Maritime Super, Seafarers Part of the Seafarers Division

Report on the Actuarial Investigation as at 30 June 2022

6 December 2022

Summary

I am pleased to present my report to the Trustee of Maritime Super on the actuarial investigation into the Maritime Super, Seafarers Part of the Seafarers Division as at 30 June 2022.

This Summary sets out the key results and recommendations contained in this report.

Summary of Data

The assets of the DB Reserve are managed by Milliman and invested in a hedging program which has the intended aim of reducing the probability of the DB Guarantee becoming more onerous than the DB Reserve. For the purpose of this investigation, we have assumed that the hedging program maintains a neutral position with investment returns based on a cash portfolio.

The assets held in respect of defined benefit Sub-fund members' account balances that are subject to the DB Guarantee are invested in the investment options selected by members from the available choices.

A summary of membership numbers and the value of net assets of the Sub-fund at 30 June 2022 and 30 June 2020 are shown below:

	30 June 2022	30 June 2020
Number of Members (Active)	1,163	1,368
Member Account Balances subject to the DB Guarantee	$258,891,000	$256,777,000
DB Reserve	$10,984,000	$35,263,000
Net Market Value of Assets subject to the DB Guarantee	**$269,875,000**	**$292,040,000**

Solvency

The financial position of the Sub-fund has deteriorated over the intervaluation period, as shown in the decreased Vested Benefits Index from 113.5% as at 30 June 2020 to 104.0% as at 30 June 2022.

Contents

Throughout this report the following terms are used:

Fund
Maritime Super

Sub-Fund
Maritime Super, Seafarers Part of the Seafarers Division

Trustee
Maritime Super Pty Ltd, the Trustee of Maritime Super

Employer
Seafarers Participating Employers and the Union

Trust Deed or Rules
The Sub-fund's Trust Deed dated 1 March 2009 and subsequent amendments

The Investigation Date or Valuation Date
30 June 2022

The solvency measures as at 30 June 2022 and 30 June 2020 are also shown below:

Measure	30 June 2022	30 June 2020
VBI	104.0%	113.5%
PVABI	103.8%	113.0%
MRBI	104.0%	113.5%

I note the solvency measures above are inclusive of member account balances subject to the DB Guarantee.

Funding

I recommend that the Employers contribute at the required amounts to meet any Superannuation Guarantee, contractual or any other obligations in respect of accumulation liabilities in the Sub-fund. In my opinion there is no current requirement to make additional contributions above the contributions required for accumulation members.

The expenses currently being deducted from the DB Reserve are contributing to the deterioration of the fund and I am unable to conclude that there is a high probability that the DB Reserve will be expected to provide for the DB Guarantee over the next 10 years if no additional contributions are made to the DB Reserve under the current investment arrangements.

Other Matters involving Actuarial Oversight

I further recommend that:

- The Trustee undertake a review of the current investment strategy of the Sub-fund, including the hedging strategy and the associated expenses;
- The Trustee undertake an investigation in respect of non-contributing members' insurance premiums, which are currently funded from the DB Reserve to the extent that the DB Guarantee applies for any member;
- The Trustee retain the shortfall limit to 98% based on the current investment structure of the Sub-fund;
- The Trustee monitor the financial position of the Sub-fund quarterly throughout the following investigation period, with the results reviewed by the Actuary;
- The Trustee obtain a letter from the Actuary in the intervening years between actuarial investigations which reports to the Trustee on the vested benefit position of the Sub-fund; and
- Current external insurance arrangements for death and disablement benefits be retained.

The next actuarial investigation of the Sub-fund should be conducted with an effective date no later than 30 June 2024. The recommended contribution rates will be reviewed at that time or at an earlier date if considered appropriate as a consequence of the regular review of the VBI or as required by legislation.

I am not aware of any event since 30 June 2022 that warrants review of the recommendations in this report.

Chris Porter
Fellow of the Institute of Actuaries of Australia

6 December 2022

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Section 1: Introduction

Scope

This investigation has been prepared effective 30 June 2022 for Maritime Super Pty Ltd, Trustee of Maritime Super, by the actuary to the Fund, Chris Porter, FIAA.

For members who joined before 1 July 2008 the Sub-fund provides benefits in an accumulation form subject to certain defined benefit guarantees. This report focuses on those accumulation benefits in the Sub-fund subject to a defined benefit guarantee.

This investigation excludes the liabilities in respect of fixed term and lifetime pensioners of the Sub-fund, which have been investigated in conjunction with the liabilities of the fixed term pensioners within the Stevedores Division of the Fund with whom their underlying assets have been co-invested.

The Trust Deed governing the Fund requires an actuarial investigation and report to be due at least every three years. Under subparagraph 14(d) of Prudential Standard SPS 160 Defined Benefit Matters, APRA has determined that the Trustee require regular actuarial investigations of the Fund to be made every two years.

The main aims of the investigation are to examine the current financial position of the Sub-fund and the long-term funding of the Sub-fund's benefits, and to provide advice to the Trustee on the contribution rate at which the Employers should contribute and on any other matters the actuary considers relevant.

This investigation is primarily interested in the defined benefit liabilities of the Sub-fund, and unless otherwise specified, this report relates only to such defined benefit liabilities. The Defined Contribution liabilities of the Sub-fund, including those that relate to defined benefit members, are fully funded and do not impact upon the Defined Benefit liabilities. No investigation is required regarding the Defined Contribution liabilities, although in my recommendations I have continued to recommend that the Employers contribute to meet any Superannuation Guarantee, contractual or any other obligations in respect of such liabilities.

This report has been prepared in accordance with Professional Standard 400, dated March 2021, issued by the Institute of Actuaries of Australia.

Background

The Fund is governed by a Trust Deed which was consolidated as at 1 March 2009 and subsequent amendments. The Fund is a complying superannuation fund for the purposes of the Superannuation Industry (Supervision) Act (SIS Act) and for taxation purposes.

The Sub-fund is closed to new members.

Defined Benefit Guarantee

As part of the transfer of the defined benefit members to an accumulation basis, the Trustee provided a defined benefit guarantee (DB Guarantee) for all defined benefit members as at 30 June 2008. Under the DB Guarantee, the Fund benefit payable on the retirement of a member, or upon leaving employment of an employer within the Maritime industry where the member:

a. is considered by the Trustee to have left the Maritime industry, or

b. is remaining with an employer in the Maritime industry, but elects to crystallise their benefit at the date of leaving employment,

will not be less than that which would have applied had they not been converted to an accumulation basis.

A Defined Benefit reserve (DB Reserve) is held which may be called upon if a top-up payment is needed to meet the defined benefit minimum benefits. This could occur for a number of interconnected reasons:

- the actual investment returns of the selected member investment strategy are less than needed to offset the effect on the DB Guarantee due to the rate of growth of Benchmark Salary;
- the increase in the discount factor on Defined Benefits is not matched for accumulation benefits;
- while longer serving members at 30 June 2008 have a significant surplus distribution to act as a buffer against adverse experience, this is not the case for shorter serving members who have the potential to accrue significant future service.

In addition, at any time, the DB Reserve needs to be in excess of the amount by which the vested benefits of all members exceed the value of their accumulation accounts. Otherwise, there is a likelihood that the Sub-fund would be in an unsatisfactory financial position. The inevitable movement of the accumulation accounts of members with investment market movements means that the amount of the DB Reserve required to fund the DB Guarantee will be variable over time.

