Asia e-Alert

Milliman

Singapore: 2023 participating fund health check

Introduction

In this e-Alert we review the position of participating (par) funds in Singapore at the end of 2022, based on public information published in 2023, and compare this to the position at the end of 2021. For information on solvency and capital we have used data from the 31 December 2022 insurance returns as published on the Monetary Authority of Singapore (MAS) website. Following the merger of HSBC Life Singapore and AXA Insurance at the end of 2022, the MAS website only includes the return for the former AXA business as at 31 December 2022, so we have excluded the former HSBC Life par fund from the solvency and capital analysis. To distinguish between the two par funds now managed by HSBC Life we will refer to the par fund that was formerly managed by AXA Insurance as the "AXA fund."

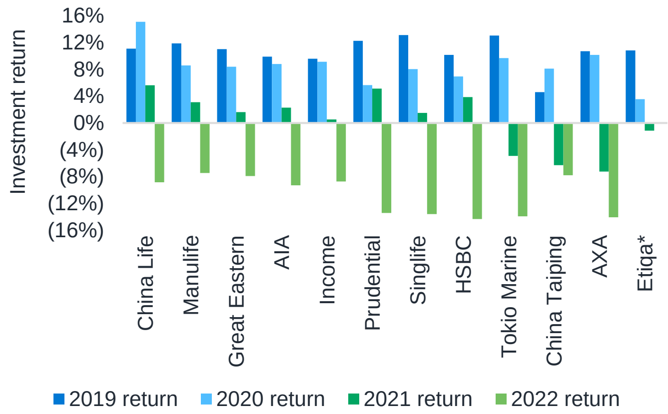
Information on investment returns and investment mix was obtained from insurers' participating fund updates, published on their websites. At the time of writing, we have been unable to locate the 2022 update for Etiqa, so have not included the 2021 information for this fund. Where insurers manage separate investment pools within the par fund, or have multiple par funds, we have focused on the investment pool or fund that we believe to be the main fund used for SGD-denominated business, so the figures we show will not necessarily reflect each par fund in totality.

Investments

Figure 1 shows the annual investment return experience for each par fund from 2019 to 2022. Whilst returns in 2019 and 2020 were strong, returns in 2021 were poorer, with 2022 demonstrating significant negative returns for all par funds. This general trend reflects how bond yields have moved over this period, as well as the performance of equity markets.

Equity returns in 2019 were positive, coupled with a fall in yields. The par fund investment returns are on a market value basis, so falls in yields will result in positive returns as bond prices rise. With positive equity returns and rising bond prices, 2019 therefore saw strong investment returns.

FIGURE 1: PAR FUND INVESTMENT RETURNS FOR 2019 TO 2022



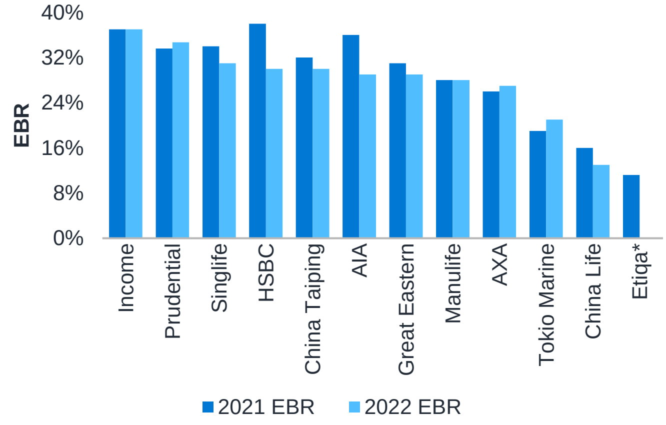
*2022 information not available for Etiqa.

Bond yields continued to drop further over 2020, leading to strong positive gains on bond market values, which were partially offset by unstable equity markets during the COVID-19 pandemic. Then 2021 saw interest rates begin to rise, resulting in market value falls in bond prices and consequently poorer investment returns relative to the previous two years.

Interest rates have continued to rise sharply in 2022, leading to further falls in bond prices. Although the STI Index was fairly neutral over 2022, global equity markets, including China, fell significantly in 2022, which coupled with the negative impact to bond prices has resulted in very negative returns in 2022 for all par funds, ranging from (7.5%) to (14.3%). The variation in returns between different funds are due to a variety of factors. Because of the rise in interest rates, one particular driver for the variation will be the duration of the fixed interest assets held. The longer the duration of the assets the greater the sensitivity of the market value to movements in yields, so those par funds with longer-duration bonds will have experienced larger falls in market values on these assets than those with shorter-duration bonds. Differences in allocations to local and overseas equity markets will also have had an effect on the relative performance of each fund.

