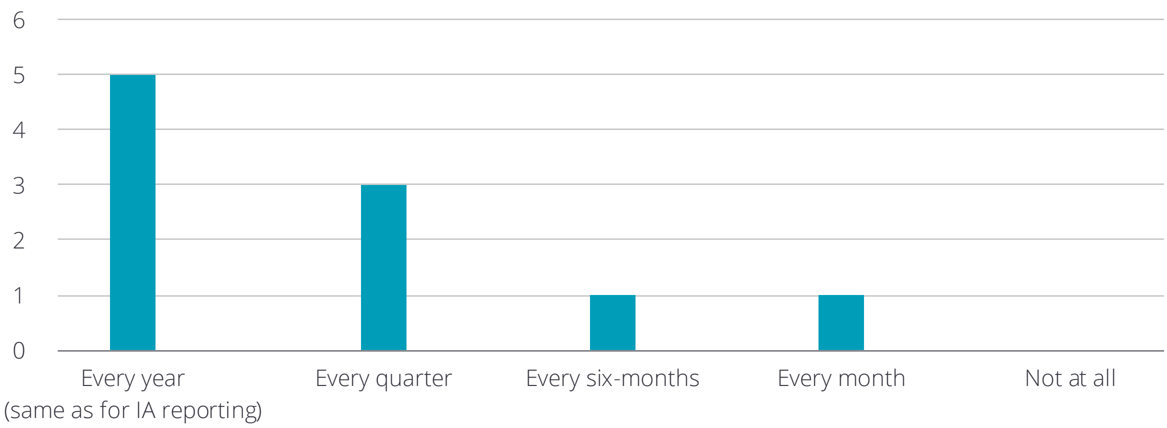


Pillar I calculation and modelling

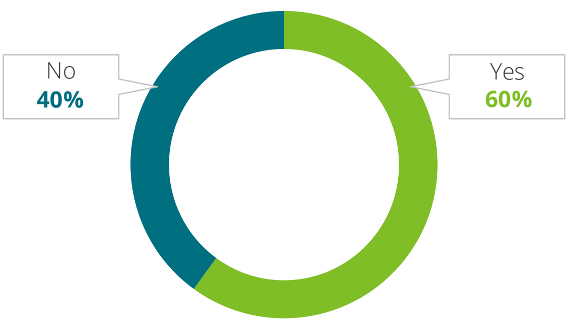
When asked about whether the assumptions used for HKRBC and IFRS reserve estimates will ultimately be the same, responses were mixed. Just over half (60%) of the respondents indicated that the assumptions will ultimately be the same, an interesting result. While the specifics of certain assumptions (such as expenses) may differ under the two frameworks, as these are both "best estimate" regimes we expected to see more convergence between the two bases.

Half of the respondents currently expect to prepare RBC results annually. Although this is in line with the current Pillar 1 proposals, we expect that (indirectly) the Pillar 2 framework will put pressure on firms to perform the calculation more frequently. This thinking may have influenced the other survey respondents.