Contributions

The level of Employer contributions (in addition to the Employer contributions required to be paid to members' accumulation accounts) payable to the Sub-fund is to be determined by the Trustee acting on the advice of the Actuary as set out in Rule 6.9 of Schedule B1 of the Trust Deed which states:

> *If the result of the Actuary's investigation and valuation reveals a deficiency, the Trustee, with the agreement of a Majority of Seafarers Participating Employers and the Union:*
>
> a. *shall, if in the opinion of the Actuary the assets of the Seafarers Division (other than those referable to Members' Accumulated Benefits) and the contributions required by Contributory Members under Schedule Rule 5.1 together with contributions required by Participating Employers under Seafarers Rule 8 and this Schedule Rule 6 would be insufficient to meet the cost of benefits (other than those in respect of Members' Accumulated Benefits) require 2008 Conversion Date Members to pay to the Trustee such further sum by way of contributions each week as may be determined by the Trustee on the advice of the Actuary, and in such event shall require Participating Employers to contribute an amount equal to such further contributions made by 2008 Conversion Date Members in that year increased by 100%; and/or*

b. *may, subject to the approval in writing of the Actuary and the Statutory Requirements, resolve to remove such deficiency in whole or in part by making such changes in the terms and the conditions of the Fund and/or the benefits (other than Members' Accumulated Benefits) as are considered necessary, provided that the changes must not result in the Member receiving an insufficient level of benefit for the purposes of the Superannuation Guarantee Legislation.*

If the Employers fail to pay any contributions required by the Trustee, then the Trustee may vary the benefits payable to members.

Previous Actuarial Investigation

The previous actuarial investigation of the Sub-fund was carried out by Chris Porter, FIAA as at 30 June 2020, with the results of that investigation set out in a report dated 10 December 2020.

The report concluded that the Sub-fund was not in an unsatisfactory financial position (as defined by SIS legislation) at that date, and that the reserves held by the Sub-fund were more than sufficient to meet expected immediate future requirements in respect of the DB Guarantee. There was therefore no requirement to make additional contributions above the current levels.

Experience since 30 June 2022

Since 30 June 2022 the net return on a cash portfolio to 30 September 2022 was approximately 0.46%. Changes in the hedge position over the same period were not available. I have taken into account known experience since 30 June 2022 when carrying out the projection of the financial position of the Sub-fund from that date.

It is my understanding that the Fund is currently in the process of implementing a Successor Fund Transfer (SFT) to Hostplus Superannuation Fund, with an intended transfer date in 2023. I consider that the recommendations set out in this report remain appropriate with consideration to the Hostplus SFT.

Limitations

This report is provided subject to the terms set out herein and in our service agreement dated 24 July 2009 and signed on 3 August 2009, which was originally made with Russell Employee Benefits Pty Ltd and novated in March 2017 to Towers Watson Australia Pty Ltd. This report is provided solely for the Trustee's use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

We consent to the Trustee making a copy of this report available on the Fund's website where required in accordance with the relevant legislation.

The Trustee may make a copy of this report available to its auditors, the relevant Employers or Unions and to any person to whom the Trustee may be required to provide a copy under relevant legislation, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Trustee's auditors the Employers or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the relevant Employers or Unions when passing this report to them.

In preparing this valuation, we have relied upon information and data provided to us orally and in writing by the Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including Fund and Sub-fund provisions, membership data and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency. The data and information we have relied upon is shown in the “Additional Information” section of this report.

In our opinion, all calculations are in accordance with requirements of applicable legislative requirements, and the procedures followed and the results presented conform to applicable actuarial standards of practice.

Section 2: Solvency

Solvency Measures

When assessing the adequacy of the assets and future contribution rates, both the long-term and short-term solvency positions should be considered. To assess the solvency position, I have considered the following funding solvency measures:

- Vested Benefits Index (VBI), the ratio of assets to the vested benefits, which represent the total amount which the Sub-fund would be required to pay if all members were to voluntarily leave service (or are payable for benefits in the form of lifetime pension or deferred benefits) on the investigation date,
- The Present Value of Accrued Benefits Index (PVABI), the ratio of assets to the present value of accrued benefits, which represents the value in today's dollars, of expected future benefits payable based on membership completed to the valuation date[1]. Consistent with Professional Standard 400, dated March 2021, issued by the Institute of Actuaries of Australia, the PVABI does not include any allowance for future expenses, and
- The Minimum Requisite Benefits Index (MRBI), the ratio of assets to the portion of the Minimum Requisite Benefits (MRB) as defined in the Sub-fund's Benefit Certificate that relates to defined benefits.[2]

The following tables show the above indices as at the valuation date, as well as the prior valuation date.

The following table sets out solvency measures inclusive of member account balances subject to the DB Guarantee.

	As at 30 June 2022			As at 30 June 2020		
Measure	**Value of Liability**	**Value of DB Assets**	**Index**	**Value of Liability**	**Value of DB Assets**	**Index**
VBI	$259,520,000	$269,875,000	104.0%	$257,301,000	$292,040,000	113.5%
PVABI	$259,914,000	$269,875,000	103.8%	$258,419,000	$292,040,000	113.0%
MRBI	$258,891,000	$269,875,000	104.2%	$257,301,000	$292,040,000	113.5%

The table below sets out solvency measures excluding member account balances subject to the DB Guarantee, and therefore represent a direct comparison of the DB Reserve and the DB Shortfall. As a result of the relative size of the account balances subject to the DB Guarantee, inclusion of these amounts in the indices results in an index closer to 100%.

[1] Benefits have been apportioned to past service by calculating the projected benefit payable using only service that is completed to the valuation date in the benefits formula.
[2] The MRBs are equal to the Sub-fund's members' account balances. This is consistent with the description of MRBs in the Fund's Benefit Certificate.

	As at 30 June 2022			As at 30 June 2020		
Measure	**Value of DB Shortfall**	**Value of DB Reserve**	**DB only Index**	**Value of DB Shortfall**	**Value of DB Reserve**	**DB only Index**
DB Shortfall	$629,000	$10,984 ,000	1,746.3%	$524,000	$35,263,000	6,729.6%
PV DB Shortfall	$1,023,000	$10,984,000	1,073.7%	$1,642,000	$35,263,000	2,147.6%

The indices have decreased from those at the previous investigation date. This is primarily a result of negative experience of the Sub-fund since 30 June 2020, in particular the effects of the hedging program held by the Sub-fund, but also the higher than expected salary increases over the period. The DB Reserve decreased by 44% p.a. over the intervaluation period. This decrease was mostly attributable to the effects of the hedging program held by the Sub-fund. I have requested a further breakdown of the source of this significant reduction from the manager of the hedging program, Milliman, but as at the date of writing this report I have not received this analysis.

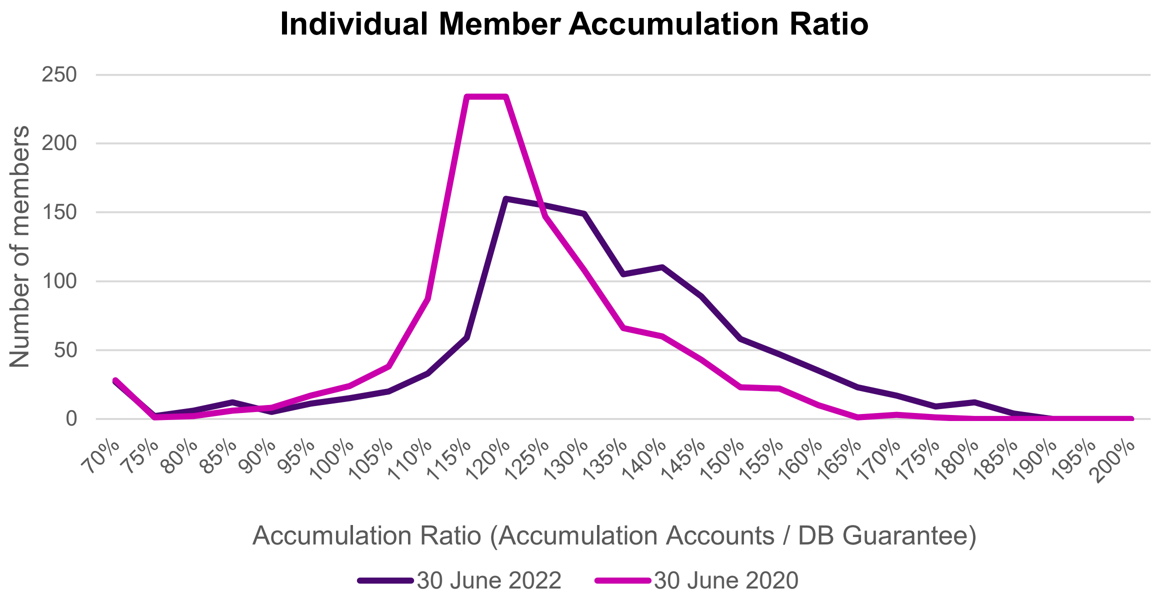
The PVABI is unchanged as a result of assumptions changes (due to the offsetting impacts of the increases in the discount rate and salary increases). The reduction in the PVABI has been entirely driven by experience losses.

