STUDY GUIDE

ASHK Examination/Certificate in Hong Kong Insurance Markets and Regulations

Feb 2021 Edition

GENERAL INSURANCE

- *Role of actuaries in GI market*
- *Main types of products in Hong Kong market*
- *Overview of market landscape in Hong Kong*
- *Regulations and guidelines*
- *Recent industry developments*

Note: This Study Guide is reviewed on an on-going basis by ASHK Curriculum/Examination Taskforce.

3.4 General Insurance

3.4.0 Introduction

This section provides practical information relevant to General Insurance (GI) actuaries practicing in Hong Kong, as well as GI actuaries supporting firms with exposures for risks domiciled in Hong Kong.

For the avoidance of doubt, the terms "insurance company" and "insurer" in the following sections may be taken to mean direct insurers, reinsurers and captives in equal measure. Wherever a distinction is relevant, this will be outlined clearly.

3.4.1 Role of actuaries in GI market

3.4.1.1 Statutory roles

The Insurance Authority (IA) requires insurers that carry on Employees' Compensation (EC) and Motor Insurance business to commission an annual review of the reserves of these two lines of business. An annual actuarial report should be prepared and certified by an actuary. The review should be conducted according to the criteria as specified in GL9 – "Actuarial Review of Insurance Liabilities in respect of Employees' Compensation and Motor Insurance Businesses" (https://ia.org.hk/en/legislative_framework/files/GL9.pdf) issued by IA[1] [2]. In preparing the report, the certifying actuary needs to provide sufficient information for an informed reader to form a view on the reasonableness of the estimation provided. In particular:

- Actuaries should explain and show evidence for material assumptions made (GL9 4.6a);
- Actuaries should exercise judgment on the sub-division of risks, for example, exposure pattern, risk nature and claim characteristics (GL9 4.9);
- Actuaries should include sufficient detail on the latest business operation to support material assumptions (GL9 4.11);
- Actuaries should advise the company the reasons for movements, to the extent that the company can explain and identify follow-up investigations or remedial actions (GL9 4.18).

The report must be submitted to the IA for review. It is the responsibility of the Chief Executive of the insurer to ensure that the report and certificate are submitted to the Board of Directors of the insurer, or the regional headquarters in the case of a non-Hong Kong incorporated insurer, for information. The actuary shall be given opportunity to raise matters arising out of

[1] The new Independent Insurance Authority (IIA) took over the statutory duties of regulating insurance companies from the Office of the Commissioner of Insurance (OCI) on 26 June 2017.
[2] All Guidance Notes promulgated by the OCI have been renamed as Guidelines, and the abbreviation has been changed from "GN" to "GL".

the preparation of the report directly with the board or the regional headquarters. This includes matters that may already have been raised with the management of the insurer but have not been dealt with to the satisfaction of the actuary. The actuarial review report and certificate prepared are to be submitted to the IA within 4 months after the close of the financial year.

There are minimum requirements of qualifications and work experience with regard to the certifying actuary, to ensure the actuary is familiar with the legal, judicial and social trends in Hong Kong that may impact upon the valuation of the liabilities. Insurers may seek approval from IA in case they wish to appoint an actuary that possesses qualifications and experience other than prescribed.

The list below (which is not intended to be exhaustive) outlines a number of important points regarding the statutory classes that a certifying actuary should be aware of in conducting their reviews:

- Motor
    - Distinction between own damage, third party property damage and bodily injury claims. For example, own damage claims tend to be resolved relatively quickly compared to bodily injury claims;
    - Bodily injury claims reporting is limited to three years from the date of accident/injury or the date of knowledge that the injury was significant and attributable to the defendant (whichever is later). For fatal accidents, the limitation period is three years from the date of death or date of knowledge of the death by the deceased's dependent (whichever is later);
    - An actuary may choose to segment a portfolio for purpose of loss ratio, frequency, severity, development or large loss analysis to take into account these features:
        - Electric vehicles, where there is increasing penetration in HK, have markedly different experience in terms of severity and frequency;
        - Distribution channels, whereby the experience often differs, e.g. online channels, partnership with motor dealers.
    - Motor market rate/burning cost report – this report provides estimates of the market burning cost by vehicle type and coverage based on data submitted by insurers (around 50% market share). The report is commissioned by the HKFI on an annual basis, and is available to insurers who are HKFI members.
    - All relevant companies are required to compile and submit quarterly rate information to the IA. For Motor, exposure and premium information is presented by class of vehicle and coverage type.

