MILLIMAN REPORT

The Milliman Fulfillment Ratio Index

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Julian Man
Clement Bonnet
George Leung
Lammy Tsang
Valensis Justiani

Contents

Fulfillment ratio and the latest changes on participating illustrations

Since January 2017, life insurance companies in Hong Kong have been required by the Insurance Authority to publish fulfillment ratios for their participating (par) products on an annual basis in compliance with the Guideline on Underwriting Long Term Insurance Business (Other Than Class C Business), commonly referred to as “GL16”.

Recent regulatory changes have led to revisions in the illustration guidelines for these policies. Specifically, the regulation related to illustration rate caps in benefit illustrations for par policies, set to be implemented by 1 July 2025, aims to define minimum standards for the illustration rates insurers should use in benefit illustrations at the point of sale. For further information, please refer to the e-alert we published in March 2025 here. This change could affect future fulfillment ratio disclosures by restricting the illustration of non-guaranteed benefits of par products to be sold from 1 July 2025, which are crucial for calculating the fulfillment ratio.

This paper presents the updated Milliman Fulfillment Ratio Index (referred to as “the Index”) based on the reporting year 2023 and provides an analysis of the historical change in the Index.

Types of non-guaranteed benefits typically offered by participating products in Hong Kong

ANNUAL DIVIDENDS

Declared and paid out as cash at the end of each year. Policyholders may choose to leave these on deposit with the company to earn interest. The actual interest credited will also affect the fulfillment ratio.

TERMINAL DIVIDEND

Typically paid at maturity, on death and surrender of the policy through a lump sum. It is sometimes referred to as the “final bonus.”

REVERSIONARY BONUSES

Bonuses declared as a permanent addition to the basic sum assured of the insurance policy, which cannot be taken away once declared.

Understanding fulfillment ratio

Fulfillment ratio =

$$\frac{\text{Actual aggregate non-guaranteed benefits}^{*}}{\text{Aggregate non-guaranteed benefits illustrated when customers purchased the policy}}$$

*Either aggregate accumulated bonuses (for annual dividends and reversionary bonuses) or aggregate payout (for terminal dividends)

The Milliman Fulfillment Ratio Index: Introduction*

Calculated annually by Milliman, the Index covers Hong Kong life insurance companies representing a significant market share, as measured by in-force premiums (>85% in 2023).

INDUSTRY LEVEL

Top ten life insurance companies in Hong Kong are included based on in-force premiums. The companies included are reviewed annually.

COMPANY LEVEL

Material par products offered by each of the selected companies are analysed. The selection of products and weight allocation is guided by a hybrid approach that combines our expert judgement with public data. This involves choosing flagship products through an in-depth understanding of the company's offerings, considering the popularity of similar products from other insurers. Product types include savings, critical illness, annuity and endowment, with a balance between on-the-shelf and shelved products.

ACROSS POLICY DURATIONS

All policy durations are considered to better reflect the condition of different cohorts. A simple average is taken across the fulfillment ratios of all policy durations available.