The VBI is above 100% as at the valuation date, and as such, the Sub-fund is to be treated as being in a satisfactory financial position as at that date.

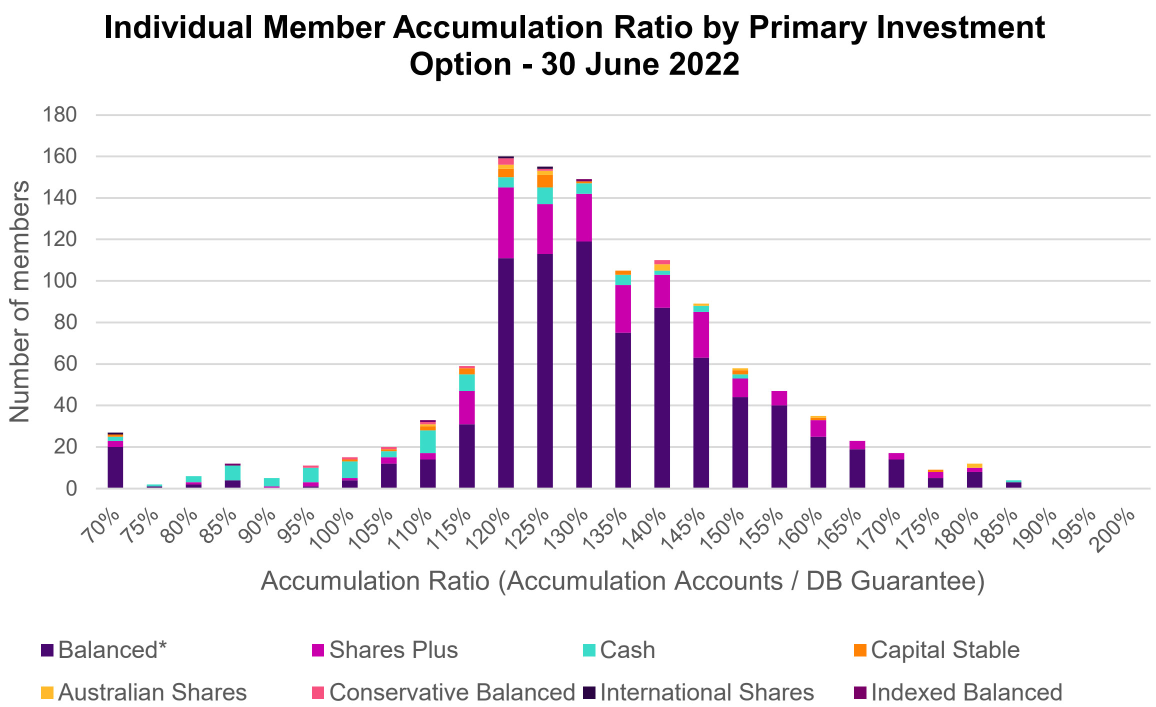
Profile of Individual Accumulation Ratio

Members are entitled to a benefit equal to their accumulation accounts subject to a minimum of their defined benefit guarantee. The ratio of accumulation accounts to DB Guarantee (Accumulation Ratio) is a measure of the strength of the DB Guarantee. The higher the Accumulation Ratio, the higher the level of accumulation accounts compared to the DB Guarantee, and therefore the lower the likelihood of the DB Guarantee applying in the future.

The chart below shows the distribution of the individual member Accumulation Ratios as at the valuation date, and the Accumulation Ratios for the same members at the prior valuation date. The chart shows that the individual Accumulation Ratios have increased over the intervaluation period due to the strong investment returns on the options in which members' accumulation benefits are invested relative to the increase in the DB Guarantee. The median Accumulation Ratio has increased from 118% to 127% over the intervaluation period.



The chart below shows a breakdown of the individual member Accumulation Ratios as at the valuation date by the primary investment option each individual member's accumulation accounts are invested in. The chart shows that the lower funding ratios are primarily attributable to members invested in more defensive options, in particular the Cash option. The higher funding ratios are more likely to be attributable to members invested in more aggressive options, in particular the Balanced and Shares Plus options.



* Includes Balanced and Balanced Socially Responsible investment options.

Minimum Death and TPD Cover Reserve

The Sub-fund provides an amount of guaranteed death and TPD cover in respect of members as at 30 June 2008. This cover is provided by group life insurance, the premium for which is met from the DB Reserve.

With the passage of time the value of this guarantee has diminished materially. I have estimated the future cost of this guarantee at 30 June 2022 to be only $50,200 calculated as the expected present value of the shortfall of the guaranteed minimum death and TPD benefits over the death and TPD benefits paid.

Consistent with the previous investigation, I have maintained the approach of including this amount in the Present Value of Accrued Benefits.

Retrenchment Benefits, Other Discretionary or Contingent Benefits

The benefit payable on retrenchment is the same as the resignation benefit, and therefore the Sub-fund does not have any material additional funding strain that would be caused by any retrenchments.

The Sub-fund has not historically paid any material discretionary benefits, so I have not analysed the impact of such discretionary benefits. There are no other material contingent benefits offered by the Sub-fund.

Termination Benefits

The Trust Deed states that on termination of the Fund, and by implication the Sub-fund, the assets of the Sub-fund must be used in the following order and the Fund must then be wound up:

a. in meeting costs and expenses of winding up that are not met by employers, and then
b. to meet in full the expected benefit obligations of pensioners and retained members of the Division, and then,
c. to meet in full the benefits of members who have attained their Normal Retirement Age, and then,
d. in satisfying the employer obligations under Superannuation Guarantee legislation, and then
e. to meet the balance of the vested benefits of members, to the extent this has not already been satisfied already, and finally
f. in providing further benefits to members as the actuary shall certify as being fair and reasonable.

In practice this means that on termination of the Fund or the Sub-fund, Sub-fund members are entitled to receive a benefit that the Fund's actuary determines to be a fair and equitable apportionment of the Fund assets in respect of the Sub-fund after providing fully for the remaining benefits of members who had already become entitled to a benefit or who had reached their normal retirement age and not yet received a benefit.

By definition this means that the Sub-fund would have been able to meet all its legal obligations to members and as the VBI is greater than 100%, the Sub-fund would have been able to pay all members' benefits including the current vested benefits of all members if it had been terminated at the investigation date.

If the Sub-fund was ever terminated, the Trustee would need to seek both actuarial and legal advice at that time to consider the method of determining and payment form of benefits from the Sub-fund.

Section 3: Funding

This section considers the long-term funding of the Sub-fund and assesses the contributions required in order to fund benefits payable in future years. To determine the additional contributions from Employers (in addition to the Employer contributions required to be paid to fund members' accumulation accounts), I have conducted a series of stochastic projections as described in the "Additional Information" section of this report.