4.4 How often do you expect to calculate RBC results for internal purposes?

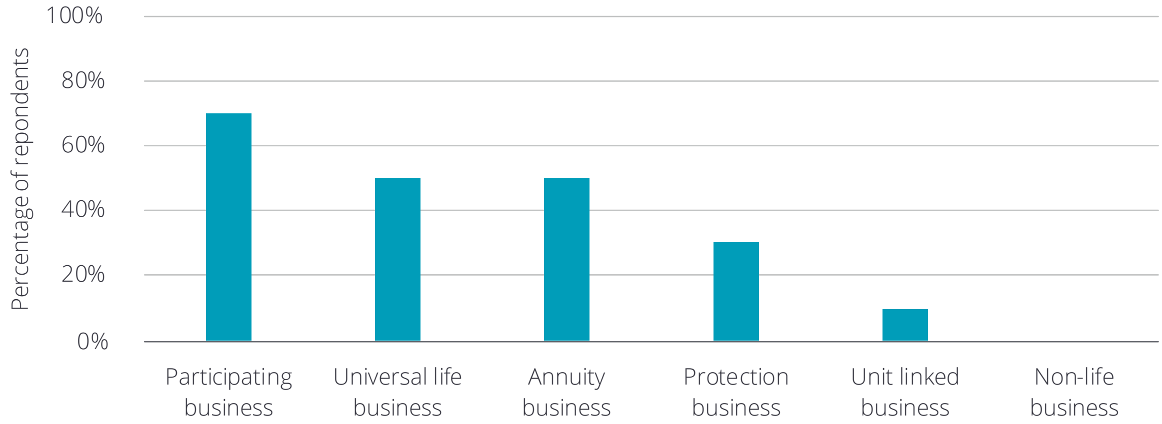


4.5 Ultimately the assumptions needed for the HKRBC and IFRS 17 reserve estimates will be the same



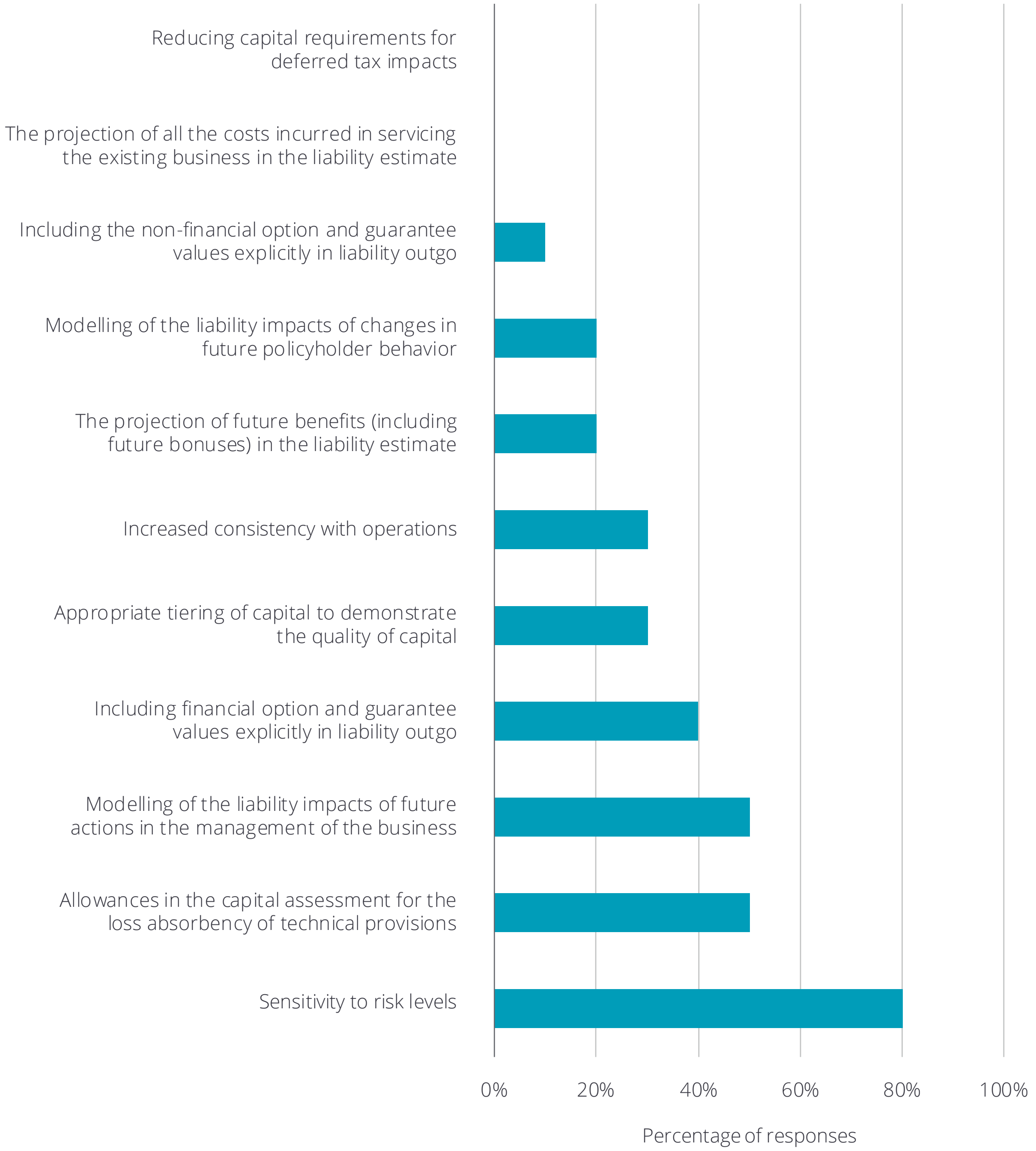
The most common management actions our survey found were in participating and universal life business. However, respondents were also modelling actions on annuity, protection, and unit linked business. These are lines where there is typically less discretion available to management. This may suggest that the actions applied are more specific.

4.6 When modelling the current estimate, which of these lines of business do you currently apply management actions on?



The main advantage that insurers see in HKRBC is reserve sensitivity to risk. The next most beneficial being management actions in liability modelling and loss absorption in the capital calculation. Interestingly, 80% of respondents indicated that no new models will be built for HKRBC. This may be an area where insurers are not taking advantage of the full benefits available to them and could explore further.

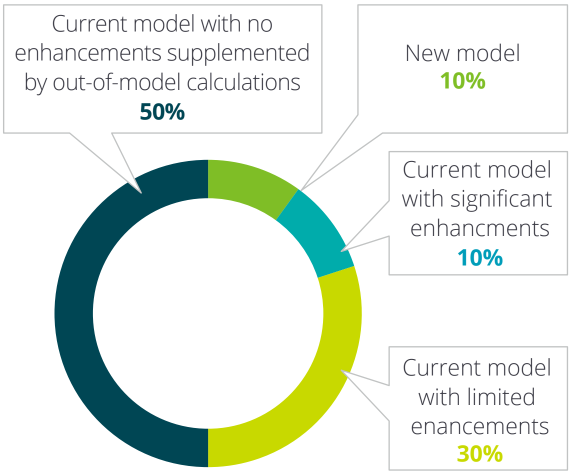
4.7 What do you consider the main advantages that RBC brings to the solvency calculation?