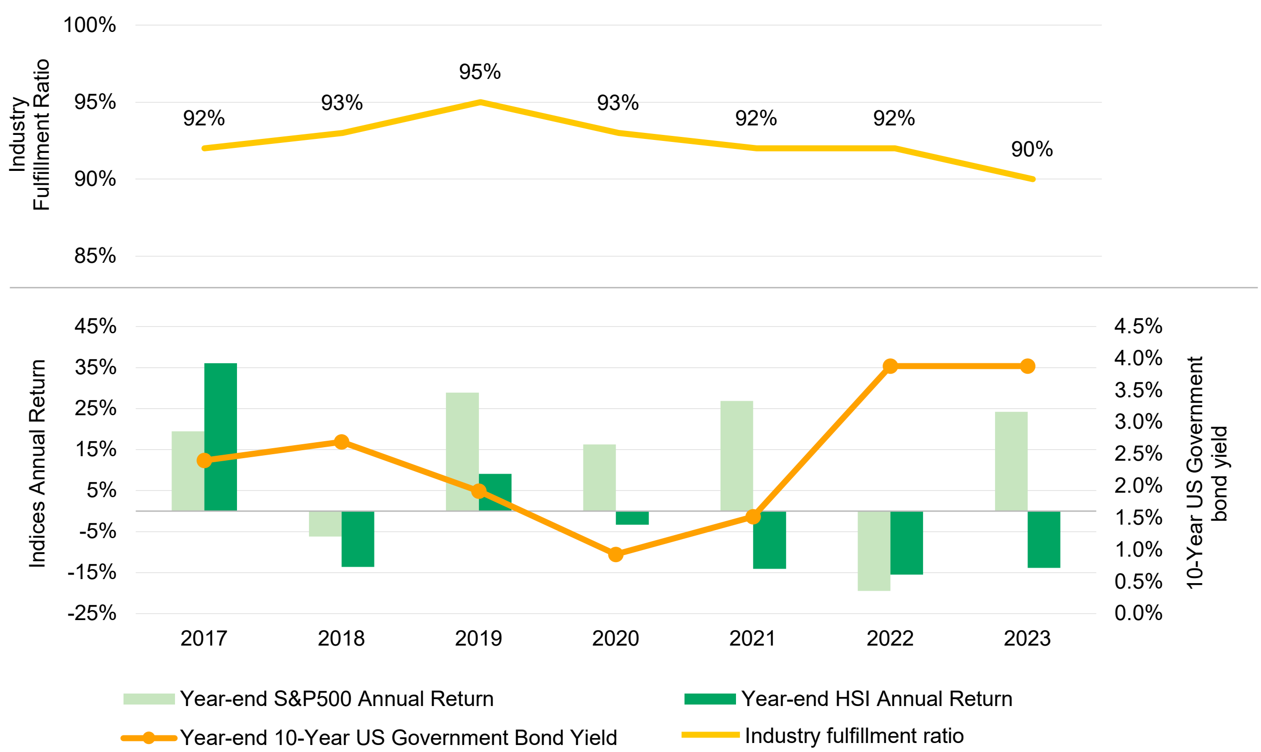
OTHER CONSIDERATIONS

The Index reflects actual dividends and bonuses aggregated up to, or paid out, in a calendar year. Some dividend/bonus adjustment decisions made in the same calendar year may not be reflected until the year that the annual dividends/bonuses or terminal dividends are actually paid out. Many companies implement bonus and dividend cuts for older products rather than for their key new products open for sale. The Index is calculated by considering both **key new products** and **older products (or shelved products)** in order to capture any material changes, based on the fulfillment ratios published by the companies.

*The Index covers par products only and does not consider universal life products.

The Milliman Fulfillment Ratio Index for reporting years 2017 to 2023

INDUSTRY-LEVEL FULFILLMENT RATIO AND MARKET RETURNS



The Index climbed to 95% in 2019 before the COVID-19 pandemic but has since fallen to 90% in 2023 as a result of various factors, including a depressed local equity market and a challenging and volatile interest rate environment.

Companies illustrate bonus rates for customers at the point of sale based on a set of in-house investment return assumptions which are influenced by the underlying asset allocation (i.e., proportion of assets invested into different asset classes e.g. government bonds, corporate bonds, public equity, private equity, and property) and the expected return of the underlying asset classes.

The actual investment return of a given year is, therefore, one important factor considered by companies when reviewing the non-guaranteed benefits to policyholders. Any material change in interest rates and equity returns could lead to adjustments of non-guaranteed benefits in a particular year. Ultimately, key changes to headline financial indicators are also used to manage policyholders' reasonable expectations (PRE).