Vested Benefit Projection

In order to examine whether the DB Reserve will remain sufficient to cover the DB Guarantee based on the selected assumptions, I have projected the vested benefits and assets, comparing:

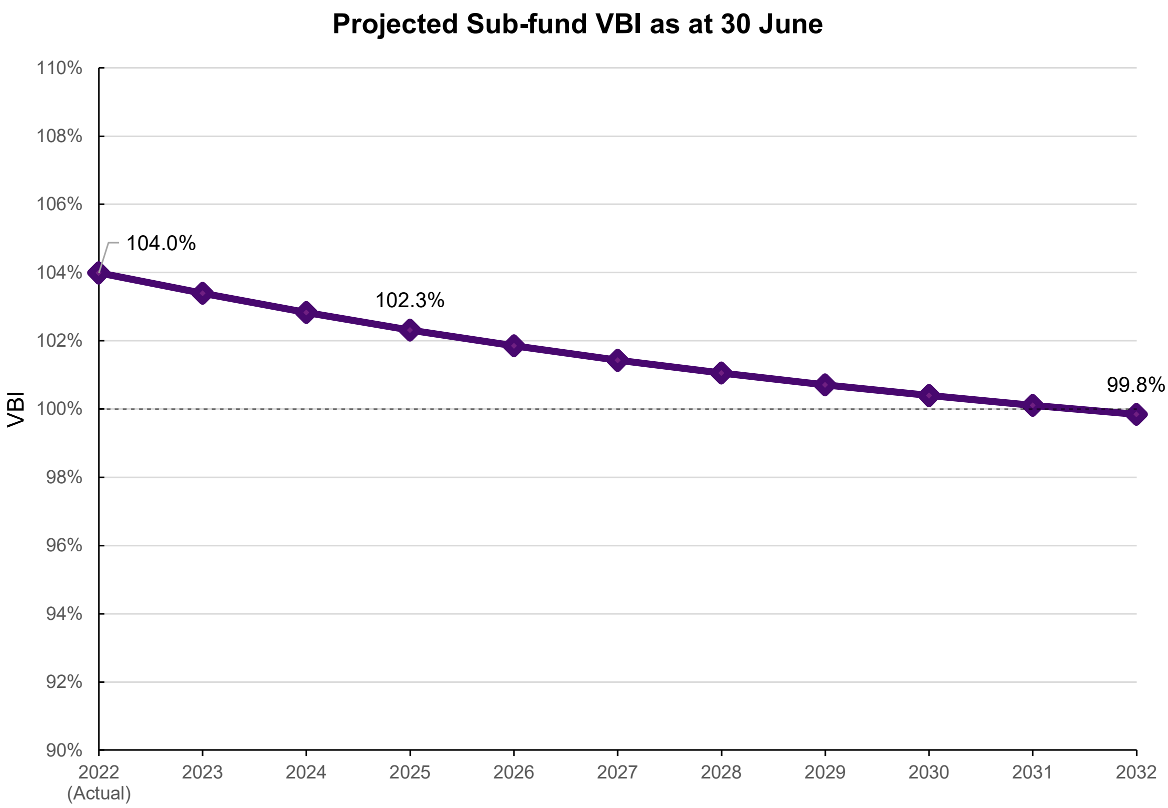
a. Expected value of member accounts that are subject to the DB Guarantee;

b. Expected DB Guarantee in excess of a. above (i.e. the DB top-up benefits); and

c. The expected DB Reserve.

In undertaking these projections I have assumed that the members' accounts remain in their current investment option and the DB Reserve is invested in a cash portfolio. On the basis that, where experience is in line with our assumptions the effect of the hedging program can be expected to remain neutral, I have not allowed for any impact of the hedging program in my projections. I have allowed for actual cash returns to 30 September 2022 in my projection, however, returns on the hedging program over the same period were not available.

Date	a. Member Accounts ($'000)	b. DB Top-up Benefits ($'000)	c. DB Reserve ($'000)	VBI (a. + c.) (a. + b.)	DB Only Index c. b.
30 June 2022	258,891	629	10,984	104.0%	1746.2%
30 June 2023	277,906	801	10,275	103.4%	1283.2%
30 June 2024	303,220	943	9,543	102.8%	1012.3%
30 June 2025	330,192	1,109	8,781	102.3%	791.6%



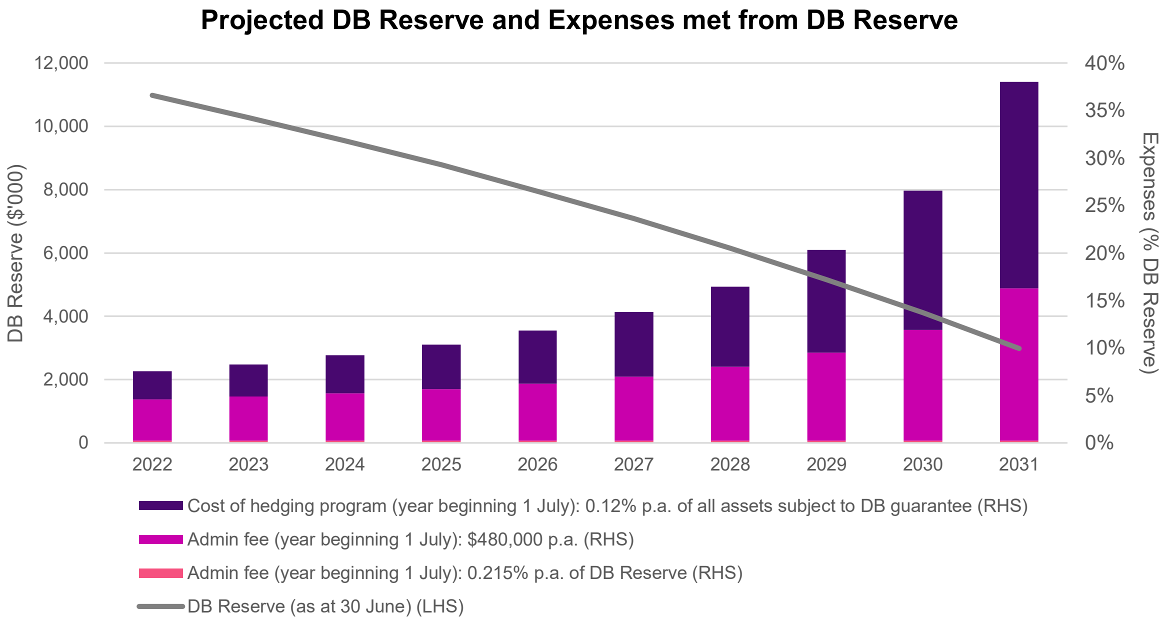
The projection above makes the prudent assumption that all members are full contributory members of the Sub-fund for the projection period. However, I note that 707 of the 1,163 members had no contributory service in the year prior to the valuation date and I therefore would expect the projected VBI to be slightly greater than the figures shown in the above chart. I note that the projected VBI is not materially sensitive to this assumption as a result of the dominance of the accumulation benefits, for example, under a projection where all members are assumed to have no further contributory service the VBI after 10 years is projected to 100.3% (i.e. only 0.5% higher).

Based on the selected assumptions, the Sub-fund is not expected to move to an unsatisfactory financial position over the next three years. However, it is expected to move to an unsatisfactory position over ten years.

Alternatively, a projection of the funding position excluding the member account balances subject to the DB Guarantee (i.e. DB Reserve versus DB Shortfall) results in a reduction in the index from 1746.2% to 66.6% over ten years.

Impact of Expenses

The projected deterioration of the financial position of the Sub-fund can be largely attributed to the significant expenses which are deducted from the DB Reserve (refer to the *Additional Information* section for details on these expenses), which are expected to increase as a proportion of the DB Reserve over the projection period. The following chart shows the projected value of the DB Reserve and the expenses as a proportion of the DB Reserve. The projection shows that expenses are expected to erode the value of the DB Reserve over time. In particular, the cost associated with the hedging program is expected to increase over time as I understand the implementation fees charged to the Sub-fund are based on a percentage of all assets subject to the DB Guarantee, not just a percentage of the DB Reserve.