- EC
  - The EC Ordinance applies to all employees (either full-time or part-time) employed under contracts of service or apprenticeship. This ordinance specifies the compensation to be provided to the injured, among other things. It also applies to employees working outside of Hong Kong but employed by local employers. A summary of information about the EC Ordinance can be found here (https://www.labour.gov.hk/eng/public/ecd/pco360.pdf).
  - In addition to compensation under the EC Ordinance, an injured employee can also seek Common Law Damages via the court system. Practicing actuaries should take note that the estimation and management of common law damages form a significant proportion of the EC claim liabilities for some industry/trades. As such, the severity and frequency trends of common law cases are often monitored for the effects of inflation and the increasing influence of recovery agents.
  - The employer has responsibility to notify the Commissioner for Labour of any accident or prescribed occupational disease irrespective of whether the accident or occupational disease gives rise to any liability to pay compensation within 14 days (7 days for deaths). EC common law claims reporting are limited by the same time bar as for Motor bodily injury claims as outlined earlier (i.e. three years from the date of accident/death or date of knowledge, whichever is later);
  - Inflation of EC claim costs would be affected by:
    - Wage inflation;
    - Legal cost inflation – solicitors' hourly rates for plaintiffs follow a fixed schedule depending on the solicitor's years of practice, with the rates differing between District Court and High Court. The latest increase in the schedule rates was effective on 1 January 2018, and was the first increase in 20 years. In the 20-year period during which the schedule rates did not increase, the actuary should still consider the impact of inflation to legal cost. It is also important to note the differentiation to the hourly rates for solicitors engaged by the insurer as these affect different components of claim cost (legal costs for plaintiffs vs an insurer's own legal costs);
    - Medical cost inflation;
    - Changes in compensation under the EC Ordinance generally occur every 2 to 3 years, although there can be other changes which have more impact that can also be affected.
  - EC rates are generally set as a percentage of wageroll (or contract value for some types of risk). Insurers, through the underwriting process, may seek to validate the wageroll by requesting information such as MPF declarations, tax returns, audited financial statements;
  - EC market rate/burning cost report – this report provides estimates of the market burning cost for the total market and by industry, based on data submitted by insurers (around 60% market share). The industry classification relies on the

Standard Industrial Classification codes. The report is commissioned by the HKFI on an annual basis, and is available to insurers who are HKFI members.
  - All relevant companies are required to compile and submit quarterly rate information to the IA. For EC, exposure and premium information is presented by high level industry groups.

There are a number of other arrangements in place acting as safety nets for policyholders with regard to the statutory classes:

- Motor
  - Motor Insurers' Bureau (MIB) (http://www.mibhk.com.hk/eng/index.php)
    - The MIB provides compensation to traffic accident victims who cannot recover damages awarded to them either because the first party was uninsured and unable to pay, the vehicle was unidentified, the vehicular accident was a result of a terrorist act, or where the insurer is insolvent and unable to pay the claim in full.
    - All insurers who write third party motor insurance in Hong Kong are required to be members of the MIB.
    - Funding for the MIB comes from a 3% premium levy imposed by insurers on all motor policies they issue.

- EC
  - Employees Compensation Assistance Scheme (http://www.ecafb.org.hk/en/scheme.php)
    - The Employees Compensation Assistance Scheme serves as a safety net of last resort to employees and eligible persons in relation to compensation for work-related injuries or fatalities. It provides payments to injured employees or eligible family members of deceased employees who fail to receive their entitlements from employers or insurers after exhausting all legal and financially viable means of recovery.
    - The Scheme excludes claims relating to insurers' insolvency, which are covered by the Employees Compensation Insurance Insolvency Bureau.
    - The Scheme is funded via a 5.8% premium levy on EC insurance, of which 3.1% is allotted to the EC Assistance Fund Board, 2.0% to the Occupational Safety and Health Council and 0.7% to the Occupational Deafness Compensation Board.
  - Employees Compensation Insurer Insolvency Bureau (ECIIB) (http://www.eciib.com.hk/about.html)
    - The ECIIB was set up to assume responsibility for the liabilities of insurers engaging in EC business who become insolvent.
    - The Bureau is funded by a 2.0% premium levy on EC insurance.

- EC terrorism fund (https://www.ia.org.hk/en/supervision/int_dom_cooperation/files/text-ilens8.pdf)
  - The Government has a $10 billion facility which provides direct insurers with coverage for claims arising out of terrorism in respect of EC insurance.
  - Participation in the facility is voluntary but any insurers who choose to opt out must provide evidence of alternative cover to the IA.
  - 3.0% is charged on EC insurance for this cover.
- Employees Compensation Insurance Residual Scheme (http://www.ecirsb.com.hk/en/index.html)
  - The Employees' Compensation Insurance Residual Scheme Bureau Limited (ECIRSB) was set up to provide EC insurance to employers who are unable to obtain insurance from the market. There are a number of conditions to be met to qualify for the Scheme:
    - Employer must be declined EC insurance by at least three insurers; or
    - Quoted EC premium rate is over 30% above the corresponding benchmark rate for relevant High Risk Groups specified by the Scheme.
  - The HKFI has been appointed as the Administrator to conduct daily operations, and there is also an Underwriting Committee and Claims Committee to carry out the underwriting and claims functions respectively.
  - All insurers writing EC insurance must become members of the ECIRSB, and the risks are shared on a pooled basis (i.e. premiums and claims are shared amongst the members).

