



STUDY GUIDE

ASHK Examination

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LIFE INSURANCE

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ACTUARIAL SOCIETY
of
HONG KONG
香港精算學會

3.2 Life Insurance

3.2.1 Role of Life Insurance Actuaries in Hong Kong¹

Life insurance actuaries are involved in a wide variety of areas within the industry. These include:

| Area | Application |
|---------------------------------------|---|
| <i>Auditor</i> | Perform internal and external audit functions of insurance companies |
| <i>Banking and Financial Services</i> | Help banks and financial services companies with product portfolio, capital management and risk analysis in relation to life insurance |
| <i>Consulting</i> | Advise clients on actuarial and insurance related matters |
| <i>Entrepreneurial Actuaries</i> | A wide range of opportunities is available for actuaries who desire to set up and run their own business |
| <i>Predictive Analytics</i> | Use modeling and data analysis techniques on large data sets to discover predictive patterns and relationships for business use |
| <i>Pricing</i> | Determine product features and pricing |
| <i>Risk Management</i> | Perform risk management functions for an insurance company; it may cover financial and/or operational risks; or specific lines of business or an enterprise level |
| <i>Regulator</i> | Oversee the financial conditions and operations of authorised insurers; facilitating both the healthy development of the industry and the protection of policyholders |
| <i>Reinsurance</i> | Perform traditional actuarial duties for a reinsurer that would accept risk from a direct insurance company |

¹ Reference to SOA website: <https://www.soa.org/future-actuaries/career-paths/>.

| Area | Application |
|---|---|
| <i>Sales and Marketing</i> | Help set policies, messages and compensation levels for those directly involved in marketing and distribution |
| <i>Statutory Role / Appointed Actuary</i> | <p>A role stipulated by the Insurance Ordinance (Cap. 41) (IO) which can only be fulfilled by qualified professional actuaries. The responsibilities include, but are not limited to the following:</p> <ul style="list-style-type: none"> • Set, validate and certify the adequacy of the insurance liabilities and financial / solvency position of the company; • Advise the company of the interpretation of its policyholders' reasonable expectations, and the transfer of assets between long term and shareholder funds; • Determine the appropriateness of premium rates charged; • Certify the information disclosed on Class C linked products is accurate; • Manage the potential conflict between its duty to policyholders and its duty to shareholders, particularly in relation to the declaration of non-guaranteed benefits for policyholders. |
| <i>Senior Management</i> | Provide broad business and management leadership for an organisation |
| <i>Valuation</i> | Perform experience studies, cash flow testing and other tasks to set the amount of reserve and capital held by an insurer |

3.2.2 Overview of the market landscape in Hong Kong

The Insurance Authority (IA) website provides a good source of reference material for an overview of the Hong Kong market. We recommend practitioners to analyse its annual reports and market & industry statistics to better understand the Hong Kong market dynamics. These covered general and long term insurance business.

3.2.2.1 Insurance companies and competitive environment ²

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.

As at 30 September 2020, there were 2,365 licensed insurance agencies, 86,351 licensed individual insurance agents and 26,777 licensed technical representatives (agent). In addition, there were 832 licensed insurance broker companies and 10,780 licensed technical representatives (broker) on the same date.

In 2019, the total gross premiums of the Hong Kong insurance industry increased by 10.2% to \$566.9 billion.

3.2.2.2 Product types and classification

Chapter 41 Schedule 1 Classes of Insurance Business³

According to IA reporting, long term insurance business in HK is categorised into nine classes of business (Classes A to I), including individual and group life businesses. For individual life business, most of the enforce and new business today are Class A (non-linked life insurance) and Class C (unit linked) business.

Total office premiums for in-force long term business were \$511.5 billion in 2019 (increased by 10.8%). The Individual Life category remained the dominant line of business, making up \$440.2 billion or 86.1% of total long term business. The respective number of policies in 2019 stood at 13.2 million, carrying net liabilities of \$2,120.3 billion.

Yearly contributions for Retirement Scheme contracts administered by insurers were \$8.9 billion (decreased by 5.3%). There were 65,728 Retirement Scheme contracts carrying net liabilities of \$133.7 billion. In-force office premiums for Group Life business were \$4.3 billion (increased by 22.7%), carrying net liabilities of \$1.4 billion. In-force office premiums for

² Source: <https://www.ia.org.hk/en/infocenter/statistics/market.html>

³ Source: https://www.ia.org.hk/en/infocenter/statistics/annual_long_term_business_statistics.html; previous years' statistics can also be found on past annual reports of IA.

Annuity business were \$56.4 billion (increased by 172.8%). In-force office premiums for Other business (mainly Permanent Health business) were \$1.6 billion (increased by 4.3%).

Office premiums for new Individual Life business remained stable at \$151.2 billion, including \$139.4 billion from Individual Life (Non-Linked) business (increased by 4.7%) and \$11.8 billion from Linked business (decreased by 32.4%). The total number of new policies was 1.3 million in 2019 (increased by 2.4%). Office premiums for new Individual Annuity business were \$20.9 billion (increased by 93.2%). As at 31 December 2019, around 96,000 Qualifying Deferred Annuity Policies (“QDAP”) has been sold in the nine months since the launch of QDAP in April 2019, contributing total premiums amounting to \$6.9 billion. The average age of policyholder was 48.2, while the average annualised premium per year stood at around \$72,000.

