



Research Office
Legislative Council Secretariat

Fact Sheet

Risk-based capital regime for the insurance industry of Hong Kong

FS02/17-18

1. Introduction

1.1 In recent years, there has been a global trend towards the adoption of a risk-based approach to insurance supervision in order to strengthen the protection of policyholders. This features the implementation of a risk-based capital ("RBC") framework which takes into account different risk factors when assessing the capital adequacy of an insurer. An insurer exposed to higher risks is required to hold more capital. In 2011, the International Association of Insurance Supervisors, the global standard-setter for the insurance industry, issued the new Insurance Core Principles which place more emphasis on risk-based supervision on both quantitative and qualitative aspects. All member supervisors around the world, including the Insurance Authority¹ ("IA") in Hong Kong, are obliged to observe the new Principles.

1.2 To align with the international standards, Hong Kong has planned to move towards the RBC regime from the current rules-based regime. The Government conducted a public consultation on the conceptual framework during 2014.² Recently, IA has launched the first Quantitative Impact Study ("QIS") to ensure that the new regime is viable and practicable. At the meeting of the Panel on Financial Affairs to be held on 8 January 2018, the Government will brief Members on the proposed RBC framework for the insurance industry. To facilitate Members' discussion, this fact sheet provides information on the key concepts and approaches under the proposed RBC framework, and highlights the relevant concerns/views of the public expressed during the public consultation. Salient features of the proposed regime are summarized in the **Appendix**.

¹ IA was established in December 2015. In 2017, it took over the statutory duties of regulating insurance companies from the then Office of the Commissioner of Insurance.

² The consultation was conducted by the former Office of the Commissioner of Insurance.

2. Hong Kong's existing rules-based regime

2.1 Under the current regulatory framework, the Insurance Ordinance (Cap. 41)³ and its Regulations, together with the Guidance Notes issued by IA, prescribe a rules-based capital adequacy framework for insurers operating in Hong Kong. Capital adequacy is assessed based on whether the value of the assets of an insurer exceeds the value of its liabilities by the required margin of solvency. The objective is to provide a reasonable safeguard against the risk that the insurer's assets may be inadequate to meet its liabilities arising from unpredictable events, such as adverse fluctuations in its operating result or the value of its assets and liabilities.

2.2 At present, the solvency margin requirements for general insurance business⁴ are calculated with reference to relevant premium income and relevant claims outstanding. For long-term insurance business⁵, the calculation is based on the sum insured and policy reserves⁶. The method of determination is set out in Section 10 of the Insurance Ordinance for general insurers, and in the Insurance Companies (Margin of Solvency) Regulation for long-term insurers.⁷ Substantial actuarial input is required for the computation.

2.3 While all insurers are required to maintain assets in excess of liabilities by the amount of solvency margin as stipulated in the Insurance Ordinance, IA in practice requires general and long-term insurers to maintain 200% and 150% of the required solvency margin respectively for monitoring purpose. These benchmarks are seen as the solvency control levels, below which IA may take regulatory measures to improve the insurer's solvency position.

³ The Insurance Ordinance was formerly named Insurance Companies Ordinance. Name change took place on 26 June 2017.

⁴ General business covers insurance business relating to accident and health, property damage, general liability, etc.

⁵ Long-term business includes life insurance, group insurance and annuity.

⁶ Policy reserves are funds set aside by an insurer to cover future liabilities arising from long-term insurance business.

⁷ For general business insurers, the solvency margin is the greater of: (i) one-fifth of the relevant premium income up to HK\$200 million, plus one-tenth of the amount by which the relevant premium income exceeds HK\$200 million; or (ii) one-fifth of the relevant claims outstanding up to HK\$200 million, plus one-tenth of the amount by which the relevant claims outstanding exceeds HK\$200 million. For long-term business insurers, the solvency margin is the greater of: (i) HK\$2 million; or (ii) an amount specified under the Insurance (Margin of Solvency) Rules for different classes of business (which is generally 4% of the mathematical reserves and 0.3% of the capital at risk).