3.4.1.2 Non-statutory roles

Although the lines of business other than EC and motor are not statutorily regulated in Hong Kong, the reserves are usually determined by an actuary using actuarial methodologies including but not limited to the chain ladder method, the Bornhuetter-Ferguson (BF) method, and the expected loss ratio method amongst other statistical methods.

Actuaries also often play a leading role in the determination of premium rates for direct insurers and in the pricing of reinsurance contracts.

Traditional roles for GI actuaries are in pricing and reserving within insurance companies or consulting firms providing such services. These roles have in recent times expanded into enterprise risk management (ERM), in particular, capital allocation. Capital allocation is critical for an insurance company's success and many actuaries have been making significant contributions in this area by leveraging their technical skills and commercial acumen.

GI actuaries have also moved into the rapidly evolving data analytics space, being well-placed to apply their skills to customers and data analytics. They are making contributions in many fields, including the retail and telecommunications markets, and to loyalty schemes.

3.4.2 Main types of products in Hong Kong market

The statutory class descriptions of GI products can be found in Part 3 of Schedule 1 to the Insurance Ordinance (Cap. 41) (IO): https://www.elegislation.gov.hk/hk/cap41.

The study materials written by IA for the Insurance Intermediaries Qualifying Examination (IIQE) provide an overview of the types of general insurance products available in Hong Kong market
(https://www.ia.org.hk/en/supervision/reg_ins_intermediaries/files/P2_SN_eng_2018_2019update_file6.pdf).

The industry body, the Hong Kong Federation of Insurers (HKFI), also maintains its own classification of different types of General Insurance business (which is focused on products for individuals) as follows:

- Accident Insurance
- Medical Insurance
- Personal Liability Insurance
- Travel Insurance
- Household Contents & Building Insurance
- Motor Insurance
- Employees' Compensation Insurance

Currently, both GI companies and life insurers offer a variety of health insurance products. The Voluntary Health Insurance Scheme (VHIS) was launched by the Food and Health Bureau of the Hong Kong SAR Government on 1 April 2019. The aim is to regulate indemnity hospital insurance offered to individuals, although participation is voluntary by both insurers and individuals. Products that satisfy the rules of the VHIS will be deemed as "Certified Plans" and a list of these are maintained on the VHIS website. Certified Plans are required to contain a number of standard features aimed at increasing consumer confidence in purchasing hospital insurance. More details about the VHIS can be found here:
https://www.vhis.gov.hk/en/consumer_corner/faqs.html.

These statistics can aid in an understanding of the market composition. From the company listing, we can observe the following types of active market participants in the Hong Kong market: direct insurers, Lloyd's, captives, marine mutuals, P&I clubs, reinsurers.

Details of the amount of business written by insurer, by line of business, are available within the annual returns published by the IA. Quarterly returns are also published with less detail, but nonetheless give some indication of the emerging results by class of business. A market

overview based on the annual statistics is available here:
https://www.ia.org.hk/en/infocenter/statistics/files/Market_Overview_2018.pdf

3.4.3 Overview of market landscape in Hong Kong

As at 30 September 2020, there were 165 authorized insurers in Hong Kong, of which 91 were pure general insurers, 53 were pure long term insurers and the remaining 21 were composite insurers.

3.4.3.1 General insurance market statistics

The Hong Kong GI market wrote HK$55.4 billion of gross premiums in 2019, primarily comprised of Accident and Health business (33% of the market), followed by General Liability business (23% of market). Details of the quarterly and annual performance of the GI market can be found in the following links:

- **Annual statistics:**
  https://ia.org.hk/en/infocenter/statistics/annual_general_business_statistics.html

- **Quarterly statistics:**
  https://www.ia.org.hk/en/infocenter/statistics/quarterly_release_of_provisional_statistics_for_general_business.html

Selected exhibits including underwriting results are provided, giving an indication of the performance of individual insurers.

3.4.3.2 Code of conduct

The HKFI has developed a Code of Conduct for Insurers that is applicable to all General Insurance members and Life Insurance members of the body - https://www.hkfi.org.hk/pdf/en/download/e_abt.code.pdf.