3.2.3 Regulations, Professional standards, Guidelines and Industry Standard Practice

3.2.3.1 Qualification for appointment as an actuary in Hong Kong - Chapter 41A Insurance Companies (Actuaries’ Qualifications) Regulation

The IO prescribes the following qualifications for the appointment of an actuary by an insurer in carrying on long term business:

- Fellow of the Institute and Faculty of Actuaries of the United Kingdom
- Fellow of the Institute of Actuaries of Australia
- Fellow of the Society of Actuaries

3.2.3.2 Chapter 41H Insurance Companies (Actuaries' Standards) Regulation

Chapter 41H of the regulation stipulates that any actuary appointed under the IO Cap.41 section 15(1) must comply with "Professional Standard 1 (PS1)" approved by the Actuarial Society of Hong Kong (ASHK) (including any subsequent amendment thereto made with the approval of the Insurance Authority and the Secretary for Financial Services and the Treasury).

The roles and responsibilities of an appointed actuary are extensive, these include determining the appropriateness of the premium rates charged, validating and certifying the adequacy of the insurance liabilities and financial / solvency position of an insurance company, advising the board on the interpretation of policyholders' reasonable expectations, recommending on the transfer of assets between long term and shareholder funds, etc. Appointed actuaries must comply with PS1 when carrying out their duties.

3.2.3.3 Guidelines⁴ and circulars

The IA has issued the following Guidelines as relevant to the long term business:

- GL1 - Authorisation Guidelines
- GL4 - Guideline on "Fit and Proper" Criteria under the Insurance Ordinance (Cap.41)
- GL5 - Guideline on Application for Authorisation to Carry on Insurance Business in or from Hong Kong
- GL7 - Guideline on the Reserve Provision for Class G of Long Term Business (revised in December 2006)
- GL10 - Guideline on the Corporate Governance of Authorised Insurers
- GL11 - Guideline on Classification of Class C - Linked Long Term Business
- GL12 - Guideline on Reinsurance with Related Companies
- GL14 - Guideline on Outsourcing
- GL15 - Guideline on Underwriting Class C Business
- GL16 - Guideline on Underwriting Long Term Insurance Business (other than Class C Business)
- GL17 - Guideline on Reinsurance
- GL19 – Guideline on Qualifying Deferred Annuity Policy
- GL26: Guideline on Sale of Investment-Linked Assurance Scheme (“ILAS”) Products
- GL27: Guideline on Long Term Insurance Policy Replacement
- GL28: Guideline on Benefit Illustrations for Long Term Insurance Policies
- GL31: Guideline on Medical Insurance Business

Insurers are expected to comply with the guidelines. Depends on the facts and circumstances, violation may subject the insurer to regulatory actions.

3.2.3.4 Professional conduct and actuarial guidance notes

To maintain a high level of professionalism among members, the ASHK regulates actuarial practice of members by issuing By-Laws, professional standards and actuarial guidance notes.

The actuarial guidance notes (AGN) currently applicable are:

- AGN 3: Additional Guidance for Appointed Actuaries (Revised on 23 October 2002)
 - Actuarial Guidance Note - Supplement to AGN 3 Additional Guidance for Appointed Actuaries (Effective 1 January 2013)
 - Actuarial Guidance Note - Second Supplement to AGN 3 - Additional Guidance for Appointed Actuaries - Additional Guidance for Determination of the Valuation Interest Rate (Effective 17 November 2014)

⁴ All Guidance Notes promulgated by the IA have been renamed as Guidelines, and the abbreviation have been changed from “GN” to “GL”.

- AGN 5: Principles of Life Insurance Policy Illustrations (Effective from 17 June 2013)
- AGN 7: Dynamic Solvency Testing (Effective from 31 December 2016)

The actuarial guidance notes are meant to be suggested standards of practices for actuaries practicing in Hong Kong. Actuaries are expected to review, understand and follow the guidance. If an actuary's practice is different from the AGNs, the actuary should document the rationale and quantify the impact of any differences.

The existing regulations, Guidance Notes and circulars have had profound impact to the industry. For example, post GL15, indemnity commission became prohibited, and the Investment Linked Assurance Schemes (ILAS) market evolved into primarily single premium products. Subsequently, the ILAS market experienced significant declines in sales volume.

3.2.3.5 Market conduct

In order to synchronise with the Insurance Core Principle 19 (ICP 19) published by the International Association of Insurance Supervisors (IAIS), the IA has issued GN 15 and 16 (now known as GL 15 and 16)⁴ for insurance companies writing long term life insurance contracts in Hong Kong. The main objective of the guidance notes is to incorporate the principle of "fair treatment of customers" from the initial stage of product design to the final servicing of the insurance policies. Insurance companies are required to perform functions including, but not limited to, the following:

- Incorporate the treating customer fairly principles as a part of the corporate culture;
- Improve the disclosure of the risk profiles of the insurance products, including illustration;
- Study the reasonableness of the fee structures;
- Evaluate the suitability of the products to potential customers;
- Monitor the conduct of intermediaries during the sales process;
- Continue adequate communications with customers; and
- Maintain a post sales process to identify potential market conduct issues.