Stochastic Projections

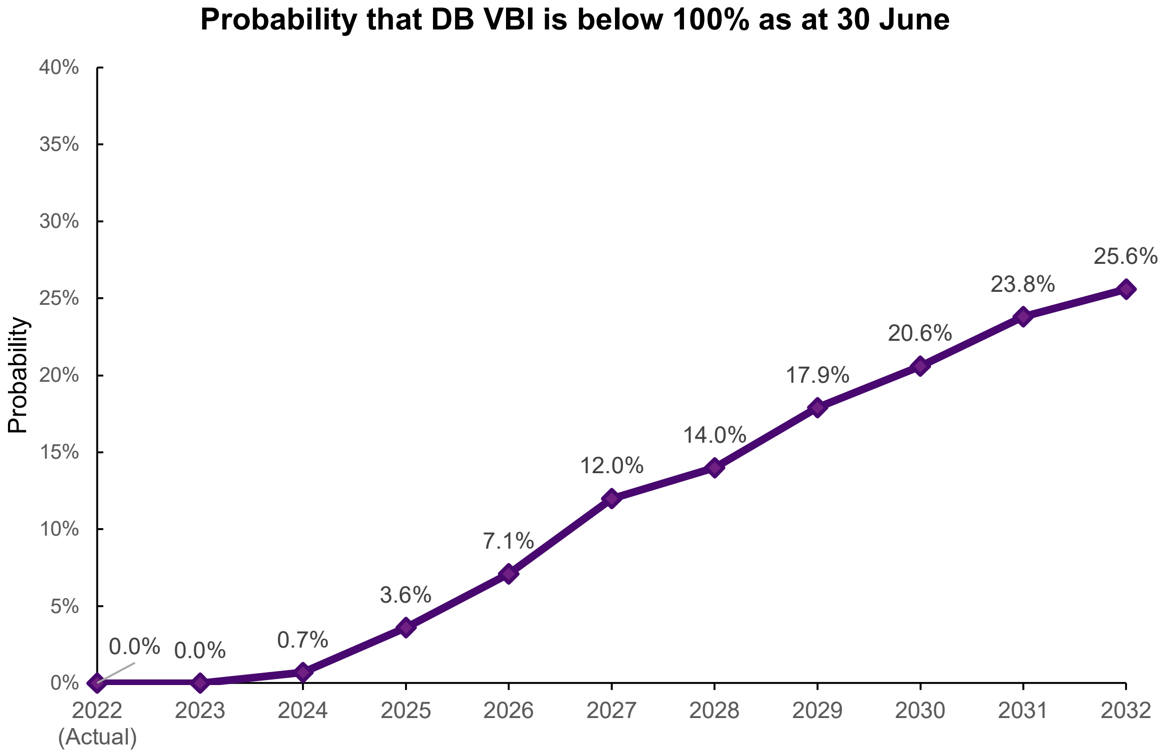
The Trustee has a solvency target for the Sub-fund to recognise the multi-employer situation of the Sub-fund in aiming to hold sufficient reserves to minimise the probability of a funding shortfall.

The Sub-fund's hedging program with Milliman has the objective to offset movements in the value of the DB liability due to movements in capital markets, thereby reducing the likelihood of a funding shortfall. Where experience is in line with our assumptions, the effect of the hedging program can be expected to remain neutral.

The expenses of the Sub-fund currently being met from the DB Reserve are significant and are projected to erode the financial position of the Sub-fund even in scenarios where the DB Guarantee is less likely to apply, particularly due to the current level of the DB Reserve, which is significantly lower than in the previous review.

In order to assess the probability of a future funding shortfall I have projected the Sub-fund's Vested Benefits Index over a large number of simulations, allowing for variation in investment returns. The projections assume the DB Reserve is invested in the Cash option, without the hedging program overlay and associated costs in place. For conservativism I have continued to maintain the assumption that all members are full contributory members of the Sub-fund. No allowance is made for additional funding. On this basis I can determine the probability of the DB VBI being less than 100% in each of the projection years of each simulation.

The following chart shows the probability that the DB VBI for the Sub-fund will be below 100% in that year.



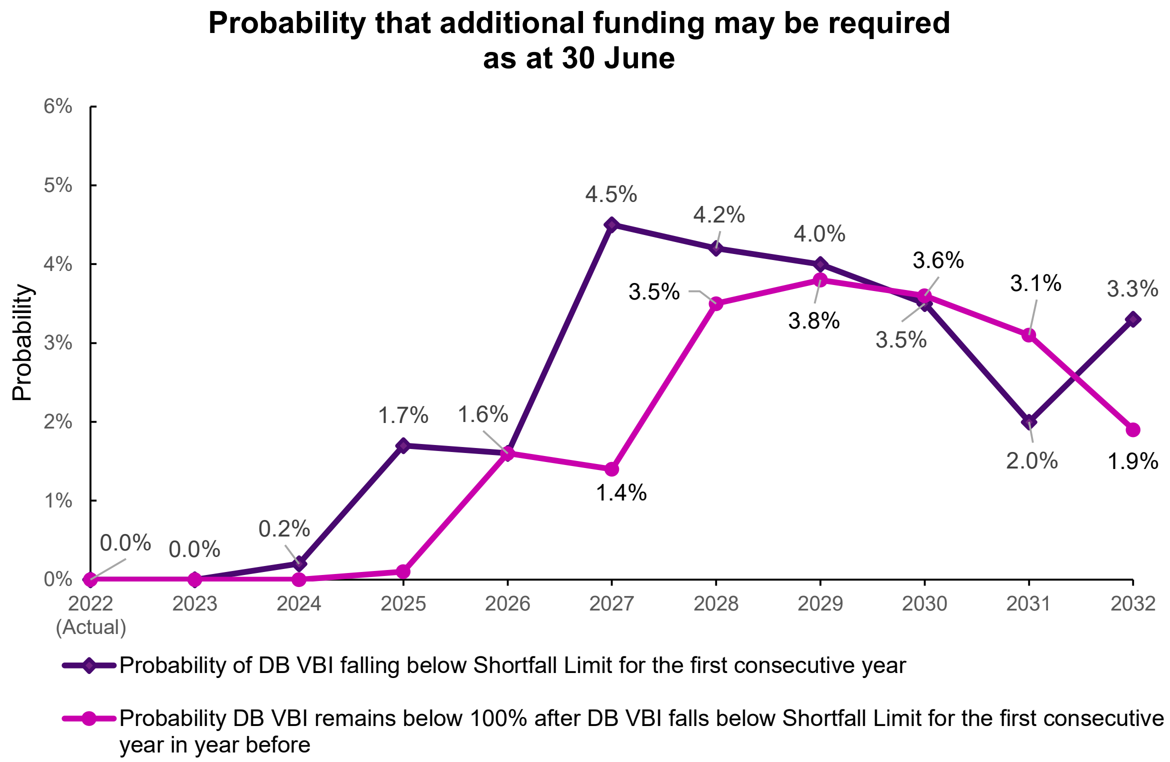
The projections show that over the next 10 years, the probability that the DB VBI is below 100% increases from 0% in the first year to 26% after 10 years. This is a deterioration from the previous investigation where there was a 9% probability of the DB VBI falling below 100% over a 10-year projection on a comparable basis.

In practice, there may be some instances where the DB VBI falls below 100% (but above the Shortfall Limit of 98%) and is restored above 100% within a year as a result of investment fluctuations without the need for additional funding.

To assess the likelihood that actuarial intervention and additional funding may be required, I have determined the following:

a. The probability that the DB VBI will fall below the Shortfall Limit of 98% for the first consecutive year; and

b. The probability that the DB VBI remains below 100% after the DB VBI falls below the Shortfall Limit for the first consecutive year in the previous year.



The combined conclusion of the above results is that there is currently a low probability of there being a need to put in place a restoration plan in any one year over the next 10 years. However, the cumulative likelihood of intervention over the next 10 years in not insignificant and should not be ignored in the ongoing management of the Sub-fund.

I note again that the above probabilities set out in these stochastic projections assume that the DB Reserve is invested in the Cash option and do not make allowance for the hedging program that is in effect or the associated costs of the hedging program. I recommend that a further assessment is carried out when results of scenario modelling on the hedging strategy has been provided by Milliman.

Sensitivity Analysis

While the stochastic results above address the variability of results, it is also useful to consider the sensitivity of results to variations in key assumptions on a deterministic basis. The following table shows the PVABI if key assumptions had been varied as described below:

	This Valuation Basis	Scenario 1	Scenario 2
Description	**Base Case**	**Investment Return Sensitivity**	**Salary Inflation Sensitivity**
Discount Rate	2.0%	0.0%	2.0%
Expected Salary Growth	2.9%	2.9%	4.9%
Present Value of Accrued Benefits Index	103.8%	103.2%	103.2%

These results show that the funding is moderately sensitive to long-term actuarial assumptions. While the sensitivities have been selected to be illustrative of reasonable changes in the valuation assumptions, they do not represent the upper or lower bounds of possible outcomes and more extreme outcomes are possible.

Summary

On the basis of the above results, the expenses currently being deducted from the DB Reserve are contributing to the deterioration of the fund and I am unable to conclude that there is a high probability that the DB Reserve will be expected to provide for the DB Guarantee over the next 10 years if no additional contributions are made to the DB Reserve under the current investment arrangements.