It applies to insurance contracts effected in Hong Kong by individual policyholders resident in Hong Kong and insured in their private capacity only.

3.4.3.3 Regulation of GI intermediaries

The Insurance Authority has taken over as the sole regulator to license and supervise all insurance intermediaries in Hong Kong since 23 September 2019, and is responsible for supervising insurance intermediaries' compliance with the provisions of Insurance Ordinance (Cap. 41) ("IO"), and the relevant regulations, rules, codes and guidelines issued by the IA. The IA is also responsible for promoting and encouraging proper standards of conduct of insurance intermediaries, and has regulatory powers in relation to licensing, inspection,

investigation and disciplinary actions.
https://ia.org.hk/en/supervision/reg_ins_intermediaries/introduction_of_insurance_intermediaries.html

The Insurance Authority has issued two guidelines for licensed insurance intermediaries (the Guidelines):

GL23: Guideline on "Fit and Proper" Criteria for Licensed Insurance Intermediaries under the Insurance Ordinance (Cap. 41)
https://www.ia.org.hk/en/legislative_framework/files/Eng_GL23_FPP.pdf

GL24: Guideline on Continuing Professional Development for Licensed Insurance Intermediaries. https://www.ia.org.hk/en/legislative_framework/files/Eng_GL24_CPD.pdf

Under the Ordinance, a person who is, is applying to be, or is applying for a renewal of a licence to be, a licensed insurance intermediary is required to satisfy the IA that he/she/it is a fit and proper person. In addition, for a licensed insurance agency or a licensed insurance broker company, its responsible officer(s), controller(s), partner(s) and director(s) (where applicable) are also required to be fit and proper persons. These “fit and proper” requirements aim at ensuring that licensed insurance intermediaries are competent, reliable and financially sound, and have integrity

Licensed insurance intermediaries who are individuals should continuously update their technical and regulatory knowledge and refresh themselves on the ethical standards through CPD in order to ensure their professional competence in carrying on regulated activities.

The IA has developed some resources primarily geared towards intermediaries. They help provide some insight into the general risk management and processes for GI companies:

- IIQA Principles and Practice of Insurance Exam Study Notes – https://ia.org.hk/en/supervision/reg_ins_intermediaries/files/P1_SN_eng_2017ver_2018update.pdf
- IIQA General Insurance Exam Study Notes – https://www.ia.org.hk/en/supervision/reg_ins_intermediaries/files/P2_SN_eng_2018_2019update_file6.pdf

3.4.4 Regulations and guidelines

Similar to many other jurisdictions, the regulation of the insurance industry and the actuaries, in particular, is handled at three levels:

- **Statutory** – As promulgated in the Insurance Ordinance (IO)
- **Regulatory** – This is captured in a series of Guidelines (GLs), issued and periodically revised by the IA.

- **Actuarial** – This is captured in a series of Professional Standards and Actuarial Guidance Notes (AGNs), issued and periodically updated by the Actuarial Society of Hong Kong (ASHK). It is incumbent upon the actuary to make timely written and reasoned disclosure to the intended users of the actuarial investigation if for any reason he or she does not comply fully with the professional standards and/or actuarial guidance notes.

There is a Hong Kong-specific feature whereby, Motor and Employees' Compensation (EC) businesses are subject to particular focus. This is primarily a function of the size of these portfolios in the context of the overall market. Only the reserves of these two lines of business are required to be certified by an actuary. For other classes of GI business, the reserves are determined by reasonable methodology and judgement, subject to the sign-off by the auditor on the financial statements.

3.4.4.1 Guidelines

The following is a list of Guidelines ("GL") and Actuarial Guidance Notes ("AGN") applicable to GI actuaries, issued by the IA and the ASHK:

- **GL2 – "Insurance (General Business) (Valuation) Rules"**
  This regulation aims at providing a standard and prudent valuation basis for the assets and liabilities of a GI company and ensuring a prudent spread of its investment for solvency purposes. GL2 primarily addresses the different valuation principles of assets commonly found in the balance sheet of an insurer and establishes that discounting of claim liabilities is disallowed except with prior approval from the IA.
  https://ia.org.hk/en/legislative_framework/files/GL2.pdf

- **GL4 – "Fit and Proper Criteria under the Insurance Ordinance (Cap. 41)"**
  This guideline outlines the expectations the Insurance Authority has with respect to the board, senior management, key persons in control functions and significant owners of an insurer with respect to their suitability to fulfil their respective roles. The guideline sets the minimum expectations for each of these persons and was updated to reflect the requirements of the Insurance Core Principles (ICP5).
  https://ia.org.hk/en/legislative_framework/files/GL4.pdf

- **GL6 – "Reserving for Mortgage Guarantee Business"**

  Mortgage guarantee insurance protects the lending bank from the risk of loss arising from default in payment by a mortgagor in respect of that portion of the mortgage loan which exceeds a certain pre-determined ratio of the value of the property. This business differs from the majority of the GI business written in Hong Kong, in that it is of a longer tail nature and strongly correlate with the local macro-economy. In view of this, the IA has issued a guideline setting out the minimum standard for setting technical reserves of this line of business.

