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## Risk-based capital framework for the insurance industry of Hong Kong



On 16 September 2014, the Insurance Authority (IA) of Hong Kong published a consultation paper on a proposed risk-based capital (RBC) framework for Hong Kong's insurance industry. The initial consultation period ends on 15 December 2014.

The new RBC regime will be developed in four phases:

- Phase I will involve development of the framework and key approaches.
- Phase II will involve development of detailed rules. An industry quantitative impact study (QIS) will be conducted during this phase. Phase II should begin in 2015, to be followed by another consultation exercise.
- Phase III will involve amendment of legislation. At least two to three years will be needed to complete all the preparatory tasks, including public consultations.
- Phase IV will be the implementation phase.

### Background

The Insurance Companies Ordinance (ICO) (Chapter 41) and its regulations, together with the Guidance Notes issued by the IA, combine to establish the existing capital adequacy framework for Hong Kong's insurance industry, which is essentially rule-based and does not explicitly take into account risk factors specific to different insurers. For long-term life insurance business, the required margin of solvency follows the European Union (EU) Solvency I regime. For long-term business, solvency capital is determined as a defined percentage of the statutory reserves plus a specified percentage of the sum at risk. In the prevailing solvency regime, the minimum solvency ratio requirement is 100% for all insurers, whilst the IA adopts a solvency ratio benchmark of 150% for life insurers and 200% for general insurers, below which it will require action to be taken to improve a company's solvency position.

In addition, the IA has issued various Guidance Notes with focus on corporate governance, risk management and internal control of insurers.

In recognition of the importance of the insurance sector in Hong Kong and its increasing complexity, as well as the need to comply with the new Insurance Core Principals (ICPs) in relation to RBC requirements issued by the International Association of Insurance Supervisors (IAIS) in 2011, the IA believes that a more modern risk-sensitive capital regime for the insurance industry is required.

### Summary of the consultation paper

The proposed RBC framework given in the consultation paper covers three major areas, known as the 'Three Pillars', a similar construct to that used for the proposed EU Solvency II framework.

#### *Pillar I – Quantitative aspects*

Pillar I consists of the quantitative requirements, including assessment of capital adequacy and valuation. In terms of the capital adequacy requirements, the IA has proposed to expand the current framework to include two explicit

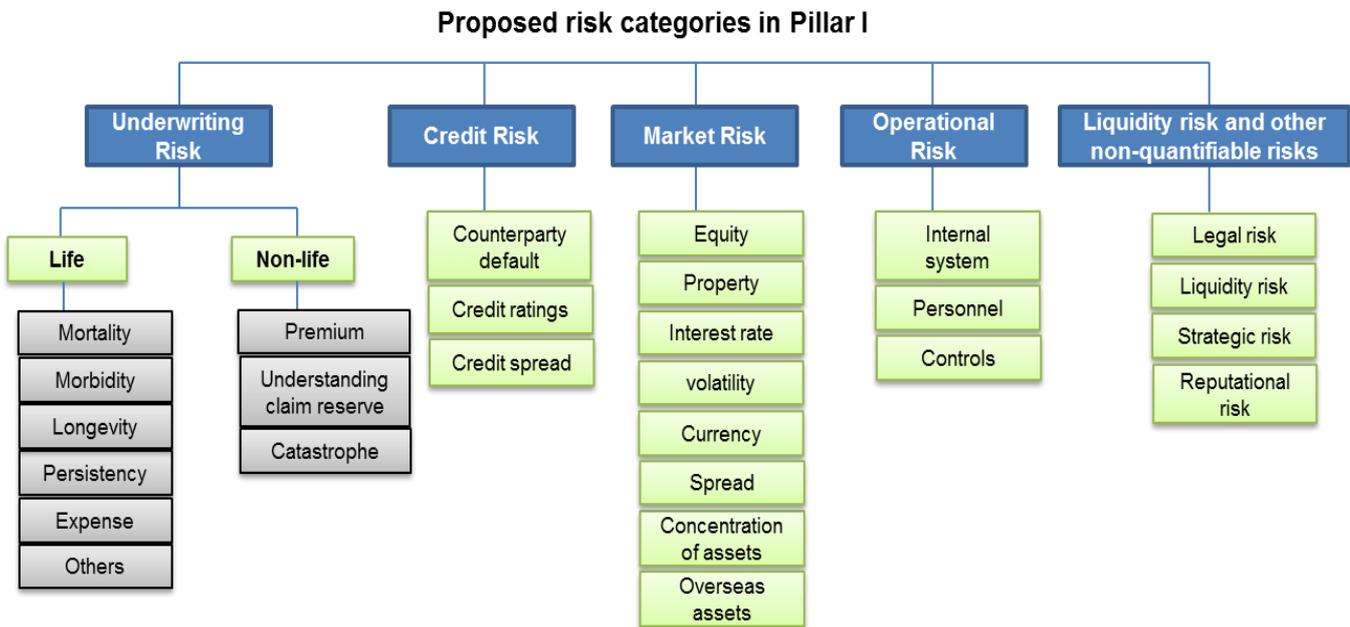
solvency control levels, a prescribed capital requirement (PCR) and a minimum capital requirement (MCR). The PCR is defined as the solvency control level above which the regulator does not intervene on capital adequacy grounds, whilst the MCR is defined as the solvency control level at or below which the supervisor would impose actions on the insurer concerned. The proposed target criteria and calculation approach for PCR and MCR are set out in Table I below.