The duration of fixed interest asset portfolios is expected to have a particularly significant impact on investment returns in 2022, but other factors will also contribute to the variation in fund investment performance, including: strategic asset allocation; use of alternative asset classes; and fund manager performance. Figure 2 shows the actual equity backing ratios (EBRs), the proportion of investments allocated to equity and property, for each company's par fund as at 31 December 2021 and 31 December 2022. As these ratios are based on actual asset allocations, rather than long-term strategic targets, they reflect tactical positions being adopted at 31 December each year. The figures do show, however, that for the group of nine funds with the EBRs at the higher end, the EBRs are typically between 27% and 37%. The Tokio Marine, China Life and Etiqa funds all seem to be managed with lower EBRs, of 21% or lower.

FIGURE 2: PAR FUND EBRS AT 31 DECEMBER 2021 AND 2022

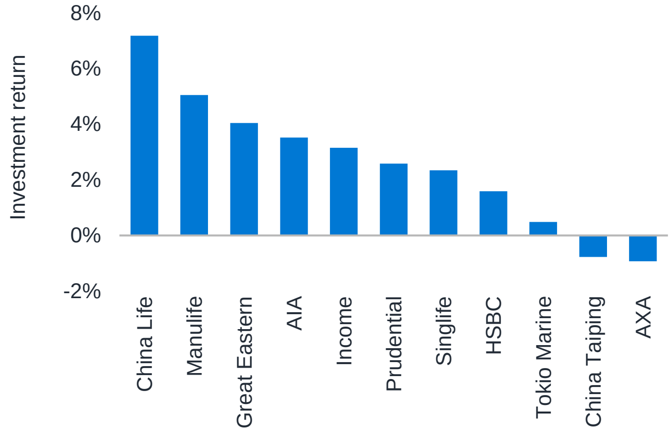


*2022 information not available for Etiqa.

One observation we can make from the EBRs is that for a few of the funds there has been a notable reduction in EBR from 31 December 2021 to 31 December 2022, in particular for HSBC and AIA. With the rise in interest rates offering higher yields on interest-bearing assets, as well as continued uncertainty around equity markets related to high inflation levels and instability from the Russia-Ukraine war, the reduction in EBR possibly reflects a likely tactical position.

Par policies are long-term insurance policies and the ability to support policyholder benefits, both guaranteed and non-guaranteed, will depend on the long-term investment performance of the par fund. To get a view of the longer-term investment performance we have calculated the annualised investment returns for each par fund using a geometric average of the returns from each year over 2019 to 2022, as shown in Figure 3. It should be noted, however, that observed investment returns over a specific four-year period will not be a guide to how the funds have performed over longer periods, or how they will perform in the future.

FIGURE 3: ANNUALISED INVESTMENT RETURNS BY PAR FUND* OVER FOUR-YEAR PERIOD 2019 TO 2022



*Excludes Etiqa as 2022 information is not available.

The poor performance in 2022, and to a lesser extent 2021, has dragged down the average returns, meaning that only China Life and Manulife's funds have exceeded the current and previous maximum allowed investment return assumptions for policy illustrations of 4.25% and 4.75%, respectively. If funds cannot achieve the investment returns assumed in policy illustrations, then they may be unable to afford the level of non-guaranteed benefits illustrated and may need to cut bonuses. However, companies not only take into account the past experience of the fund when setting their bonus rates, but also their future expected experience. The rise in interest rates has led to an increase in the returns that insurers expect to earn on their investments in the future. If interest rates were to remain at their current levels then fixed interest portfolios should provide good returns in future years to offset the poorer returns experienced in 2021 and 2022. This has helped some insurers to maintain bonus levels despite the poor investment returns in 2021 and 2022.

One caveat to the positive effect on expected future investment returns is, however, the degree that insurers had already been taking credit for interest rate rises within their expected return assumptions. There had been a general expectation that yields on fixed interest assets would increase from the low interest rate environment that has persisted since the after-effects of the 2008 global financial crisis, so many forward-looking investment return assumptions were already including an allowance for future reinvestment at higher yields. To the extent that insurers were already taking credit for this within their investment return assumptions they would then see less benefit to the expected return assumption when yields actually rose.