This guideline applies to insurer as well as reinsurer in respect of its mortgage guarantee business carried on in or from Hong Kong.
https://ia.org.hk/en/legislative_framework/files/GL6.pdf

- **GL9 – "Actuarial Review of Insurance Liabilities in respect of Employees' Compensation and Motor Insurance Businesses"**
  Wherever Motor and/or EC portfolios exceed certain premium or reserve thresholds, it is necessary to provide a certified opinion in connection with the actuarial valuation. https://ia.org.hk/en/legislative_framework/files/GL9.pdf
  Supplementary Guideline issued by Insurance Authority in May 2020

- **GL10 – "Corporate Governance of Authorized Insurers"**

  Corporate governance refers to the systems an authorized insurer is managed and controlled. This guideline sets out the minimum standard of corporate governance expected for an authorized insurer. Actuaries should pay special attention to the corporate governance framework and expectations as these form a critical element of an insurer's overarching enterprise risk management framework.
  https://ia.org.hk/en/legislative_framework/files/GL10.pdf

- **GL12 – "Reinsurance with Related Companies"**
  When reinsurance is effected with related companies, there may be higher risk of financial vulnerability to a company, and the IA has a separate guideline in relation to the treatment of such reinsurance arrangements. This guideline stipulates a number of criteria that should be satisfied for the related reinsurer to be considered adequate. In the event that the related reinsurer does not satisfy these criteria, the insurer must then either limit the net reinsurance recoverable due from such related reinsurers, or may be required to hold collateral securities for the recoveries included in excess of the limit set by the guideline.
  https://ia.org.hk/en/legislative_framework/files/GL12.pdf

- **GL17 – "Reinsurance"**
  This guideline was released by the OCI in 2016 and it provides best practice recommendations and mandatory requirements in respect of reinsurance arrangements. Under the IO, an insurer is required to arrange adequate reinsurance protection unless there are justifications not to do so. A sound reinsurance management framework is commonly found within an insurance company's risk management toolkit. The IA sets standards for the use of reinsurance and other forms of risk transfer, ensuring that insurers adequately control and transparently report their risk transfer programs.
  https://ia.org.hk/en/legislative_framework/files/GL17.pdf

- **GL21 – "Enterprise Risk Management"**

  This guideline sets out the expectations of the IA for insurers to maintain a sound risk culture as the basis for driving business practices and decisions. Specifically, it sets out the Pillar 2 (corporate governance and ERM) requirements for insurers, and the supervisory objectives, guidance and expectations from the IA for assessing the overall competence and effectiveness of an insurer's ERM framework and Own Risk and Solvency Assessment ("ORSA"). Actuaries should take note that the guidelines currently make reference to using QIS3 as the regulatory capital basis for the purposes of performing stress and scenario tests.

  https://www.ia.org.hk/en/legislative_framework/files/GL21.pdf

  Paragraph 9.5 (k)(ii) of GL21 stipulates that applicable authorized (re)insurers carrying on general insurance business should perform the stress testing scenarios prescribed by the IA. The prescribed scenarios were circulated to insurers in January 2020, with these to be adopted in the first ORSA report, which is required for the financial year ending on or after 31 December 2020, and for future ORSA reports until the IA prescribes new scenarios.

  The Scenarios defined in the draft document aim for general business insurers to consider:
  (a) Capital adequacy for risks not adequately reflected or not reflected by regulatory capital requirements e.g. A&H accumulation risk, Hull accumulation risk, Liability accumulation risk etc.
  (b) Risks of two severe events or stresses happening at the same time
  (c) The planned management actions needed in such extreme events or stresses

  There are 3 prescribed scenarios in the document and insurers may be asked to test different scenarios by the IA case officer from time to time. Insurers should also consider other scenarios which are relevant to its business in the target capital and stress testing framework.

  - **AGN4 – "Outstanding Claim Liabilities and Premium Liabilities for General Insurance Business."**

  This document provides guidance to GI actuaries responsible for estimating outstanding claims liability and (premium liabilities) or for advising on reserves.
  https://www.actuaries.org.hk/storage/download/AGN4(Effective20170101).pdf.