Table I: Proposed target criteria and calculation approach for PCR and MCR

	PCR	MCR
<b>Proposed target criteria</b>	<ul style="list-style-type: none"> <li>On a going-concern basis</li> <li>Allow for one year's forecast new business</li> <li>Confidence level equivalent to a minimum investment grade level</li> <li>Use 99.5% value-at-risk (VaR) measure over one-year time horizon</li> </ul>	<ul style="list-style-type: none"> <li>Simpler and lower than PCR</li> <li>To be determined after completing the industry QIS in Phase II</li> </ul>
<b>Proposed calculation approach</b>	Adopt a standardised approach (typically a risk-factor-based approach or a specified stress-test-based approach) initially and retain the flexibility to use internal models or partial internal models subject to the approval of the IA	

In Pillar I, insurers are also required to quantify the capital they need to hold for any risks not addressed through their Own Risk Solvency Assessment (ORSA), as part of the capital adequacy requirements. Insurers' key risks are grouped into different risk categories, including underwriting risk, credit risk, market risk, operational risk, liquidity risk and other non-quantifiable risks, as shown in Chart I below.

Chart I: Proposed risk categories in Pillar I



Among these risk categories, underwriting risk, credit risk, market risk and operational risk are proposed to be addressed through additional capital requirements in the Pillar I calculations. Other risks are proposed to be better dealt with through enhanced enterprise risk management (ERM) processes in Pillar II or through enhanced supervisory oversight of asset-liability management (ALM) rather than holding additional capital.

To quantify the additional capital required for each risk category, the IA has proposed to adopt the stress-test based approach for underwriting risk and market risk, and risk-factor based approach for credit risk and operational risk. Correlations among different risks will be dealt with during the Phase II consultation exercise.

In addition, the quality and suitability of capital resources are also considered in Pillar I. The IA has proposed three steps to determine capital resources required, i.e., identification of capital resources, assessment of the quality and suitability of capital resources and determination of capital resources. The final determination of capital resources is to be based on a tiering approach, which categorises capital resources into different classes of quality and applies certain limits/restrictions with respect to these tiers.

The fundamental theory of the quantitative calculations is that the valuation of assets and liabilities should be consistent. Recognition of insurance contracts on bound or inception date should be consistent with the generally accepted accounting principles (GAAP) in Hong Kong. Economic valuation is proposed to be applied to all classes of business except Class G business. Class G business refer to retirement business, which already requires a stochastic valuation basis under the prevailing 'Guidance Note 7 on the Reserve Provision for Class G of Long-Term Business' (GN7) requirement. The economic valuation method can be either:

- 1) A market-consistent valuation approach and minimum cash surrender
- 2) A combination of both market-consistent and amortised cost valuation approaches, depending on the class of business

The consultation paper does not specify which classes of business should use market-consistent or amortised cost valuation approaches under item 2 above.

The valuation of technical provisions should be based on best estimate assumptions plus some margin for adverse deviations and make allowance for the time value of options and guarantees. The current minimum cash surrender value requirement is applied to the technical provisions. The discount rate used should adopt either a market-referenced rate, defined with reference to both current market yield or historical market yield, alternative valuation techniques during 'anomalous' market conditions or a combination of both.

#### *Pillar II – Qualitative aspects*

Pillar II is mainly related to how insurers can manage their risks appropriately. Under the proposals, all insurers need to put in place an effective ERM framework that provides for the identification and quantification of risks, as well as effective corporate government process. A formal ALM policy should also be incorporated within the ERM framework.

Insurers' investment policies should be clear, transparent and consistent with non-insurance financial sectors. Asset allocation should follow principle-based requirements rather than rule-based requirements. Currently the principles regarding the management of investments are given in 'Guidance Note 13 on Asset Management by Authorized Insurers (GN 13).' The IA has proposed an overhaul of GN 13 to expand it to address more issues, e.g., capital quality, asset allocation, ALM process, etc. A prudent-person principle in drawing up new investment requirements has been proposed in Pillar II. Insurers must invest in a manner that is appropriate to the nature of their liabilities, review and refresh the policy regularly at defined intervals.