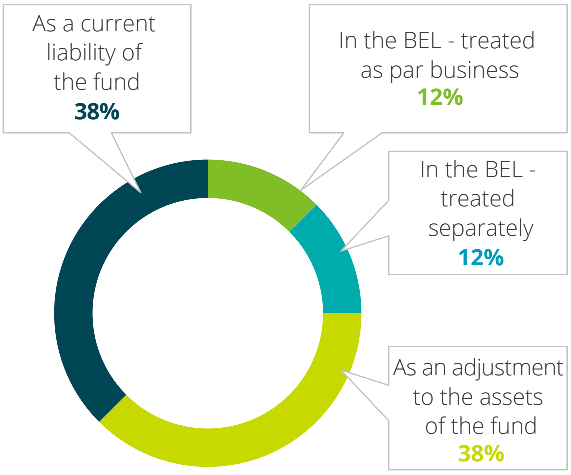
5. Capital modelling impacts

The industry does not expect significant changes to their current valuation models. This simplified approach suggests that insurers are not expecting to take full advantage of the additional accuracy allowed by risk based capital immediately at implementation.

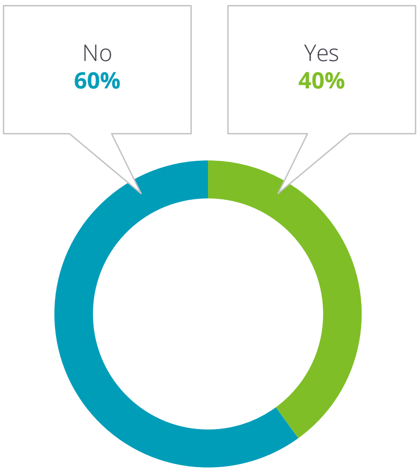
5.1 System expected to be used for HKRBC



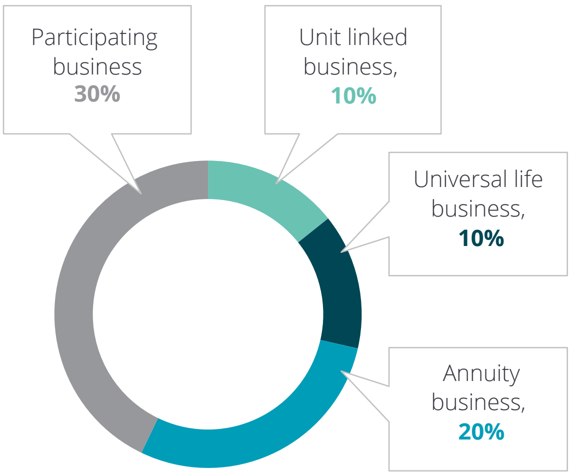
5.2 Modelling dividends on deposit



5.3 Plan to model new management actions for HKRBC implementation



5.4 Lines of business expecting to have new actions

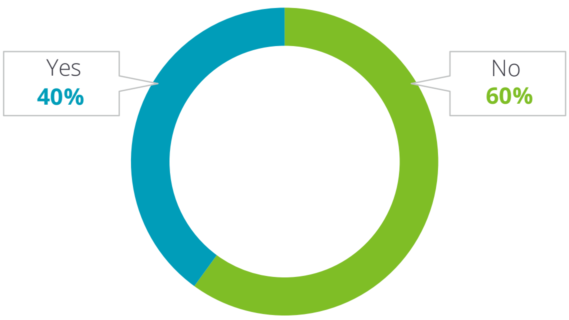


Expanding the modelling of liabilities

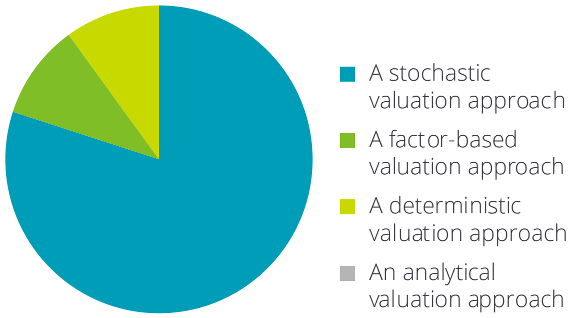
As noted earlier, most insurers are not expecting to implement new models or make significant changes to their current models in preparation for HKRBC. While this will reduce the cost of implementation, it does suggest that approximations and simplifications will be used in some places under HKRBC. One implication is that some prudence margins may continue to result in an inflated capital requirement.