- **AGN9 – "Best Estimate Assumptions"**

This document outlines the general principles to be considered when setting best estimate assumptions. AGN9 is meant to be generic and applicable to all actuarial investigations regardless of field. Nevertheless, there are two sections of particular relevance to GI practitioners regarding claims ratios and large and catastrophic losses. https://www.actuaries.org.hk/storage/download/AGN9(Effective20160401).pdf.

3.4.4.2 Captives

The scope of operation of a captive may differ from one to another depending on the purposes for which it is formed. In Hong Kong, a captive is legally defined under the IO as an insurer which is formed by its parent company to underwrite exclusively the insurance business of the parent or group companies or their associated companies.

The Hong Kong SAR Government encourages establishment of captives in Hong Kong and wishes to promote Hong Kong as a captive center in Asia. Regulatory concessions are provided in the Insurance Companies Ordinance (Cap. 41) to provide incentives for multinational companies to establish their captive insurers in Hong Kong. An example of the concessions available is a lower minimum capital requirement for a captive insurer as compared to a typical GI company.

Additional details are available on the IA website:
https://ia.org.hk/en/supervision/reg_insurers_lloyd/requirements_captive_insurers.html

3.4.5 Recent industry developments

3.4.5.1 Insurance Authority (IA)

The insurance industry has experienced a number of changes in the regulatory environment in recent years. Specifically, an independent insurance regulator, the Insurance Authority (IA), was established in 2017.

The IA has replaced the Office of the Commissioner of Insurance (OCI) in regulating insurance companies, effective 26 June 2017. The OCI was disbanded on the same day.

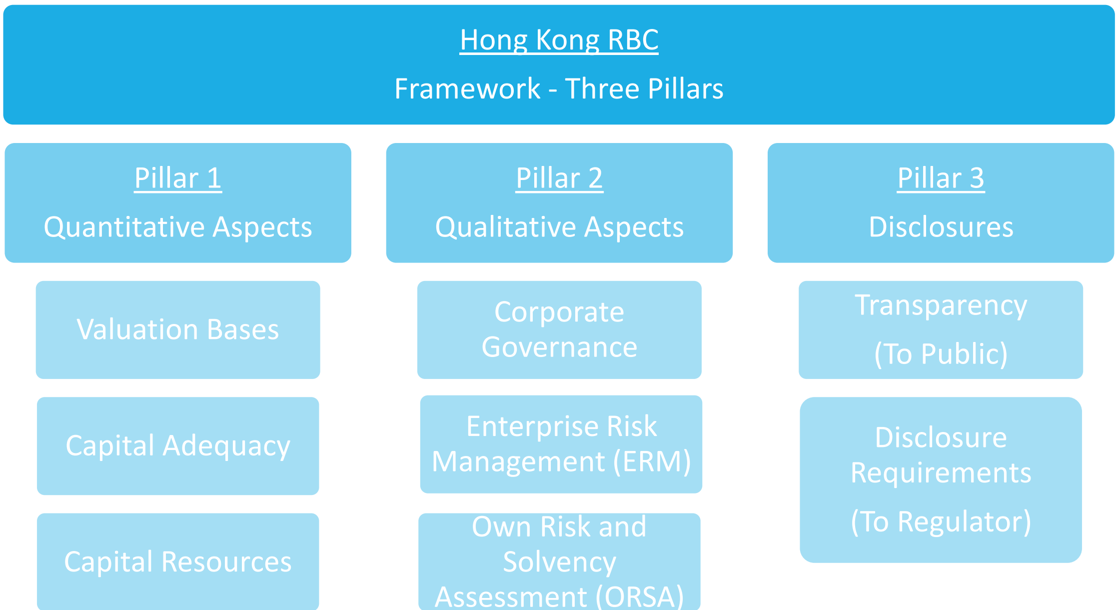
Details of IA's responsibilities can be found on their official website:

https://www.ia.org.hk/en/index.html

3.4.5.2 Risk-based capital

The OCI released a consultation paper in 2014, in which it announced plans to develop a risk-based capital (RBC) framework for Hong Kong insurance industry. This represents a shift from rule-based capital adequacy framework to a risk-based approach. In recent years, it has been recognized globally that the capital adequacy framework should take into account different risk factors of different insurers, and be conducive to enhancing the corporate governance, enterprise risk management (ERM) and public disclosure practices of insurers. The International Association of Insurance Supervisors (IAIS) – the global standard-setter for the insurance industry – has issued new Insurance Core Principles (ICPs) in relation to RBC requirements in late 2011. All insurance supervisors, including the IA, are obliged to comply with these new ICPs as soon as practicable.