The IA has proposed that the rationale, calculations and action plans connected with the performance of ORSA should be formally documented in an ORSA report and that the report should be submitted to the IA annually for review. ORSAs should include continuity analysis, stress and scenario testing, and reverse stress testing.

It is proposed that the IA retains the power to apply capital add-ons to insurers where deemed necessary.

#### *Pillar III – Disclosures*

Pillar III relates to the nature of periodic public reporting of capital resources and capital requirements of insurers. Insurers should, in addition to the statutory reporting to the IA, disclose to the public information about their risk assessments, capital resources and capital requirements in their published accounts and that enhanced disclosure requirements are addressed once proposals in respect of Pillar I and Pillar II are further evolved. There is potential for the solvency margin to be auditable/require external sign-off, which will be considered in Phase II, including whether and what information should come under the scope of external audit.

In addition to the three Pillars mentioned above, a group-wide supervision concept has been proposed by the IA. The proposed group-wide supervisory framework includes the following features:

- The IA should supervise insurers on both a solo entity and a group entity basis.
- Insurers should maintain separate onshore and offshore funds for general and long-term insurance business. Whether capital adequacy is to be determined at a fund or entity level is to be considered in Phase II.
- A three-tier approach to group supervision is proposed:
  - Tier 1 represents groups held by Hong Kong based insurers or non-operating holding companies and insurance subgroups not subject to home group-wide supervision.
  - Tier 2 represents disaggregated subsidiaries and insurance groups subject to home group-wide supervision.
  - Tier 3 represents all entities, including other regulated or non-regulated entities within the groups.
- The three pillars approach is applied differently to the three tiers:
  - Capital requirement prescribed by the IA at group level is applied to tier 1 only.
  - Corporate governance and ERM (including ORSA) requirements is applied to tiers 1 and 2.
  - Reporting requirements of group events and intra-group transactions is applied to all three tiers.

## Observations

There are still many uncertainties in terms of the final RBC framework, as this is still the initial consultation period and many details have yet to be agreed. Whilst it is too early to make any definitive conclusions about the impact of the proposed new RBC framework on the industry, we make some initial observations below:

- The development of an RBC framework is seen as a welcome step which better reflects levels of regulatory capital with levels of underlying risks and aligns an important and developed insurance market such as Hong Kong with the solvency regimes used in many other markets in Asia and with evolving global standards.
- The use of a market-referenced discount rate may be potentially challenged as not acting in accordance with a 'true' market-consistent valuation approach. It is not clear at this stage how the relative weights of current market yields and historical market yields are to be set in determining the market-referenced rate. If insurers have the right to decide their own market-referenced rate, it will be harder to compare the valuation results across different insurers. On the other hand, if the discount rate is based solely on markets yields, levels of statutory solvency may be seen as too exposed to market volatility.
- Depending on the final details, the introduction of a new RBC framework may also potentially drive increased merger and acquisition activity and industry consolidation. The changes may potentially lead some insurers to divest capital-intensive blocks of business as they seek to optimise capital.
- Use of an economic valuation for all business lines except Class G business is required under the proposed RBC framework. Insurers may need to improve their current modelling systems and processes to meet the demand of economic valuation. Business planning and embedded value calculations will require projections of the new capital standards, which may be challenging for many companies with their existing platforms. Companies will also need to increase their efforts to either train or acquire talent with suitable expertise for such tasks, which may increase cost pressures.
- Although the extent of the additional capital requirements for durationally mismatched business is far from being decided, the proposals should make life insurers reconsider their product strategies. For example, limited pay whole life plans, which typically involve liabilities so long that they are unable to be matched by equivalent duration assets, are likely become very capital-intensive under the new regime, as they are under most risk-based capital regulations.

The industry has generally welcomed the proposals set out in the consultation paper, although many were hoping for more details to be provided. The life insurance sector in particular has been burdened by a reserving regime that results in uneconomic levels of policyholder reserves for certain lines of business at the interest rates we have been

experiencing in recent years. The implementation timetable set out in the paper, although seen as prudent by some, has disappointed others who were hoping for more rapid change. The flexibility in the proposals to allow both standardised and internal model approaches is seen as positive, particularly by those multinationals that have been spending huge amounts of effort on constructing internal models for other purposes (e.g., Solvency II) in recent years.

In summary, the consultation paper marks an important first step in the process towards embedding a new risk-based solvency framework in Hong Kong. For many, the subsequent steps can't come soon enough.

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