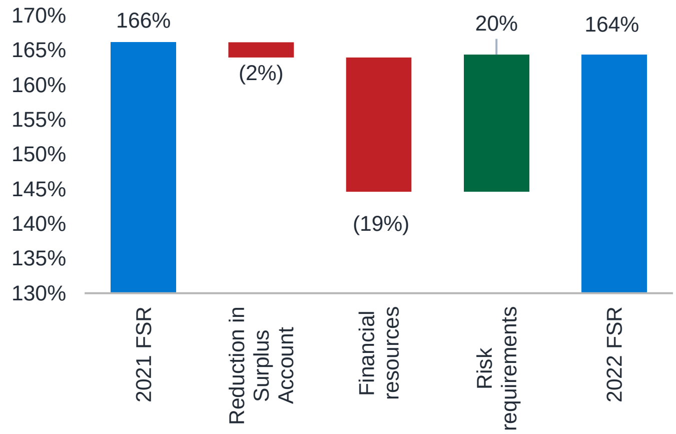
Another important factor to consider is that higher expected returns in the future will not affect surrender values, so there will have been a significant fall in asset shares relative to surrender values. Typically, at least in recent years, we have come to assume that surrender values will be lower than asset shares, resulting in positive surrender surpluses. Following the significant negative investment returns experienced in 2022, this may not be the case, at least not for all products. Insurers may need to monitor their surrender value to asset share ratios to more carefully understand how the surrender risk may have changed for different products.

Solvency and capital

Given the large negative investment returns experienced in 2022, our expectation might be for there to have been significant pressure on par fund solvency levels. However, whilst the values of assets have fallen significantly, the rise in the risk-free rate used to discount liabilities will have partially offset some of the effect from the fall in asset values. We have even seen that some of the insurers that were providing shareholder capital support within the Surplus Account have actually been able to return some of that support to the shareholders. We have seen large reductions (relative to their fund sizes) for Income, Manulife, AXA, China Taiping and China Life. Conversely, Tokio Marine saw a large increase to its Surplus Account of around SGD100 million.

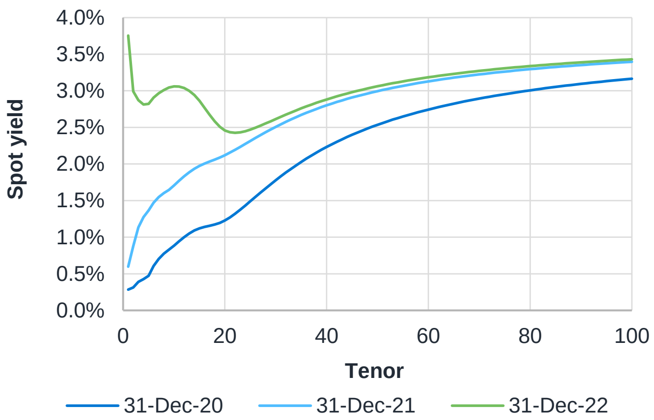
Figure 4 shows an aggregate-level picture of the change in par fund solvency over 2022, summing the financial resources and risk requirements across all the par funds in the Singapore market. It shows that the aggregate level fund solvency ratio (FSR) reduced by 2 percentage points over the year, from 166% to 164%, which is equivalent to the impact from the reduction in Surplus Account assets, which we have assumed is due to returning capital support to shareholders.

FIGURE 4: CHANGE IN INDUSTRY LEVEL PAR FUND FSR OVER 2022



We can see that the change in financial resources over 2022 has led to a decrease in the FSR of 19%. Whilst there will be several factors influencing the financial resources it is likely that loss in asset values from the negative investment returns experience in 2022 could only be partially offset by the reduction to guaranteed liabilities from the higher-risk discount rate. This is due in part to losses in equity values, for which there is no offsetting impact on the liabilities, and also from the nonlinear movement in the yield curve. Although interest rates have risen at all tenors over 2022, we can see from Figure 5 that yields at the short end of the curve have increased much more sharply than those at the longer end and the yield curve has become inverted (yields at the short end are higher than those at the long end). As the fixed interest assets held by the par funds are typically shorter in duration than the guaranteed liabilities, the higher rise in yields at the short end of the curve will have led to bigger falls in asset values than for the guaranteed liabilities.