2.4 Solvency assessment based on consistent valuation of assets and liabilities is a pre-requisite for obtaining meaningful insight into the asset-liability positions of an insurer. However, there are presently no prescribed rules for consistent asset and liability valuation bases in assessing an insurer's solvency position. In addition, risk factors pertinent to an individual insurer are not featured or quantified under the existing framework. They are examined separately by the regulator together with the insurer concerned.

3. Consultation on the introduction of RBC framework in Hong Kong

3.1 To align Hong Kong's regime with the international standards, IA has planned to move towards the RBC regime, under which the capital requirements for an insurance company are determined in relation to the level of risk that the company is bearing. During 2012-2013, the Government commissioned a consultancy study for developing an RBC framework appropriate for Hong Kong's insurance industry. In 2014, the Government drew upon the findings of the consultancy study to propose a RBC regime for public consultation. In developing the framework, the Government has taken into account that, among others, the framework must be in compliance with the Insurance Core Principles, and the cost of change in meeting the new requirements should not diminish the attractiveness of Hong Kong as a place to do business.⁸

3.2 According to the consultation document, the proposed RBC framework covers three major areas (known as Three Pillars) with each featuring a different focus. In addition, wide-group supervision which enables IA to supervise insurers on both legal entity and group-wide basis is proposed. These aspects will be discussed in paragraphs 3.3-3.7, and they are briefly summarized as follows:

- (a) **Pillar 1** consisting of the **quantitative requirements** that include assessment of capital adequacy and valuation;
- (b) **Pillar 2** setting out the **qualitative requirements** that include corporate governance, Enterprise Risk Management as well as Own Risk and Solvency Assessment;

⁸ See Office of the Commissioner of Insurance (2014).

- (c) **Pillar 3** including **disclosure requirements** for enhancing transparency of relevant information of insurers to the public; and
- (d) **group-wide supervision** regulating all insurance groups under a **three-tier approach**, with each tier being subject to a different level of regulatory requirements depending on the group structure.

Pillar 1 – quantitative requirements

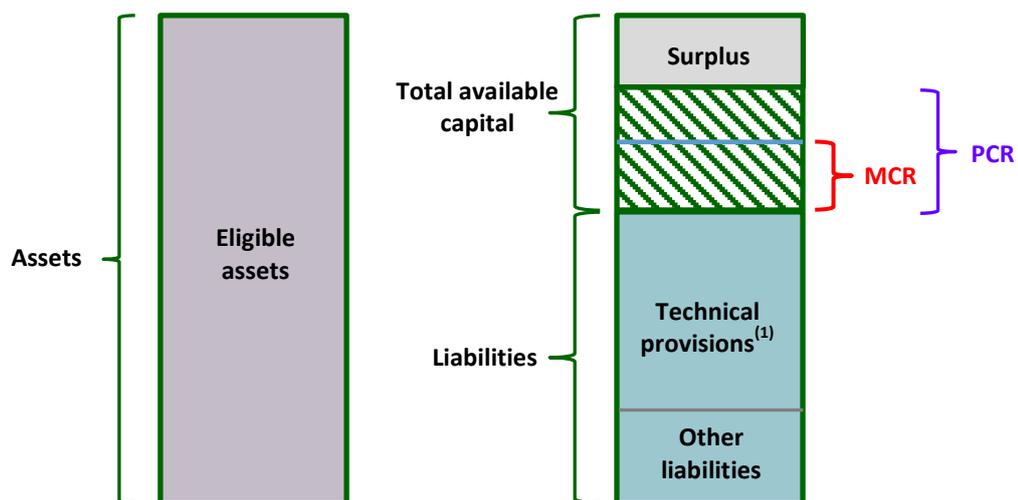
3.3 Pillar 1 addresses the quantitative requirements of the RBC framework, which focus on making capital requirements risk-sensitive such that insurers presenting greater risk to policyholders must carry more capital. Notwithstanding the introduction of risk-sensitive capital requirements, it is emphasized in the consultation document that the move does not necessarily imply a need for individual insurers to increase or decrease capital. Conceptual features are summarized below:

- (a) **adoption of a total balance sheet approach for assessing capital adequacy**, where the required capital and capital resources of an insurer are determined on the basis of a consistent valuation of its assets and liabilities,⁹ with due regard to the risks inherent in the assets and liabilities. In so doing, all quantifiable risks associated with an insurer's assets and liabilities are explicitly factored into determining the required capital and capital resources, which represents a fundamental shift from the current relatively simple determination of the required solvency margin;
- (b) **introduction and adoption of prescribed capital requirement ("PCR") and minimum capital requirement ("MCR") as solvency control levels (Figure 1)**. This in turn provides an early-warning mechanism and enables proportionate responses. Based on the Insurance Core Principles, PCR is the highest solvency control level determined on an on-going basis, above which the regulator

⁹ Valuation on consistent bases means that differences in values of assets and liabilities can be explained in terms of the differences in the nature of the cash flows (including their timing, amount and inherent uncertainty), rather than differences in methodology and assumption. Consistency in valuation is considered a pre-requisite for obtaining meaningful insight into the asset-liability positions of an insurer. See Office of the Commissioner of Insurance (2014).

does not intervene on the capital adequacy grounds. MCR is the lowest solvency control level, at or below which the regulator would invoke its strongest actions in the absence of appropriate corrective actions;

Figure 1 – PCR and MCR under Pillar 1 of the RBC framework



Note: (1) Technical provisions represent the amount that an insurer sets aside to fulfil its insurance obligations and settle all commitments to policyholders and other beneficiaries arising over the lifetime of the insurer's portfolio.

Sources: Office of the Commissioner of Insurance (2014) and Insurance Authority (2017b).

(c) **methodology for determining solvency control levels.** PCR will be expressed in probabilistic terms, based on a **value-at-risk measure**¹⁰ at a confidence level of 99.5% over a one-year period.^{11, 12} The minimum categories of risk to be captured include underwriting risk, credit risk, market risk and operational risk. In the initial stage, a **standardized approach** will be adopted by all insurers to produce their PCR target at the value-at-risk level. Flexibility is retained for using internal models by

¹⁰ Value-at-risk measures the worst expected loss under normal conditions over a specific time interval at a given confidence level.

¹¹ In the consultation document, the Government suggested inclusion of one year's forecast of new business in the calculation. Some respondents indicated concerns that this might give rise to the issue of subjectivity and practicalities and subsequent comparability across insurers. The Government said that it would review this requirement and assess whether there are viable and effective alternatives. See Office of the Commissioner of Insurance (2015).

¹² This would mean an insurer's PCR would be the amount of capital resources required to be at a 99.5% confidence level (i.e. under a 1-in-200-year event) of having non-negative net assets at the end of a one-year time horizon.

individual insurers, subject to IA's approval. For the target level of MCR, it will be defined after completion of QIS; and

- (d) **adoption of a tiering approach to categorize the capital resources** to meet the regulatory capital requirements, in contrast with the current framework with no rules on classification of capital resources. Under the tiering approach, capital resources will be categorized into different classes of tiers based on quality by reference to, for example, its ability to absorb losses on going-concern basis and wind-up basis. For each category, certain limits/restrictions will be applied.

Pillar 2 – qualitative requirements

3.4 Qualitative aspect is an integral part of the RBC framework, with the main purpose to encourage insurers to manage risk appropriately. Key elements are outline below:

- (a) **implementation of an Enterprise Risk Management framework.** Under the RBC framework, an effective Enterprise Risk Management framework will need to be put in place by insurers for better risk management through identification and quantification of risks. In particular, the framework features (i) the incorporation of a "feedback loop" as a process of assessing and monitoring changes in the risk profile of the business to enable insurers to respond in a timely manner; and (ii) inclusion of a risk tolerance statement which sets out the tolerance limits the insurer is prepared to be exposed;
- (b) **requirement for an Own Risk and Solvency Assessment ("ORSA").** Insurers will be required to perform an ORSA regularly for assessment of the adequacy of their risk management and current and likely future capital positions. The rationale, calculations and action plans in connection with the performance of ORSA are required to be formally documented and submitted to IA annually for review. To allow sufficient time for insurers to get familiar with Pillar 2 requirements, the Government proposes a **phased**

implementation, with ORSA introducing after the Enterprise Risk Management; and

- (c) **adoption of proportionality in the course of Pillar 2 implementation.** In view of the diverse nature of the insurance industry in Hong Kong, the principle of proportionality is proposed to ensure that the new requirements under Pillar 2 will be appropriate to the nature, scale and complexity of an insurer's business. However, IA will have the power to impose additional capital requirement (**capital add-ons**) to mitigate risks to policyholders, if it considers that there is weakness or inadequacy in the ORSA process or Enterprise Risk Management framework.¹³

Pillar 3 – disclosure and transparency

3.5 Pillar 3 is about enhancing disclosure requirements in order to increase market transparency. Under Pillar 3, it is proposed that insurers should, on top of the statutory reporting requirements to IA, disclose to the public **information about their (a) risk assessments; (b) capital resources and (c) capital requirements in their published accounts.** As stated in the consultation document, the industry had concerns over both the cost and "information overload" arising from the proposed requirements, although they generally agreed to greater transparency and public disclosure.

3.6 In response, the Government plans to address the enhanced disclosure requirements under Pillar 3 once proposals in respect of Pillar 1 and Pillar 2 are further evolved. As raised in the consultation document, the extent to which additional information is to be disclosed to the public and whether it should be subject to external audit will need to be examined. In addition, the Government proposes to take a **phased-in approach** to greater information requirements in order to enable both insurers and policyholders to better understand and interpret the information.¹⁴

¹³ During consultation, some respondents indicated a need to have a clear definition and transparent rules for the power to be invoked. The Government has responded that details would be developed at a later stage when the components of PCR, MCR and capital resources are established. See Office of the Commissioner of Insurance (2015).

¹⁴ See Office of the Commissioner of Insurance (2015).

Group-wide supervision

3.7 Pursuant to the requirements under the new Insurance Core Principles, Hong Kong is planning to introduce group-wide supervision in order to ensure that Hong Kong policyholders are adequately protected and will not be placed at any disadvantage due to risks taken by any entities of the group. Proposed features under group-wide supervision include the following:

- (a) **setting up of separate funds for on-shore and off-shore insurance businesses.** In the consultation document, the Government proposes to require insurers to set up separate funds to hold assets for their on-shore and off-shore businesses,¹⁵ which would enable the regulator to have more information on the insurers' assets and liabilities in relation to their off-shore business. Consultation responses towards the proposal were mixed. Some agreed with the proposal, but there were others who were concerned about the resulting increased **administrative and compliance burden** borne by the insurers. There were also requests for more details about the requirements; and
- (b) **introduction of a three-tier supervisory approach.** Under group-wide supervision, IA will supervise insurers operating in Hong Kong on both a solo entity and group entity basis. The group-wide supervision will apply to all three Pillars under the RBC framework, and a three-tier supervisory approach will be put in place, with each tier subject to a different level of regulatory requirements, depending on the insurance group structure.¹⁶ While consultation respondents generally indicated support to group-wide supervision, some have expressed concerns about the **complexity and practicality** of the supervisory approach. The Government responded that duplication of regulation should

¹⁵ On-shore business generally refers to the business of Hong Kong operations while off-shore business refers to business of overseas operations through branches.