I believe that there are no current requirements to make additional contributions above the standard contributions required for accumulation members.

I further recommend that the VBI position (and other measures of solvency) continue to be monitored quarterly throughout the following investigation period, with the results reviewed by the Actuary, to ensure that prompt action can be taken if the financial condition deteriorates. I also recommend that the Trustee obtain a letter from the Actuary in the intervening years between regular actuarial investigations which reports to the Trustee on the vested benefit position of the Sub-fund.

Section 4: Other Matters Involving Actuarial Oversight

Investments

The net market value of assets is based on the asset values declared by the respective external fund managers at 30 June 2022 which in turn are based on the market values of the assets after allowing for realisation costs.

I note that Professional Standard 404 defines the 'Fair Value' of assets as the value of assets before the deduction of transaction costs. Based on the type of assets held by the Fund I do not expect realisation costs to be material. I have therefore used the net market value of assets for the purpose of this investigation.

The total net market value of assets for the Sub-fund as at 30 June 2022 is $670,266,000.

The net market value of assets for the Sub-fund that is subject to the DB Guarantee as at 30 June 2022 is shown in the table below:

	30 June 2022
Total Net Market Value of Assets	$670,266,000
Less Accumulation Account Balances not subject to the DB Guarantee	($400,391,000)
Net Market Value of Assets subject to the DB Guarantee	**$269,875,000**

Additionally, the assets subject to the DB Guarantee consists of the following components:

	30 June 2022
Member Account Balances subject to the DB Guarantee	$258,891,000
Plus DB Reserve	$10,984,000
Net Market Value of Assets subject to the DB Guarantee	**$269,875,000**

Investment Strategy

The assets of the DB Reserve are managed by Milliman and invested in a hedging program which has the intended aim of reducing the probability of the DB Guarantee becoming more onerous than the DB Reserve.

The primary objective of the Hedge Strategy is to offset movements in the value of the Sub-fund DB liability, which is calculated and maintained by Milliman, due to movements in capital markets. This is achieved by trading derivatives in quantities which offset the sensitivity of the Sub-fund DB liability to certain market exposures, including:

- Changes in the underlying asset values, including changes due to foreign exchange movements which result in a higher DB Shortfall applying i.e. poor investment returns which reduce the accumulation benefits to which the DB Guarantee applies;
- Changes in the risk-free rates used to measure the Sub-fund DB liability;

- Changes in inflation which impact the Benchmark Salary and subsequently the DB liability i.e. high inflation which increases the value of the DB Guarantee.

I note that this overlay has been a source of significant volatility in the value of the DB Reserve over recent years and has significantly reduced in value of the DB Reserve, primarily as a result of strong investment returns which reduce the DB Shortfall applying and increase any existing gap between Accumulation balances in excess of the DB Guarantee, as well as increases in the risk-free rates which reduces the present value of the Sub-fund's DB liability.

I note that while the hedging program, in principle, removes much of the funding risk on a discounted present value basis, there is a risk that the Sub-fund could move into an unsatisfactory financial position as a result of increasing risk-free rates, particularly where the level of the DB Reserve continues to be reduced by expenses which represent an increasing proportion of the DB Reserve.

The assets held in respect of defined benefit Sub-fund members are invested in the investment options selected by members from the available choices. As at 30 June 2022 the percentage invested in each investment option in respect to members' account balances were as follows (with 30 June 2020 shown for comparative purposes):

Investment Option	Percentage of Portfolio 30 June 2022	Percentage of Portfolio 30 June 2020[1]
Australian Shares	1.1%	1.1%
International Shares	0.7%	1.3%
Shares Plus	19.5%	19.0%
Balanced[2]	67.2%	62.2%
Indexed Balanced	0.6%	0.2%
Conservative Balanced	1.4%	0.3%
Capital Stable	2.5%	4.2%
Cash	7.0%	11.7%
Total	**100.0%**	**100.0%**

[1] Investments at 30 June 2020 were held in the internally managed Maritime Super investment options, which do not directly map to those offered through the Hostplus Pooled Superannuation Trust. The allocations are displayed next to the closest matching investment option.
[2] Includes investments in the Balanced and Balanced Socially Responsible Investment options

The strategic asset allocations as at 30 June 2022 of the two most commonly selected Fund investment options, Balanced and Shares Plus are shown in the below table:

Asset Class	Balanced	Shares Plus
Australian Shares	21%	30%
International Shares	29%	41%
Property	11%	7%
Private Equity	10%	8%
Infrastructure	11%	7%
Credit	7%	5%
Alternatives	3%	2%
Diversified Fixed Interest	3%	0%
Cash	5%	0%
Total Growth Assets	**76%**	**90%**
Total Defensive Assets	**24%**	**10%**

In my opinion the investment strategy as described above, including the hedging program and the associated expenses, should be reviewed, as based on the assumptions adopted in this investigation I expect that the DB Reserve will reduce to less than the DB Guarantee over the next 10 years if no additional contributions are made to the DB Reserve under the current investment arrangements.

Unit Pricing and Investment Reserving Policy

The net rate of return of the members' selected investment choice is credited to members' accounts. In my view, this remains appropriate.

Investment reserves are not held as there is no smoothing of investment earnings in the setting of unit prices. This remains appropriate.

Liquidity

The two most commonly selected Fund investment options, Balanced and Shares Plus, currently target an illiquid allocation of 42% and 29% of assets respectively. As at 30 June 2022, the total assets (including accumulation benefits not subject to the DB Guarantee) represent around 12% of the total assets held by the Fund, and an immaterial proportion of the total assets under management by the Hostplus Pooled Superannuation Trust. As such, in my opinion the Fund has sufficient liquidity to meet payments from regular cashflows.

Shortfall Limit

The Trustee currently has an approved shortfall limit of 98%.

Based on the Sub-fund's benefit design and its target asset allocation described above, in my opinion the 98% shortfall limit remains reasonable for the Sub-fund.

Insurance

Death and Disablement Benefits

At the investigation date, the Sub-fund has death, and total and permanent disablement insurance with MLC Limited in respect of death and disablement benefits in excess of the accumulation benefits payable to members on exit. The level of insurance is:

- The value of insurance units held in respect of the member; plus
- The amount of any guaranteed death and TPD cover in respect of the member, being the difference, if any, between:
  - The guaranteed minimum death and TPD benefit in respect of members as at 30 June 2008;
  - The member's accumulation benefit and their insured benefit.

Premiums in respect of the guaranteed death and TPD cover are paid from the DB Reserve.

In respect of non-contributing members, premiums are deducted from Accumulation benefits subject to the DB Guarantee. To the extent that the DB Guarantee is applying for these members, the cost of insurance is therefore effectively met from the DB Reserve. We recommend that the impact of this is investigated further.

The death and TPD benefits of defined benefit members of the Sub-fund are therefore effectively fully covered by insurance. On this basis, I consider the current insurance arrangements adequate and recommend that the current insurance arrangements be maintained.

Claims Prior to 30 June 2008

In addition, the Sub-fund has group insurance cover in respect of claims which may arise in respect of the period prior to 30 June 2008, which had not been advised to the Trustee at that date. The provision of this cover substantially removes any self-insurance risk in respect of periods prior to 30 June 2008. Some self-insurance may still apply in respect of any new claims not covered under the terms of the insurance policy, although I consider the likelihood of such claims arising to be small.

In my opinion these arrangements remain appropriate.

Section 5: Additional Information

Risks

The table below summarises the main risks to the financial position of the Sub-fund.