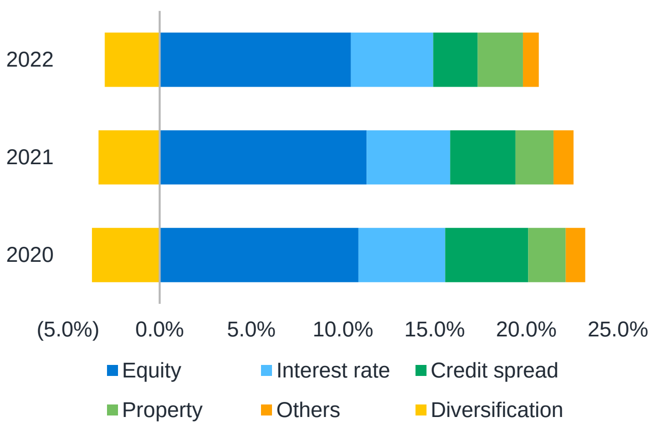
FIGURE 5: RBC2 SGD RISK-FREE SPOT RATES AT DIFFERENT VALUATION DATES EXCLUDING ANY ADJUSTMENTS



Note that yields beyond 20 years are extrapolated based on an ultimate forward rate, as prescribed under the RBC2 regulations.

The negative impact on the FSR from the fall in financial resources has been completely offset by the positive effect of a reduction in risk requirements. When we analyse the movement in the risk requirements, we see that most of the reduction is coming from a reduction in the C2 asset risk requirements. Figure 6 shows the breakdown of the par fund C2 risk requirements at an aggregated industry level in 2020, 2021 and 2022, as a proportion of the total par fund investments. The aggregate C2 requirements have decreased from 19.5% of total par fund investments in 2020, to 19.2% in 2021, then down to 17.7% in 2022.

FIGURE 6: INDUSTRY-LEVEL BREAKDOWN OF PAR FUND C2 RISK REQUIREMENTS AS A PROPORTION OF TOTAL INVESTMENTS 2020-2022



We can see that the equity risk charges are the largest component of the C2 risk requirements and there has been a reduction in this moving from 2022 to 2021, which reflects the observed reduction in asset allocation to equities that we discussed earlier. The other noticeable change is the reduction in the credit spread risk charge, which reduced between 2020 and 2021 and then even more materially between 2021 and 2022. Whilst there could be numerous reasons for this, for example insurers reducing their corporate bond holdings, or targeting higher credit ratings, as well as the effect that higher yields will reduce duration and therefore the credit spread risk charge, we believe that the main reason is the application of the matching adjustment (MA). The MA is an add-on to the risk discount rate that insurers can apply to reflect the specific illiquidity premium on corporate bonds that are being held to match future liability cash flows.

The actual impact of the MA on the policy liabilities can be limited, as the illiquidity premium (IP) adjustment that they can use without the approvals required for MA can offer similar levels of adjustment. However, the MA also offers relief on the credit spread risk requirement, where the stress on the credit assets can be offset by the impact on the liabilities from the increased MA as a result of spreads widening. The observed reduction in credit spread risk requirements over 2020 to 2022 is an indication that more insurers are employing the MA on their par business and/or that insurers are extending the scope of products included within the MA portfolios. This is an indication of insurers adapting and evolving to the new Risk-Based Capital 2 (RBC2) regulations that were introduced in 2020 to improve the capital efficiency of the par funds.

Conclusions and future outlook

Rising interest rates and the fall in global equity markets during 2022 have led to very negative investment returns for Singapore's par funds. Despite this, the aggregate market-level FSR has remained at the same level, after allowing for the shareholder capital removed from Surplus Accounts. This was achieved, in part, by the reduced value of guaranteed liabilities as a result of the increase in interest rates, but also from companies implementing measures to improve capital efficiency, for example by implementing or extending the use of the matching adjustment. If returns in 2023 do not improve then FSRs will likely come under more pressure, as there will be fewer capital efficiency levers left to pull.

The negative investment returns experienced in 2022 are also likely to have put bonus rates under pressure. However, we understand that higher expected future returns as a result of the rise in interest rates have allowed companies to protect bonuses for now. The challenge going forward is that the funds are going to need to actually earn these higher returns in practice, otherwise we will see pressure on the need for bonus cuts.

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