As an example, under the current regulations many insurers adopt a simplified approach to valuing dividends on deposit. This is likely to continue under the new regime, with 60% of respondents indicating that they will still make a simple adjustment for dividends on deposit. In fact, our survey suggests that most companies (76%) intend to continue using a simplified / approximate approach under HKRBC.

5.5 Will you be carrying out the QIS2 fund on deposit sensitivity exercise?

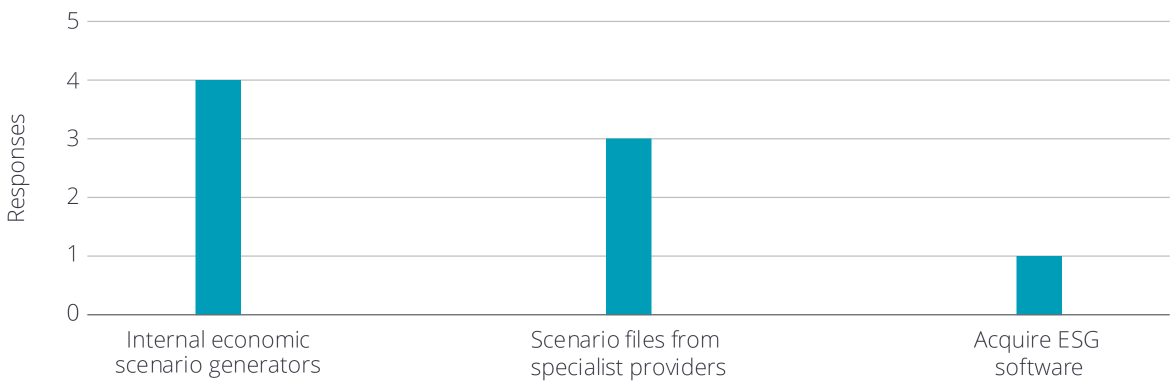


5.6 Which approach will you use to determine the time value of guarantees?



Another benefit of risk based capital is the ability to take credit for the actions of management to reduce the liability valuation. Typically, for insurers to be able to get the full benefit of these actions would require a stochastic calculation. While 80% of our survey respondents plan to use a stochastic valuation methodology, 60% of respondents do not plan to match this with an expanded management action modelling plan. In addition, half of these respondents indicated that they will build their own scenario generators. Only one respondent indicated that they would buy the ESG software with the rest indicating they would buy the scenario sets from external providers.

5.7 Producing the economic scenarios for the valuation of options and guarantees



6. Risk management impacts

Companies have work ahead in order to prepare for and implement the ERM framework under the RBC regime. Survey results demonstrated that though the industry is confident in its readiness for updated requirements around Risk Monitoring and Management, readiness is in fact mixed and some gaps remain to be addressed.

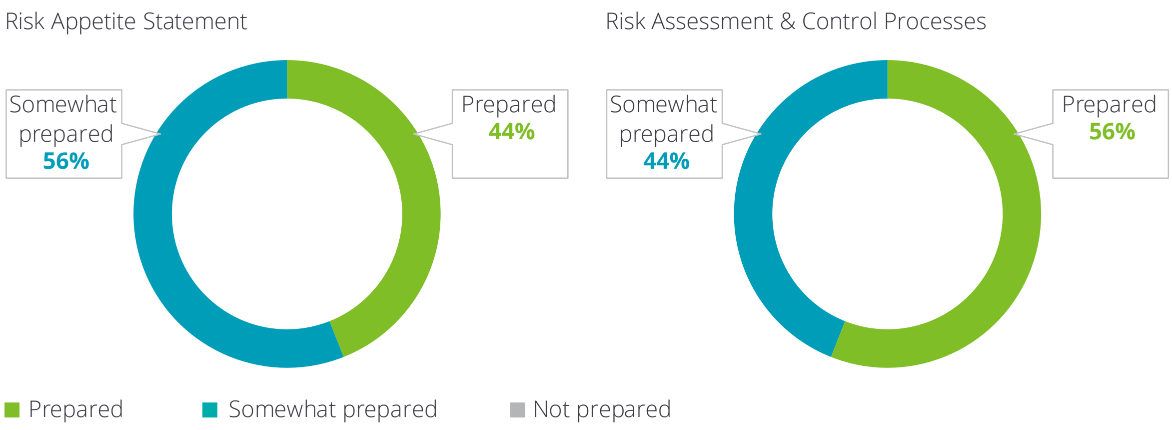
Across the industry, however, firms will find that the most work ahead involves preparing for the new Own Risk and Solvency (ORSA) requirements under RBC.

Firms should also expect to regularly review ERM frameworks under RBC, and ensure that review results are fed back to ensure continued effectiveness.