Risk	Approach taken to risk
Investment returns on the existing assets could be insufficient to meet the Trustee's funding objectives	The Trustee takes advice from the Fund Actuary on possible assumptions for future investment returns. In setting the future contributions, the Fund Actuary considers the effect on the future financial position if investment returns are less than expected. The Trustee is able to agree further contributions with the Employers and the Unions at subsequent valuations if future returns prove insufficient.
Price inflation or salary increases could be different from that assumed which could result in higher liabilities	The Trustee invests in a hedging program which is designed to, in isolation, increase in value in response to high inflation. This means that, over the longer term, such assets are expected to keep pace with inflation.
Falls in asset values might not be matched by similar falls in the value of the Sub-fund's liabilities	The Trustee invests in a hedging program which is designed to, in isolation, increase in value in response to poor investment returns.
Liquid assets are not sufficient to meet cashflow requirements of the Sub-fund when they fall due	The assets of the Fund are invested in the Hostplus Pooled Superannuation Trust. As such, the total assets under management are sufficient to cover any potential cashflows of the Sub-fund.
Sub-fund members leave service at rates different to long-term assumptions	The level of benefits paid to members will depend on the timing of members exiting the Sub-fund. If actual rates of exit differ from the rates assumed, then the future financial position of the Sub-fund may not develop as expected. The Fund Actuary conducts actuarial investigations every two years where actual experience is analysed. Where experience is significantly different from the assumptions, the Fund Actuary may update the assumptions to more closely reflect experience.
Legislative changes could lead to increases in the Sub-fund's liabilities	The Trustee takes legal and actuarial advice on changes in legislation and consults with the Employers or Unions, where relevant.

Economic risk Demographic risk Legal risk

Benefits summary

The following is a summary of the defined benefits applying at 30 June 2008 prior to the conversion to an accumulation basis. These form the basis of the underlying DB Guarantee after 1 July 2008.

Definitions

Accumulation accounts	:	the total account balances of the various accumulation accounts, including Voluntary, Past Service Account, 3% Accumulation, SG, 2% Member and 4% Employer
Early Retirement	:	Retirement after age 55 and before age 65
Fund Service	:	the number of completed weeks of contributory membership of the Fund, in respect of which normal contributions have been made
Fund Service Benefit (FSB)	:	9.0% of weekly Benchmark salary per completed week of contributory Fund Membership
Member's normal contributions	:	5.0% of Benchmark Salary
Normal retiring age (NRA)	:	65 years
Past service	:	specified service up to the commencement date of the Fund
Past Service Account	:	$145 for each completed year plus $12.08 per completed month of past service plus credited interest

Contributory & Non-Contributory Members (before 1 July 2008)

Benefit on Normal Retirement and Early Retirement

A lump sum of the member's FSB plus the sum of the member's accumulation accounts.

For members who joined pre 1 July 1998, this benefit is subject to a minimum of the sum of a defined benefit of 15% of weekly Benchmark salary per completed week of contributory Fund membership and the member's accumulation accounts but excluding the 2% Member and 4% Employer accounts.

Benefit on Total and Permanent Disablement

A lump sum equal to the member's accumulation accounts, the member's FSB at date of disablement plus a prospective benefit of 9% of benchmark salary for each year of future service. (Future service is calculated in complete months to age 62). Non-contributory members are not eligible to receive the future service benefit.

For members of the Fund at 30 June 1999 there exists a minimum benefit equal to the benefit (in fixed dollar terms) at that date.

Benefit on Death

A lump sum equal to the member's accumulation accounts, the member's FSB at date of death plus a prospective benefit of 9% of benchmark salary for each year of future service (future service is calculated in complete months to age 62). Non-contributory members are not eligible to receive the future service benefit.

For members of the Fund at 30 June 1999 there exists a minimum benefit equal to the benefit (in fixed dollar terms) at that date.

Benefit on Leaving the Industry

A lump sum equal to the member's accumulation accounts at the date of leaving, plus a percentage (the "RW" factor) of the member's FSB. These "RW" factors are set out in the 'Leaving Industry Factors' table below.

For members of the Fund at 30 June 1998 there exists a further minimum benefit equal to the sum of a percentage (R% from the table below) of 15% of weekly Benchmark salary per completed week of contributory Fund membership and the member's accumulation accounts but excluding the 2% Member and 4% Employer accounts.

This benefit is payable on leaving the industry and on resignation from an employer, partial disablement or redundancy.

Contributions

Member's normal contributions are 5% of benchmark salary (2% to the accumulation accounts and 3% towards the defined benefits) indexed in line with the Benchmark salary. In addition members may make voluntary contributions which are paid, together with interest, as an additional benefit when membership terminates.

Employers contribute the full cost of past service benefits plus the balance of the cost of benefits for fund service, subject to the latter amount being not less than twice total normal contributions paid by members. Currently this contribution rate is 6% of benchmark salary.

In addition, the Employers contribute at the rate of 3% of the benchmark salary to the 3% Accumulation account, and at the rate of 4% of the Benchmark salary to the Employer 4% accumulation account. These amounts are accumulated with interest and fully vested in the member.

For those members where the full weekly member contribution is not payable, employers contribute to an SG accumulation account. These contributions are made at the prescribed minimum SG rate.

Leaving Industry Factors

Age in Years	“RW” Factors (%)	“R” Factors (%)
34 or less	75.00	70
35	75.00	71
36	76.25	72
37	77.50	73
38	78.75	74
39	80.00	75
40	81.25	76
41	82.50	77
42	83.75	78
43	85.00	79
44	86.25	80
45	87.50	81
46	88.75	82
47	90.00	84
48	91.25	86
49	92.50	88
50	93.75	90
51	95.00	92
52	96.25	94
53	97.50	96
54	98.75	98
55 or more	100.00	100

For intermediate ages, the factors contained in the above tables should be interpolated.

Contributory & Non-Contributory Members (after 1 July 2008)

From 1 July 2008, members’ benefits have been converted to an accumulation basis.

Benefit on Retirement or Leaving the Industry

If the member joined Seafarers Sub-Fund after 1 July 2008, a lump sum equal to the member’s Accumulated Amount.

If the member joined Seafarers Sub-Fund prior to 1 July 2008, the benefit is subject to a minimum of the benefit calculated in either ‘Benefit on Normal Retirement or Early Retirement’, or ‘Benefit on Leaving the Industry’ as set out above, depending on the mode of exit and calculated at the date of exit.

Minimum Benefit on Death or Total and Permanent Disablement

If the member joined Seafarers Sub-Fund after 1 July 2008, a lump sum equal to the member’s Accumulated Amount, plus six units of death and disablement cover.

If the member joined Seafarers Sub-Fund prior to 1 July 2008, the above benefit is subject to a minimum of the benefit calculated in either ‘Benefit on Total and Permanent Disablement’ or ‘Benefit on Death’ depending on the mode of exit, calculated as at 30 June 2008.

Summary of Data Used in this Investigation

Membership Data

Maritime Super has responsibility for maintaining member records, payment of benefits and other administrative tasks of the Sub-fund.

Maritime Super provided data in respect of members of the Sub-fund as at 30 June 2022, including members who had left the Sub-fund since the last investigation date.

I have checked a sample of the membership data for internal consistency and am satisfied as to the accuracy of this sample.

The following table shows a summary of the membership as at 30 June 2022 and 30 June 2020:

Defined Benefit Membership	30 June 2022	30 June 2020
Number of Contributory Accumulation Members[1]	992	1,170
Number of Non-Contributory Members	171	198
Total Number of Members	**1,163**	**1,368**
Average Age	52.4	51.0
Average Service	23.3	21.7
Benchmark Salary (p.a.)	$93,973	$88,449

1. 536 of the Contributory Accumulation Members made no contributions during the year ended 30 June 2022.

There are also 822 Post-2008 Contributory Accumulation, and 7 Post-2008 Non-contributory members who are not subject to the DB Guarantee and have therefore not been considered in this investigation.

Assets Data

We have been provided with audited accounts for the Sub-fund as at 30 June 2022. The accounts were audited by Ernst & Young.

In addition to the Fund's accounts, I have also been provided with a breakdown of the Fund's assets into each of the Fund's various Sub-Funds which I understand has been subject to audit review. I have relied on this breakdown in determining the net asset relating to defined benefits in the Sub-fund.

The net assets exclude any amount held to meet the Operational Risk Financial Requirement.

I am satisfied that there are no material data discrepancies and that the data provided is suitable for the purpose of this investigation. I have relied on the information provided for the purposes of this investigation. Although I have no reason to doubt the quality of asset information provided, the results of this investigation are dependent on the quality of the asset information. Any changes to the asset values above will have an impact on the outcome of the investigation and any resulting recommendations.

Funding Method, Assumptions and Experience

Funding Method

In this valuation, I have assessed the likely future financial position of the Sub-fund by projecting members' expected future benefits, and the expected level of future value of assets on the basis of selected assumptions.