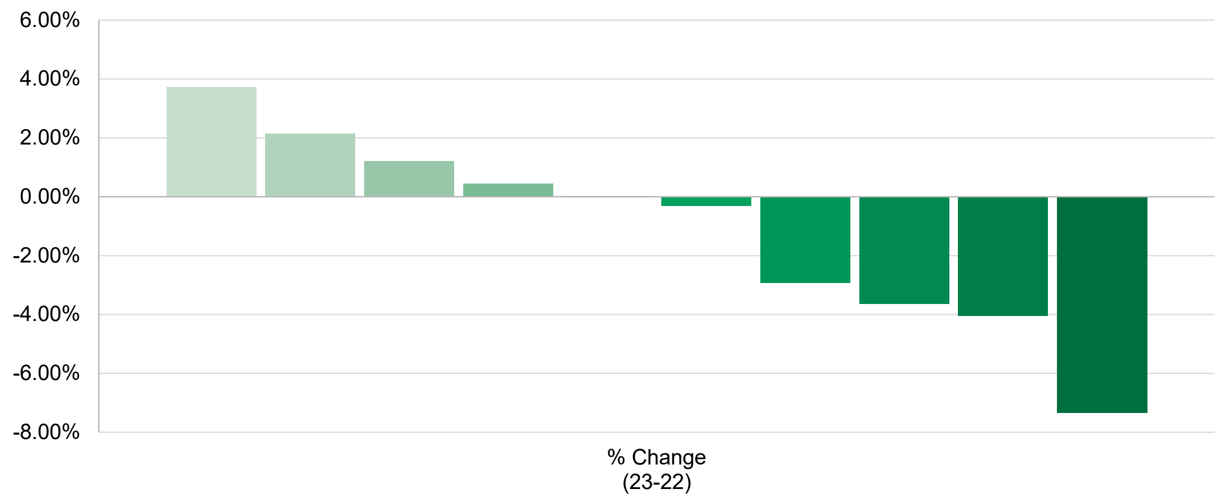
Changes in equity market returns are of particular importance. For popular "guaranteed lite" whole life par products sold in Hong Kong, the equity backing ratio can be as high as 75%, and any continuous underperformance of the equity market relative to expectations could therefore lead companies to adjust non-guaranteed benefits downwards.

Other factors also impact the decision to adjust non-guaranteed benefits and are actively managed by life insurers, for example:

- Smoothing adjustment of non-guaranteed benefits so that all investment gains (or losses) are not fully passed to the policyholder in a given year but can be used to smooth future losses (or gains)
- Considerations around changes in future economic outlook (e.g., long-term government bond yield, long-term equity return, long-term credit spread)
- Commercial considerations

Changes in company-level fulfillment ratios for reporting year 2022 and 2023

CHANGE IN COMPANY-LEVEL FULFILLMENT RATIOS



The chart above shows the absolute change in company-level fulfilment ratio for the ten selected life insurance companies which comprise the industry-level fulfillment ratio.

Following the bonus and dividend adjustments in 2023, half of the top ten companies selected have experienced a decline in their company-level fulfillment ratios, ranging from -0.3% to -7.35%.

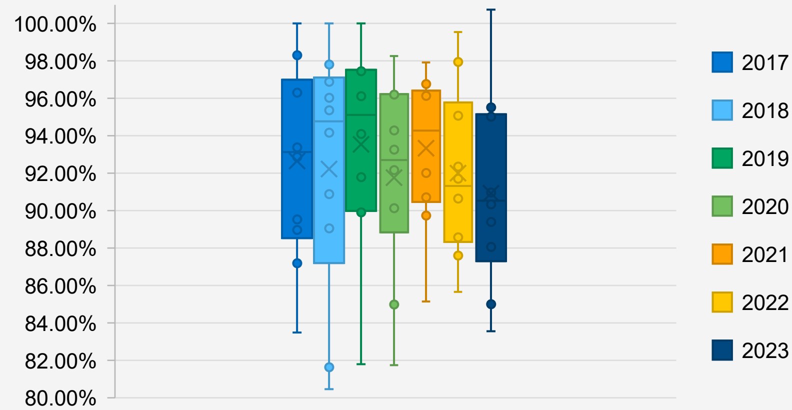
The varying extent of dividend adjustments among insurers can be attributed to several factors, primarily the actual investment performance of the par portfolio. Unfavorable investment returns in the local equity market and marked-to-market losses resulting from the increase in interest rates in 2023 could be reasons for the downward adjustment of dividends.

When analysing changes in fulfillment ratios by benefit type, it is observed that products with reversionary bonuses often face larger reductions compared to those with terminal or annual dividends. This is because once a reversionary bonus is declared, it becomes part of the guaranteed benefits for future years, increasing costs for insurers. In contrast, annual and terminal dividends provide more flexibility for adjustments. Furthermore, some companies may have decreased the terminal bonus for some future policy years, which is not yet captured in the fulfillment ratio, as it only accounts for the terminal dividends actually paid out.