- **Consultation paper on risk-based capital framework**
  This document provides high level description of the RBC framework, which is anticipated to follow a "Three-Pillar" format. The proposed three pillars are: **Pillar 1 – Quantitative aspects**. The primary purpose of imposing capital adequacy requirements is to ensure that an insurer's obligations to policyholders will be met. The centerpiece of an RBC framework is to make capital requirement risk-sensitive such that higher risks carry more capital; **Pillar 2 – Qualitative aspects**. An integral part of an RBC framework is to encourage increased standards of corporate governance and ERM, therefore, encourage insurers to manage risk appropriately (this is covered by GL21 in Section 3.4.4.1 of this study guide); **Pillar 3 – Disclosure**. It includes disclosure both to the supervisor and the public. Disclosure is a general feature of modern systems of financial services supervision. This document also provides proposals regarding capital supervision on a locally-incorporated insurer or a Hong Kong branch of an overseas insurer -
  https://ia.org.hk/en/infocenter/files/rbc_consultation_paper.pdf



- **Consultation conclusions on risk-based capital framework**

This document summarises the responses received by the OCI following the consultation period in 2015:
https://ia.org.hk/en/infocenter/files/rbc_consultation_conclusions.pdf

- **Roadmap and updates on the development of risk-based capital framework**
  This document provides an overview of the roadmap and timeline for the consultation and implementation process for the framework:
  https://ia.org.hk/en/aboutus/task_force/activities_meetings/files/RBC_170831.pdf

  Optional reading – the following link refers to the latest materials available to insurers on the RBC development. You will be required to obtain the company log-in from the RBC representative from your company to access these materials:
  https://ia.org.hk/en/portal_for_insurers/icc/welcome.html

- **This is a high level overview of the Pillar 1 risk-based capital framework as per the 3rd Quantitative Impact Study carried out in 2019:**

  RBC regime values assets and liabilities on an economic basis, reflecting the actual risks undertaken. This is in accordance with the Insurance Core Principles (ICP) issued by the International Association of Insurance Supervisors (IAIS), in particular ICP 14 Valuation and ICP 17 Capital Adequacy.

An economic approach is adopted to valuing assets and liabilities in this QIS. In line with ICP 14, the economic approach for this QIS requires the valuation to reflect all reasonably foreseeable and relevant risks. An economic valuation should result in an assessment of an insurer's financial position which is not obscured by hidden or inherent conservatism or optimism in the valuation.

- **Capital Resources**
  - QIS classifies capital resources into two Tiers: Tier 1 (with sub-tiers of Tier 1 Unlimited and Tier 1 Limited) and Tier 2. Tier 1 capital is intended to absorb losses on both going concern and winding-up bases. Tier 2 capital is intended to absorb losses on a winding-up basis under which an insurer reaches the point of insolvency or "point of non-viability".
    - Non paid-up capital would not be included in either Tier 1 or Tier 2.

  - The following capital composition limits will be applied as proxy for this QIS3
    - Tier 1 Unlimited capital resources would be fully recognized;
    - Tier 1 Limited capital resources will be limited to 10% of the PCR; and

    - Tier 2 capital resources will be limited to 50% of the PCR.

- **Liability Valuation**
  - Insurers' liabilities consist of outstanding claim liabilities and premium liabilities. Each liability is the sum of (i) its best estimate and (ii) a risk margin.
    - Best estimate: The best estimate is the probability weighted-average of the present value of the future cashflows. It should be a value that is neither conservative nor optimistic. This is different to the HKFRS basis where discounting is not allowed. The present value of future cash flows is based on a risk free rate.
    - Risk margin: an amount in addition to the best estimate of the liability. It reflects the inherent uncertainty related to all relevant future cash flows that arise in fulfilling insurance obligations over the full time horizon. A risk margin should be added to the best estimate such that their sum should provide for a 75% probability of adequacy. Diversification amongst lines of business are allowed to be included in setting the risk margin.