¹⁶ For example, it is proposed in the consultation document that if the insurance group has a Hong Kong-incorporated insurance subsidiary and is not subject to group-wide supervision in any other jurisdiction, the insurance group will be under Tier 1 subject to group-wide supervision of IA to satisfy its (a) group-wide capital requirements, (b) qualitative requirements, and (c) reporting requirements (including intra-group transactions and material events). On the other hand, if the holding company of a Hong Kong-based insurer is a regulated entity of another financial supervisor, the holding company will be under Tier 3, subject only to the reporting requirements imposed by IA. See Office of the Commissioner of Insurance (2014).

be avoided and further details would be considered and worked out at a later stage.¹⁷

4. Follow up to the public consultation

4.1 In September 2015, the Government published the consultation conclusions on the RBC framework for the Hong Kong insurance industry. According to the consultation conclusions, there was general agreement from the industry on the overarching principles of the conceptual framework. After the consultation, the Government carried out another round of consultancy study on the detailed rules in September 2016. Meanwhile, IA went further with conducting various industry focus groups on technical issues with representatives of the Hong Kong Federation of Insurers and the Actuarial Society of Hong Kong between November 2016 and mid-2017.

4.2 IA will proceed with the first QIS data analysis and calibration upon collection of quantitative and qualitative data from authorized insurers in early December 2017. It is expected that at least two more QIS exercises will have to be conducted and they would only be completed in 2019 at the earliest. After that, IA would proceed to conduct public consultation on the draft rules of the RBC framework, tentatively in 2020. According to the Government, a new guideline on Pillar 2 requirements will be issued and the public will be consulted on the draft guideline in early 2018. The relevant legislative amendments in relation to the Pillar 1 rules will tentatively be submitted to the Legislative Council in 2020-2021.¹⁸

¹⁷ See Office of the Commissioner of Insurance (2014) and (2015).

¹⁸ See Financial Services and the Treasury Bureau (2017) and Insurance Authority (2017a).

Table – Salient conceptual features of the proposed RBC framework and group-wide supervision

	Pillar 1	Pillar 2	Pillar 3	Group-wide supervision
Focus	Quantitative aspects	Qualitative aspects	Disclosures and transparency	Group-wide supervision
Salient conceptual features	<ul style="list-style-type: none"> • Total balance sheet approach for assessing capital adequacy. • PCR and MCR as solvency control levels. • Value-at-risk as the target criteria for PCR. • Standardized approach for determining capital requirements. • Tiering approach for categorizing capital resources into different classes based on quality. 	<ul style="list-style-type: none"> • Enterprise Risk Management framework for better management of risks. • Own Risk and Solvency Assessment for assessment of the adequacy of the risk management and capital positions. • Principle of proportionality applied to Pillar 2 requirements based on the insurers' business nature, scale and complexity. • Capital add-ons imposed by the regulator on insurers where necessary. 	<ul style="list-style-type: none"> • Disclosure of insurers' information to the public about their risk assessments, capital resources, and capital requirements. 	<ul style="list-style-type: none"> • Separate funds for insurers' on-shore and off-shore general and long-term insurance businesses. • Three-tier supervisory approach with each tier subject to a different level of regulatory requirements, depending on the group structure.
Remarks	<ul style="list-style-type: none"> • Technical details on various aspects are to be further worked out during QIS, as disclosed by the Government. 	<ul style="list-style-type: none"> • The Government suggests phased implementation of Pillar 2 requirements. • Some consultation respondents have expressed a need to have clear rules on the part of capital add-ons. 	<ul style="list-style-type: none"> • The industry has cited challenges of both cost and "information overload". • The extent to which additional information should be disclosed and whether it should be subject to external audit need to be examined. • The Government suggests a phased-in approach for Pillar 3 requirements. 	<ul style="list-style-type: none"> • There were concerns over the administrative and compliance burden on the need to maintain separate funds for on-shore and off-shore businesses. • Some had concerns about the complexity and practicality of the three-tier supervisory approach.

Sources: Office of the Commissioner of Insurance (2014) and (2015).