These guidance notes are principles-based regulations rather than rules-based. The general practices may vary widely among insurance companies in Hong Kong due to factors such as company philosophy and limitation on resources. The market practices, however, are expected to gravitate towards a narrower range after the IA reviews the industry's compliance status.

In response to the guidance notes, the HKFI has developed standard benefit illustration for ILAS, Participating Insurance Products and Universal Life (Non-Linked) Products.

⁴ All Guidance Notes promulgated by the IA have been renamed as Guidelines, and the abbreviation have been changed from "GN" to "GL". The above mentioned Guidance Notes (now known as Guidelines) are: Guideline 15 – Guideline on Underwriting Class C Business; and Guideline 16 – Guideline on Underwriting Long Term Insurance Business (Other than Class C Business).

Although there are vast similarities between ICP 19 and the guidelines, there are minor discrepancies between them.

3.2.3.6 Taxation

In Hong Kong, all corporations including insurers are subject to profit tax. Profit tax is determined by applying a profit tax rate to the assessable profits. For life insurance business (Class A Life and annuity, Class B Marriage and birth, Class C Linked long term and Class E Tontines) the assessable profits are deemed to be 5% of the net premium or the life corporation can elect it to be the local statutory profits in the year less any dividend received. The election is irrevocable. The assessable profits for other classes of business would be based on the latter approach.

3.2.4 Valuation of Assets and Liabilities

This section covers the regulations on long term business from the aspect of valuation, reserving and solvency margin requirements.

3.2.4.1 Chapter 41 Insurance Ordinance

An effective and responsive regulatory framework which instils public confidence is essential to the healthy development of the insurance industry in Hong Kong. The Insurance Ordinance (Cap.41) prescribes the regulatory framework for insurers and insurance intermediaries. It is being continuously reviewed and updated to keep in pace with changing market conditions and international practices.

The Insurance Authority regulate and supervise the insurance industry for the promotion of the general stability of the insurance industry and for the protection of existing and potential policyholders.

3.2.4.2 Chapter 41E Insurance Companies (Determination of Long Term Liabilities) Regulation

Chapter 41E covers the determination of the amount of liabilities of an insurer in respect of its long term business. In accordance to Chapter 41E, the amount of liabilities of an insurer in respect of long term business shall be determined in accordance with generally accepted accounting concepts, bases and policies or other generally accepted methods appropriate for insurers.

In general, the amount of liabilities shall be determined separately for each contract by a prospective calculation, along with prudent assumptions that shall include appropriate margins for adverse deviations.

A retrospective calculation may be applied to determine the liabilities where a prospective method cannot be applied to a particular type of contract or benefit, or where it can be demonstrated that the resulting amount of the liabilities would be no lower than would be required by a prudent prospective calculation.

The liabilities also need to recognise all guaranteed benefits, including guaranteed surrender value, as well as vested, declared or allotted bonuses to which policyholders are already entitled.

3.2.4.3 Chapter 41F Insurance Companies (Margin of Solvency) Regulation

Hong Kong regulations require that the assets held by an insurer exceed its liabilities by a certain amount. This amount is the greater of the 'relevant amount' under the Insurance Ordinance (IO) or the required margin of solvency from the solvency regulations (Cap 41F). Both of these are dependent on the type of business sold by the insurance company.

The 'relevant amount' for life insurers under the IO is HKD 2 million. This relevant amount is not indexed for inflation, and serves effectively as a minimum amount of assets that need to be held in excess of a life insurer's liabilities.

The required margin of solvency under Cap 41F is calculated based on the mathematical reserves and capital at risk for each class of business. The key classes of business in life insurance are class A, which corresponds to traditional products, and class C, which covers linked business.

An insurer who sells both long term and general business will require an additional amount on top of the amount required for life business.

3.2.5 Recent Industry Developments

- Qualifying Deferred Annuity Policy (QDAP)

Due to the rapid aging population of Hong Kong, enhancing the quality of living of the elderly after their retirement is one of the key policy focuses of the Government. The Government has proposed a tax deduction for premiums for deferred annuity products to promote voluntary retirement savings. The Insurance Authority has issued the guidelines (GL19) to set out the criteria for deferred annuity products to become a QDAP.

The overview of QDAP can be found at:

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

- Voluntary Health Insurance Scheme (VHIS)

In 2018, Hong Kong Government has announced the details of VHIS which aims at encouraging more people to use private healthcare services through hospital insurance, thereby relieving the pressure on the public healthcare system in the long run. The VHIS is a policy initiative implemented by the Food and Health Bureau (FHB) to regulate individual indemnity hospital insurance products, with voluntary participation by insurance companies and consumers. Under the scheme, the participating insurance companies will offer hospital insurance plans that are certified by FHB.

The overview of the VHIS and tax reduction incentive under the scheme can be found at:

https://www.vhis.gov.hk/en/information_centre/index.html