Risk Appetite Statements and Monitoring

The industry demonstrated high levels of confidence that it is prepared to implement Risk Appetite Statements as per the RBC framework. Generally, the industry was confident in its preparedness for Risk Assessment and Control Processes, which will also be required by the regime. 44% of respondents reported feeling prepared to implement Risk Appetite Statements, and 56% felt prepared for forthcoming requirements on Risk Assessment and Controls. The remainder felt somewhat prepared, as demonstrated in Figure 6.1. Moreover, 67% of respondents felt that their risk appetite statements took all relevant and material categories of risk into consideration, both qualitatively and quantitatively, while the remainder agreed somewhat - a confident stance.

6.1 Perceptions on readiness under RBC for:



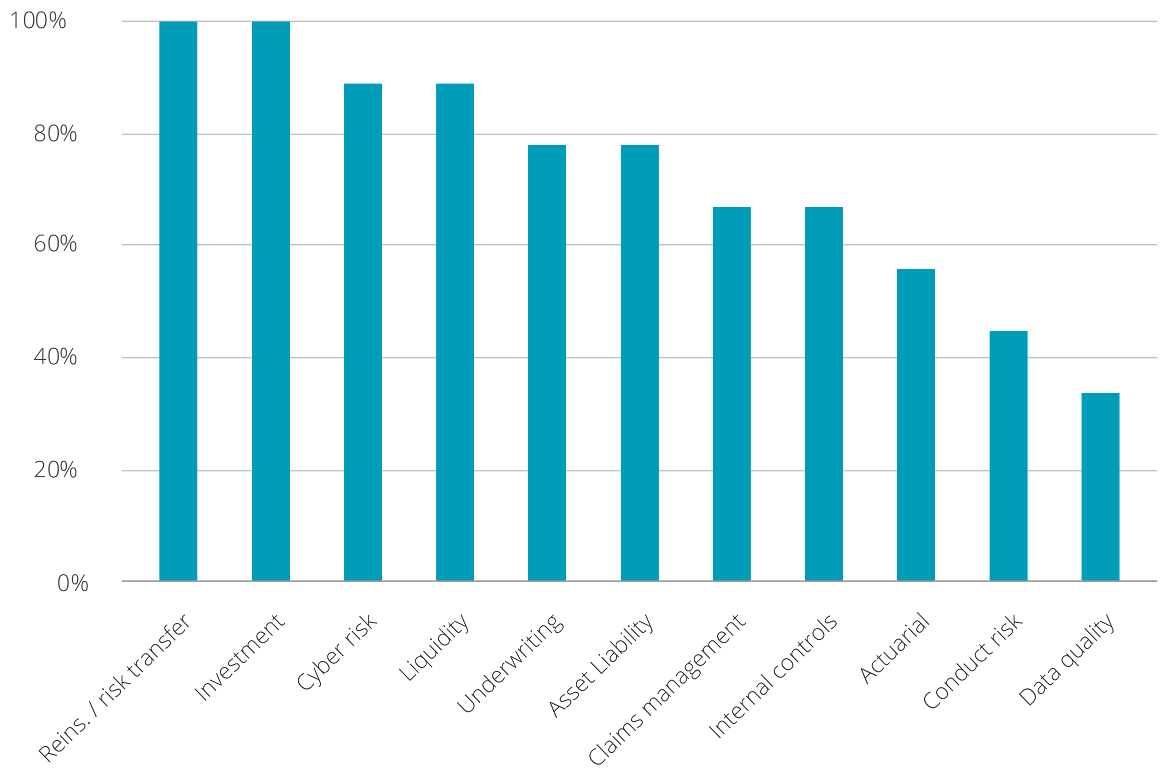
However, this may in fact demonstrate a level of overconfidence when compared against the responses furnished by companies. When asked which risk metrics were monitored as part of firms' risk appetites, a number of key risks such as operational, market, liquidity, credit default, and compliance were found to be monitored by a broad consensus of firms but other risks mentioned within the RBC framework were not. Only 11% of respondents monitor emerging risks, less than half monitor both conduct and strategic risk. Although it is a majority, it is notable that in an era of constant cyber intrusions and data breaches, only two-thirds monitor cyber and information security risks.

Risk Management Policies

Similarly, there are a number of risks within the RBC framework for which firms are not maintaining risk management policies. Industry participants will need to consider these risks and determine where it is appropriate to introduce new policies in advance of RBC taking effect in Hong Kong. In doing so, companies should keep in mind that the list in Figure 6.2 is non-exhaustive.

As Figure 6.2 shows, relatively few firms maintain policies towards actuarial, data quality, and (again) conduct risk.

6.2 Percentage of respondents maintaining RBC-specified risk management policies in:



Conduct Risk is an increasing area of focus for the IA and other regulators globally. It is also a risk that has the potential to affect a firm's reputation, and consequently its ability to retain and grow its customer base, execute on strategy, and realise commercial upside. As part of a Conduct Policy, firms should ensure clear standards are set, along with mechanisms to assess, monitor, and remediate as necessary through a continuous improvement approach.