Some companies have experienced an increase in their company-level fulfillment ratios, ranging from 0.03% to 3.73%, which could be attributed to their specific investment strategies. These insurers may have better diversified their underlying asset portfolio, leading to a more favorable actual investment return. Furthermore, the implementation of more sophisticated risk management strategies such as interest rate hedging may have helped some insurers protect themselves from the rapidly increased interest rates.

The decision to maintain non-guaranteed benefits without further adjustment is also often driven by commercial considerations, as insurers aim to uphold their reputation for stability and reliability, especially in challenging times. This strategy can enhance brand image and help maintain customer trust, distinguishing a particular company from a competitor that reduce benefits. Achieving this may involve using smoothing mechanisms tailor-made by the insurance company. For example, insurers managing bonuses at a granular level might offset reduced fulfillment ratios for some cohorts of policyholders, with increased fulfilment ratios for others, maintaining a neutral overall position.

The box plot shows the minimum/25th/50th/75th/ maximum company-level fulfillment ratio of the ten companies covered under the Index. While the maximum and various percentiles decreased noticeably in 2021 compared to 2017, they have widened since 2021.



The width of the box in a box plot represents the interquartile range (IQR), which is the distance between the first quartile (25th percentile) and the third quartile (75th percentile), covering the middle 50% of the data. The line within the box represents the median (50th percentile), showing the central point of the data.

For example, in 2021, a narrower box and whiskers suggest that companies' fulfillment ratios showed less variability, indicating a more consistent approach to adjusting bonuses and dividends across companies. Conversely, a wider box and whiskers after 2021 imply increased diversity in their bonus adjustment decisions, possibly due to varying smoothing mechanisms or commercial considerations.

Conclusion and what's next for fulfillment ratios

The fulfillment ratio for the 2023 reporting year appears to be primarily influenced by macroeconomic factors, with each company adopting slightly varied strategies for bonus decisions. In 2024, the recovery of the local equity market, robust performance in international equities and relatively stable interest rates may have a positive impact on the fulfillment ratios for most companies. This favorable financial climate enhances investment returns, allowing insurers to provide greater non-guaranteed benefits to policyholders. As a result, these elements collectively contribute to the expected increase in fulfillment ratios across the industry.

The recent illustration cap imposed by the Insurance Authority, which limits the rates insurers can illustrate to customers, may help manage PRE by reducing high sales illustrations and achieving a closer alignment with actual payment amounts. If products are not repriced and the underlying asset allocation remains unchanged, the cap could theoretically allow asset returns to support higher actual non-guaranteed returns, potentially resulting in a fulfillment ratio exceeding 100%. However, since these caps typically take effect over a long term, such as 25 years, the impact may not be immediately observable. This regulatory measure aims to balance customer expectations with realistic outcomes, although its long-term effects will unfold gradually.

It is essential to point out that many popular "guaranteed lite" whole life par products, which are impacted the most by this new regulatory cap, are still in the initial years of their policy terms. Consequently, the current fulfillment ratios do not adequately reflect the increasing non-guaranteed components that are planned to be paid to policyholders in the future. The future trend of the Index will largely depend on the actual dividend declaration of insurers, especially when terminal dividends/bonuses become material.

More information from the regulator

- The Insurance Authority has updated its website to provide more information on fulfillment ratios (https://www.ia.org.hk/en/fulfillment_ratio/index.html), including an introduction to fulfillment ratio, examples of fulfillment ratio calculation and some frequently asked questions.
- There is also an updated list consolidating the website links where insurance companies upload their fulfillment ratios, as well as information on the frequency and timing of each insurer's upload of their latest fulfillment ratios. Some companies upload the fulfillment ratios as early as January while some do it as late as September.

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milliman.com

CONTACT

Julian Man
julian.man@milliman.com

Clement Bonnet
clement.bonnet@milliman.com

George Leung
george.leung@milliman.com

Lammy Tsang
lammy.tsang@milliman.com

Valensis Justiani
valensis.justiani@milliman.com