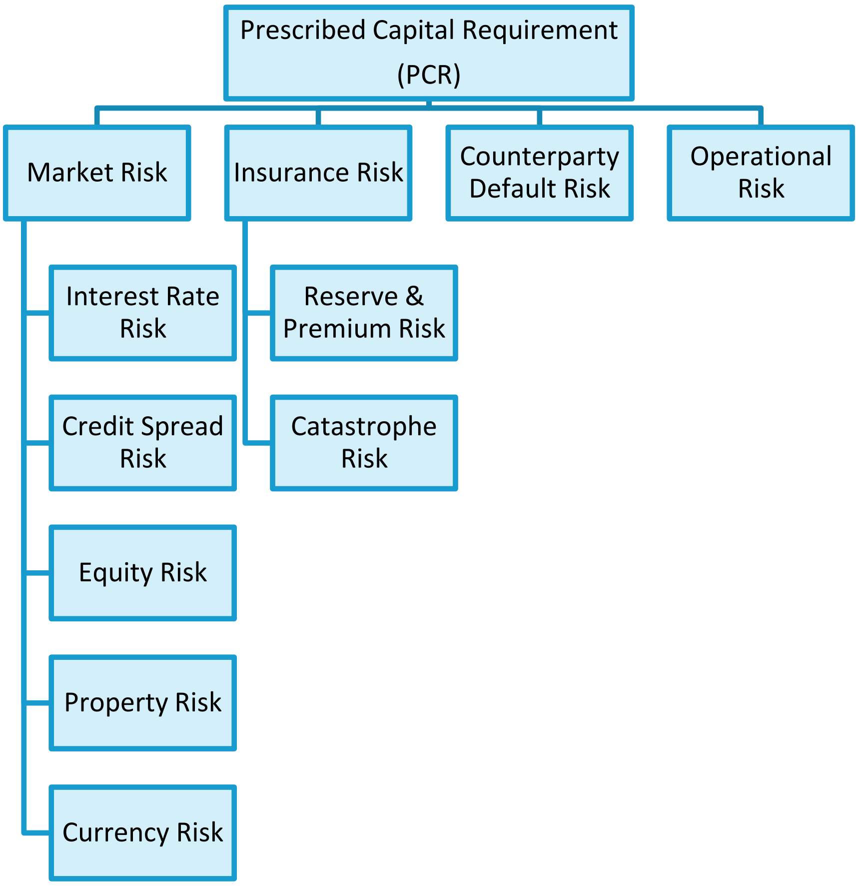
  - The components of the technical provisions should be reported both gross and net of recoveries from reinsurance and other risk transfer arrangements. The recognition of reinsurance and other risk transfer arrangements for QIS should be in line with existing regulations.

- **Capital Requirement Calculation**

Capital requirements are set with reference to a Value-at-Risk (VaR) subject to a 99.5% confidence interval over a one-year period. In other words, capital requirements are to cover the potential loss under a 1-in-200 scenario within one year.

The structure is still under refinement following the 3rd Quantitative Impact Study conducted in late 2019. The key areas of discussion revolve around risk factor parametrization relating to both natural and man-made catastrophe risks, and the requirement of inputs on exposures which are limited by reinsurance covers or policy wordings.

Overall, the solvency ratio of the market has improved in the 3rd Quantitative Impact Study compared to the 2nd study. The main driver of the improvement was due to the removal of 5 man-made catastrophe scenarios for the calculation of the capital requirements.



- **Market Risk**
  - **Interest Rate Risk -** Interest rate risk arises from the changes in interest rates or interest rate volatility.
  - **Credit Spread Risk -** arises from credit spread widening, credit spread volatility and credit rating changes.
  - **Equity Risk -** Equity risk arises from level or volatility of market prices of equity-based assets.
  - **Property Risk -** Property risk is the risk of loss in the value in property investment holdings as well as the possible secondary impact on liability.
  - **Currency Risk -** Currency risk is the risk of loss due to fluctuations in the exchange rate between currencies. This risk occurs when there is a mismatch between the total assets and liabilities in any foreign currency.
- **Insurance Risk**
  - **Reserve Risk -** Reserve risk is the risk that the claims, net of reinsurance, relating to events that have already occurred are greater than expected.
  - **Premium Risk -** Premium risk is the volatility of combined ratio which covers both loss and expenses.
  - **Catastrophe Risk**

  - Refers to risks associated with events that are low frequency and high severity in nature
  - Often arises from aggregation of claims by a single root cause
  - May affect a significant number of policyholders and insurers
  - May cause significant hazards to insurers' solvency and liquidity
- **Counterparty Default Risk**
- **Operational Risk -** This is the risk of loss due to failures in internal operations

3.4.5.3 IFRS 17

Historically, Hong Kong Financial Reporting Standards (HKFRS) have followed the International Financial Reporting Standards (IFRS) with limited variation. IFRS 4, which provides guidance for the accounting of insurance contracts, was released by the International Accounting Standards Board (IASB) in March 2004. Since then there has been extended consultation around upgrading of the standard – i.e. IFRS 17.

In November 2016, the IASB set 1 January 2021 as the mandatory effective date of IFRS 17. In November 2018, the IASB voted to amend the IFRS 17 effective date from 1 January 2021 to 1 January 2022, meaning that there is a one-year delay on the effective date from the IFRS 17 standard issued in May 2017. In March 2020, the international Accounting Standards Board (IASB) announced the deferment of the IFRS 17 Insurance Contracts implementation for another year with an effective date of 1 January 2023.