Own Risk and Solvency Assessment (ORSA)

The industry demonstrated a clear lack of readiness for ORSA, which is likely to prove a significant operational and organisational hurdle for insurance companies preparing for RBC's Pillar 2 requirements. Indeed, from the survey results, a clear majority (67%) of respondents reported they are not prepared for ORSA requirements, and no respondent reported being fully prepared (Figure 6.3).

GL 21 states that notwithstanding the mode of operation of the authorized insurer in Hong Kong, i.e. either as a Hong Kong incorporated company or as a Hong Kong branch of an overseas-incorporated company, the ORSA report submitted to the IA should cover the entire company with specifics to cover the Hong Kong operations. Some relief is available to Hong Kong branches of overseas insurers in that the head office or combined ORSA report can be submitted provided the Hong Kong component of the report meets the minimum requirements as set out by the IA.

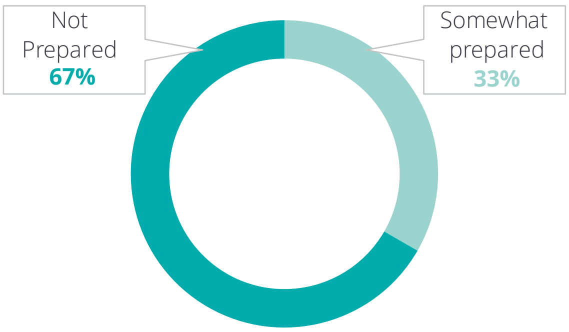
Due consideration should be given to the program of work necessary to ensure the ORSA report can be delivered on time.

Firms also foresee that resourcing for ORSA will prove to be another key challenge. 87% of respondents believe they do not have a sufficient level of expertise to handle ORSA requirements, and will either look to external support, recruiting, or training to bridge the gap (Figure 6.4). Given the finite nature of local talent to fulfil the expected need, resourcing along with training and development of existing staff should be considered a high priority.

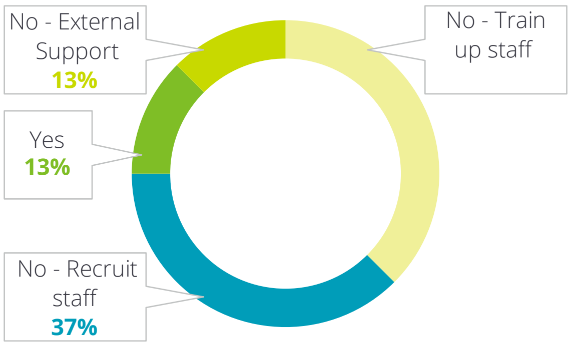
No respondents reported being fully prepared for 5 of 8 key components of the ORSA framework; only a few believe they are fully prepared for the other 3 (Figure 6.5).

Finally, across a number of RBC-related requirements, all survey respondents agreed that the ORSA effectiveness review would have the highest impact on their operations.