References

1. Actuarial Society of Hong Kong. (2014) *Re: ASHK Comments on the Consultation Paper on a Risk-based Capital Framework for the Insurance Industry of Hong Kong*. Available from: <http://www.actuaries.org.hk/upload/File/ASHK%20Comments%20on%20the%20Consultation%20Paper%20on%20a%20Risk-based%20Capital%20Framework%20for%20the%20Insurance%20Industry%20of%20Hong%20Kong.pdf> [Accessed December 2017].
2. DLA Piper. (2015) *Consultation Paper on a Risk-Based Capital Framework for the Insurance Industry in Hong Kong*. Available from: <https://www.dlapiper.com/~media/Files/Insights/Publications/2015/01/Consultation%20Paper%20on%20a%20Riskbased%20Capital%20Framework%20for%20the%20Insurance%20Industry%20in%20Hong%20Kong.PDF> [Accessed December 2017].
3. Ernst & Young. (2015) *Introduction to Solvency II SCR Standard Formula for Market Risk*. Available from: <http://www.ermsymposium.org/2015/presentations/C-14-Thoren.pdf> [Accessed December 2017].
4. Financial Services and the Treasury Bureau. (2017) Legislative Council Panel on Financial Affairs. *Risk-based Capital Regime for the Insurance Industry of Hong Kong*. LC Paper No. CB(1)402/17-18(06).
5. Hong Kong e-Legislation. (2015) *Cap. 41 Insurance Ordinance*. Available from: <https://www.elegislation.gov.hk/hk/cap41> [Accessed December 2017].
6. Insurance Authority. (2017a) *Insurance Regulation in Hong Kong. Presentation by CEO on 10 October 2017*. Available from: https://www.ia.org.hk/en/infocenter/files/Insurance_Summit_RBC_Regime_and_Insurtech.pdf [Accessed December 2017].
7. Insurance Authority. (2017b) *Insurance Summit 2017. Presentation by the Executive Director on 21 September 2017*. Available from: https://www.ia.org.hk/en/infocenter/files/Insurance_Summit_RBC_Regime_and_Insurtech.pdf [Accessed December 2017].

8. Insurance Authority. (2017c) *Letter to Chief Executives of authorized insurers on participation in the First Quantitative Impact Study for the Development of the Risk-based Capital Regime*. Available from: https://www.ia.org.hk/en/legislative_framework/circulars/reg_matters/files/cir_20170728_2.pdf [Accessed December 2017].
9. International Association of Insurance Supervisors. (2017) *Insurance Core Principles*. Available from: <https://www.iaisweb.org/page/supervisory-material/insurance-core-principles> [Accessed December 2017].
10. KPMG. (2017) *ASHK HK RBC Update. 11 April 2017*. Available from: http://www.actuaries.org.hk/upload/File/ET1104_210317.pdf [Accessed December 2017].
11. Office of the Commissioner of Insurance. (2014) *Consultation Paper on a Risk-Based Capital Framework for the Insurance Industry of Hong Kong*. Available from: https://www.ia.org.hk/en/infocenter/files/rbc_consultation_paper.pdf [Accessed December 2017].
12. Office of the Commissioner of Insurance. (2015) *Consultation on a Risk-Based Capital Framework for the Insurance Industry of Hong Kong – Consultation Conclusions*. Available from: https://www.ia.org.hk/en/infocenter/files/rbc_consultation_conclusions.pdf [Accessed December 2017].
13. Towers Watson. (2015) *The Risk-Based Capital Framework in Hong Kong – An essential step forward*. Available from: <https://www.towerswatson.com/en-HK/Insights/IC-Types/Ad-hoc-Point-of-View/2015/01/The-Risk-Based-Capital-Framework-in-Hong-Kong> [Accessed December 2017].

Research Office
Information Services Division
Legislative Council Secretariat
29 December 2017
Tel: 2871 2122

Fact Sheets are compiled for Members and Committees of the Legislative Council. They are not legal or other professional advice and shall not be relied on as such. Fact Sheets are subject to copyright owned by The Legislative Council Commission (The Commission). The Commission permits accurate reproduction of Fact Sheets for non-commercial use in a manner not adversely affecting the Legislative Council, provided that acknowledgement is made stating the Research Office of the Legislative Council Secretariat as the source and one copy of the reproduction is sent to the Legislative Council Library. The paper number of this issue of Fact Sheet is FS02/17-18.