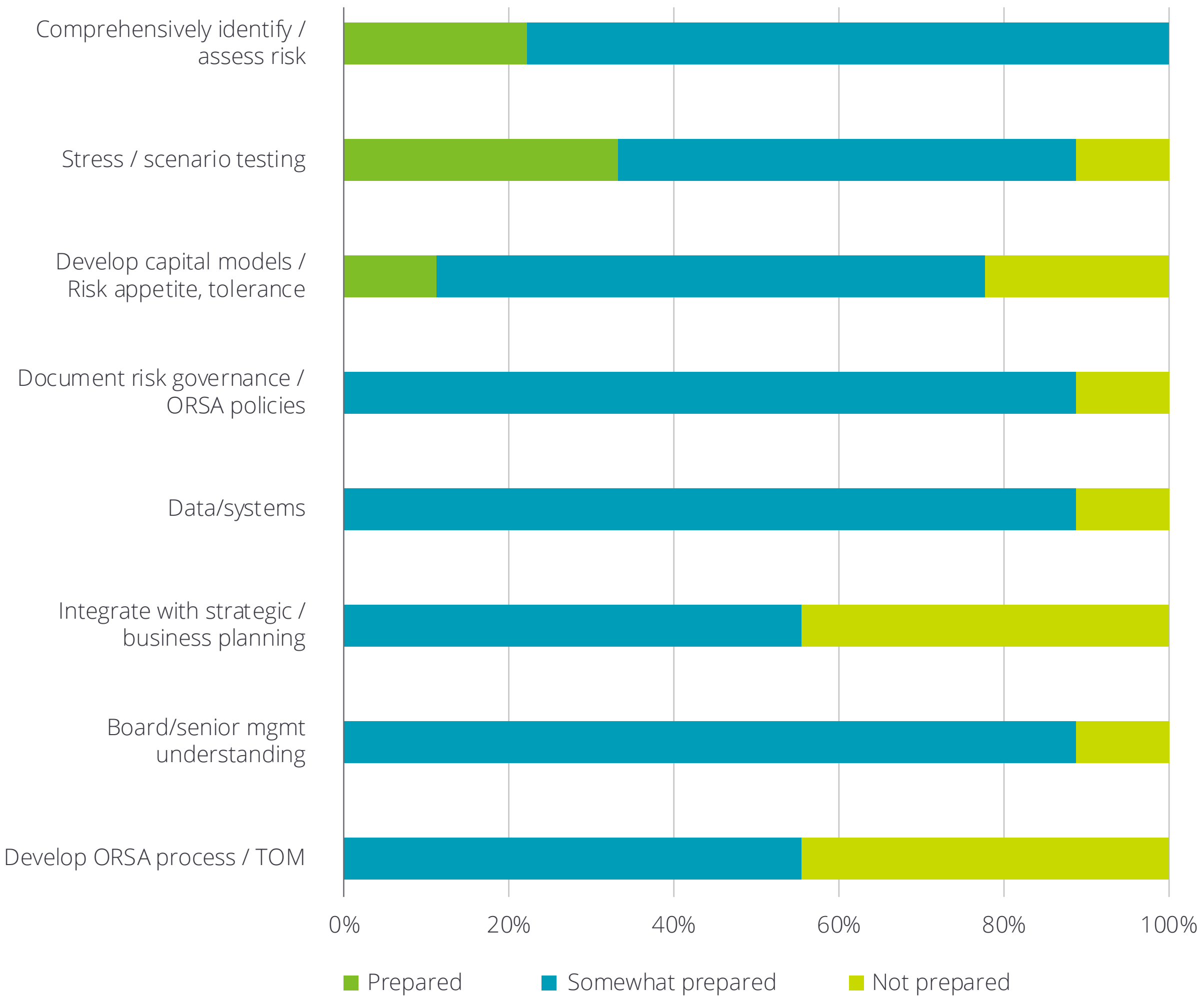
6.3 Preparedness for ORSA requirements



6.4 Sufficiency of internal expertise for ORSA



6.5 What is the level of your organisation's preparedness in relation to key components of the ORSA framework?



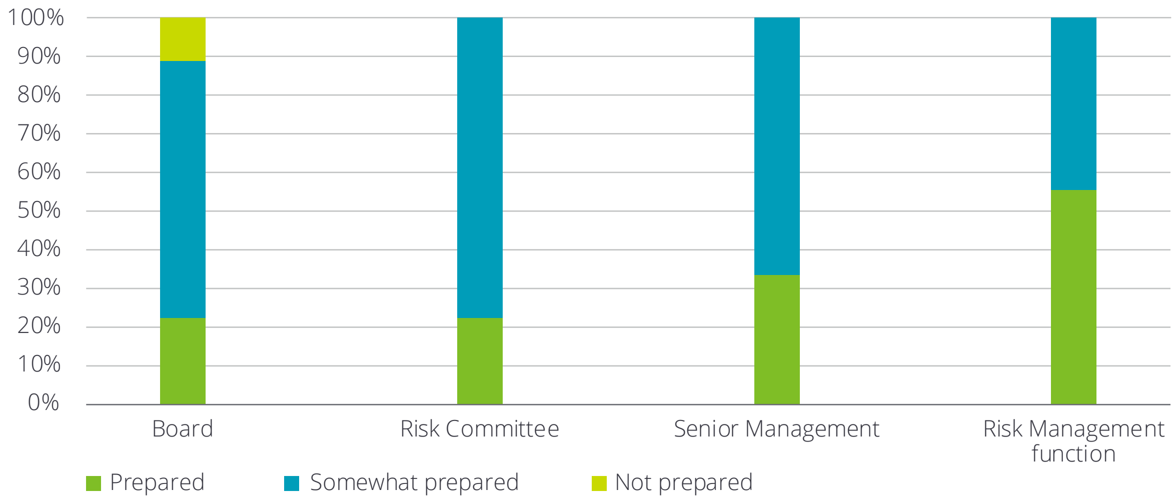
Alignment across Risk Governance Units

Broadly, respondents perceived that Senior Management, the Board, and the Risk Committee are only partially prepared for changes under the RBC regime. Perhaps unsurprisingly, Risk Management Functions are seen to be better prepared. Nonetheless, these units should be aligned in their understanding of the regime and the transformation efforts required - the earlier the better.

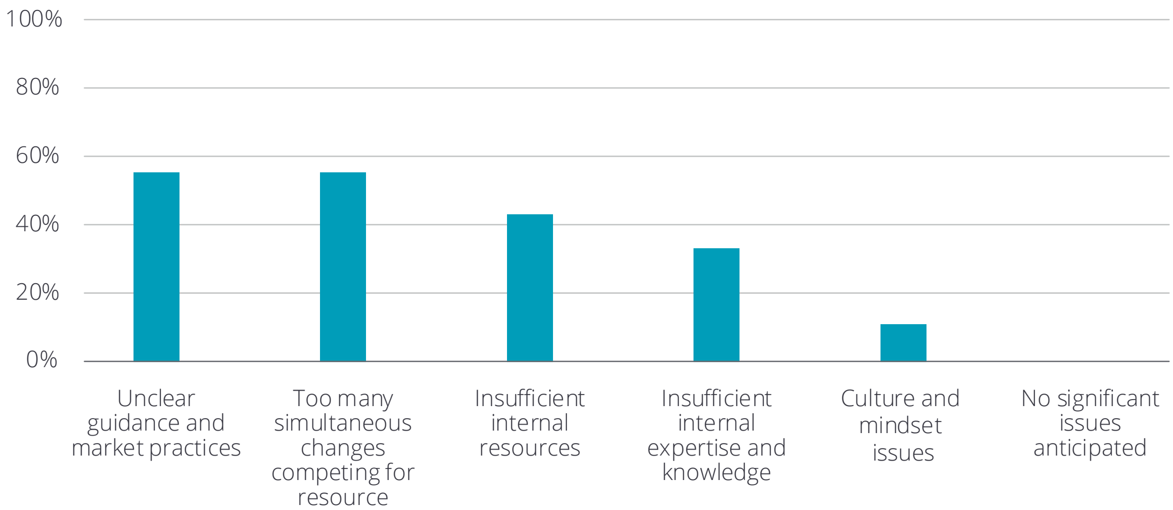
Key Institutional Roadblocks for RBC Transformation

Survey respondents anticipate several key roadblocks for the implementation of the ERM requirements under RBC. Leading these concerns were unclear guidance and market practices, as well as internal competition for resources (both at 56%) as seen in Figure 6.7. Lack of internal resources at 44% was a close third while internal knowledge and culture issues were also cited as key considerations. Responding to competition for resources, insufficient resources, and insufficient expertise further reinforces the need for a strategic view of RBC impact and alignment across risk governance units. Unsurprisingly, no respondents expected that they would face no significant organisational issues in implementing the ERM framework under RBC.

6.6 To what extent are the risk governance units aware and prepared for the forthcoming RBC Regime?



6.7 Top Roadblocks and Challenges for ERM Transformation



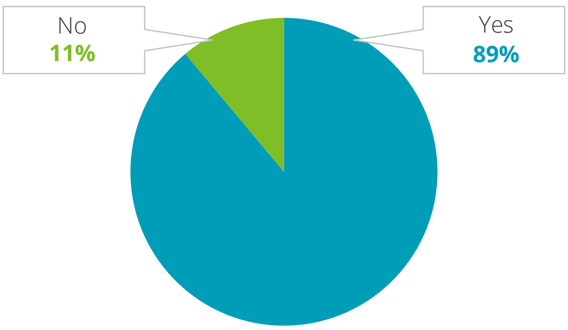
7. Reporting impacts

Hong Kong insurers expect that Pillar 3 will require hiring new resources, and some expect to implement new reporting systems.

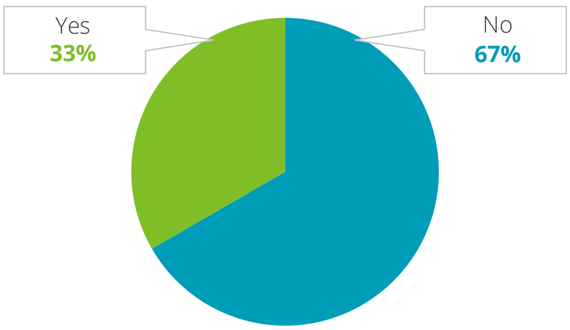
Although the disclosure proposals for HKRBC have not yet been set out, it appears that most respondents believe this exercise will be onerous and financially costly. These expectations could be influenced by the experiences of other firms implementing similar 3-pillar regimes such as European insurers under Solvency II.

In particular, 89% of respondents believe they would have to hire more resources, while 33% say they would also have to implement a new disclosure system.

7.1 Do you expect that you will need to hire additional resource to meet the RBC reporting requirements?



7.2 Do you expect that you will need to need new systems to meet the reporting requirements?



8. Conclusion

HKRBC will bring a complete change to the way insurance companies assess their solvency and manage risks. It comes at a time when insurers are also preparing for the financial reporting requirements of IFRS 17.

The new HKRBC regulations have been staggered. Though it is still being tested, much of the progress done so far across pillars has focused on Pillar 1 via the Quantitative Impact Studies and Pillar 2 via release of GL 21. Nonetheless, there is a considerable amount of development work to do on valuation models and capital frameworks to ensure that compliance with Pillar 1 is achieved.

Meanwhile, Pillar 2 will introduce new gaps in insurers' ERM frameworks and alignment across the risk governance units will be required in order to address them. As Pillar 2 comes into force ahead of Pillar 1, insurers face a significant amount of work remaining to close these gaps and integrate the new processes into business as usual.

Though we are yet to see indication of Pillar 3 requirements for insurers, the industry expects that it will devote resources to the forthcoming requirements. Through forethought, advance planning, and comparison against other 3-pillar frameworks, firms can put themselves in an optimal position to be fully prepared to react when details on Pillar 3 are released.

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