To assign a probability of the Sub-fund VBI remaining above 100%, and further, the probability of the need for additional funding in the future, I have used a stochastic projection method. This process involves:

- Simulating 1,000 sets of asset returns over the next 10 years based on the assets held by the defined benefit members;
- For each of the simulations, I calculate the expected accumulation benefits subject to the DB Guarantee, total benefits and the level of net reserve available, taking into account expected contributions, benefit payments and expenses. For the purpose of these calculations, no allowance is made for additional rectification contributions that may be required in practice. The calculations also assume the removal of the hedging program overlay and the costs associated with the hedging program met from the DB Reserve.
- Using the information above, I calculate the Defined Benefit Vested Benefits Index (DB 'VBI') of the Sub-fund, defined as the ratio of the market value of assets attributable to defined benefits and the Vested Benefits subject to a DB Guarantee.
- Establishing funding shortfall identifiers, namely:
  - the DB VBI falling below 100%,
  - the DB VBI falling below the Shortfall Limit of 98%, and
  - DB VBI falling below the Shortfall Limit of 98% for the first consecutive year and remaining below 100% in the subsequent year.
- Using the results from the simulations I calculate at each year:
  - the number of simulations where the DB VBI falls below 100% at least once.
  - the number of simulations where the DB VBI falls below the Shortfall Limit for the first consecutive year; and
  - the number of simulations where the DB VBI first falls below the Shortfall Limit and is still below 100% one year later.

The relative frequency of the shortfall event occurring can then form a basis for an estimate of the probability that further funding will be required.

This funding method is suitable for this valuation as it takes into account the expected growth of the Sub-fund's assets and liability profile and the Trustee's funding objective to hold sufficient reserves to minimise the probability of a funding shortfall.

In producing my recommendations, I have also taken into account the pace of funding required to maintain certain short-term solvency measures, in particular, that legislation requires the VBI to be above 100%.

This is consistent with the method used in the previous actuarial investigation. In my view this method remains appropriate.

Assumptions

In order to determine the value of expected future benefits and Sub-fund assets, it is necessary to make assumptions regarding the timing and amount of future benefit payments, expenses and contributions. In doing so it is important to examine the experience of the Sub-fund since the last valuation to see whether the previous assumptions have been borne out in practice.

While each of the assumptions used is normally the actuary's best estimate of future experience, in practice, the actual experience in any (short) period can always be expected to differ from the assumptions to some extent. However, it is intended that over longer periods, they will provide a reasonable estimate of the likely future experience and financial position of the Sub-fund.

In the short-term, as the actual experience emerges differently to the experience implied by the assumptions, the financial position of the Sub-fund will also vary from that expected. However, adjustments to Employers' contribution rates, if any, can be made to reflect these differences in the following actuarial investigation.

Financial Assumptions

Valuation assumptions can be broadly divided into demographic assumptions, which relate to characteristics of current and future members of the Sub-fund, and financial assumptions, which are assumptions other than demographic assumptions. The following sections first consider the financial assumptions that are to be adopted for this valuation.

Investment Returns

The rate of return in respect of the Balanced and Shares Plus investment options (the two most commonly selected Fund investment options) from 30 June 2020 to 30 June 2022 are set out in the table below:

Year Ending	Balanced Option[1]	Shares Plus Option[2]
30 June 2021	20.8%	25.1%
30 June 2022	2.0%	-3.8%
Overall	11.0% p.a.	9.7% p.a.

Over the two-year period to 30 June 2022 the value of the DB Reserve decreased by 44% p.a. While the actual return on the hedge position is not available, the reduction in the DB Reserve indicates that the return is significantly less than the rate assumed in the previous investigation of 1.2% p.a. (net of tax) which reflects a neutral hedge position and investment returns based on a cash portfolio. The Fund's Balanced and Shares Plus options returned 11.0% p.a. and 9.7% p.a. which is higher than the rates assumed in the previous investigation of 4.2% p.a. and 4.6% p.a. (net of tax) respectively.

[1] Based on the returns of the previous Maritime Super Balanced option from 30 June 2020 to 30 April 2021, and the Balanced option thereafter.
[2] Based on the returns of the previous Maritime Super Growth option from 30 June 2020 to 30 April 2021, and the Shares Plus option thereafter.

Additionally, the relative strength of returns on members' accumulation benefits which are subject to the DB Guarantee compared to the lower than expected returns on the DB Reserve has, in isolation, weakened the financial position of the Sub-fund.

While short-term differences between actual investment return experience and the actuarial assumption can affect the long-term financial position of the Sub-fund as measured by the actuarial investigation, the assumption used in the investigation must be based on long-term expectations since the investigation involves valuing payments in the future.

The rate of return assumptions have been set based on models of future investment returns developed by WTW, the current expectations of investment returns over the remaining lifetime of the Sub-fund, net of taxation and investment management expenses and current strategic asset allocation of the Sub-fund and are set out in the table below for key Fund investment options, along with the assumptions used for the previous investigation for comparative purposes.

	DB Reserve[1]	Balanced Option	Shares Plus Option
30 June 2022 assumed rate of return (net)	2.0% p.a.	5.6% p.a.	6.1% p.a.
30 June 2020 assumed rate of return (net)	1.2% p.a.	4.2% p.a.	4.6% p.a.

The rate of return used in the projection of each member's benefit reflects the weighted average of the rate of return assumptions and the member's selected investment choice.

Salary Increases

The average salary increases during the investigation period for the members remaining in the Sub-fund as at 30 June 2022 was 3.1% p.a. This is higher than the salary increases assumption adopted for the previous actuarial investigation of 2.0% p.a. This has had a negative impact on the financial position of the Sub-fund.

A long-term salary increase assumption of 2.9% p.a. is consistent with current-long term expectations of price increases based on modelling by WTW. I have therefore adopted this rate for the purpose of this investigation.

Administration Expenses and Insurance Costs

For this investigation, I assumed:

- A long-term rate of expenses of 0.215% p.a. of net assets, in line with the administration expenses levied against all members of the Fund. This is lower than the rate of 0.28% p.a. allowed for in the previous investigation.
- Additional administration costs of $480,000 p.a. paid from the DB Reserve. In the absence of updated data regarding this cost, we have maintained the assumption used in the previous investigation. I believe that this is appropriate as this cost is typically regarded as fixed.

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[1] Based on a cash portfolio

- Additional costs associated with the cost of operating the hedging program of approximately 0.12% of all assets subject to the DB Guarantee (based on the estimated annual costs of $325,000 advised by Maritime Super). I only became aware of this fee for the hedging program over the intervaluation period, it was therefore not included in previous reviews but will have contributed to the weakening of the financial position over the intervaluation period.
- Additional administration costs and the cost of death and TPD insurance are met from member accounts, with the exception of premiums relating to guaranteed death and TPD cover which are paid from the DB Reserve and have been calculated based on the premium rates charged to members of the Fund.

Demographic Assumptions

Rates at which Employee Members Cease Service

I have analysed the rates at which employee members cease service during the intervaluation period from 30 June 2020 to 30 June 2022. There were 205 exits, compared to the 176 expected.

I have retained the same assumed rates as the ones used in the previous investigation (which remain consistent with those provided to Milliman in 2017 and used in managing the hedging program).

Sample exit rates per 10,000 members in the Sub-fund are shown in the table below:

Age	Death	Disablement	Withdrawal	Early Retirement
35	8.6	11	340	-
45	21.5	46	170	-
55	67.3	128	-	500
58	91.5	190		500
61	123.4	295	-	1,000
63	150.3	390	-	2,500
65	-	-	-	10,000

Statutory Statements Under SPS 160

Maritime Super, Seafarers Part of the Seafarers Division

Actuarial Investigation as at 30 June 2022

The statements required under paragraphs 23(a) to (i) of SPS 160 for interim and regular investigations are set out below:

A. Sub-fund Assets

At 30 June 2022 the net market value of assets of the Sub-fund, excluding any amount held to meet the Operational Risk Financial Requirement (ORFR), was $670,266,000. Comprised of the components below:

	30 June 2022
Member Account Balances subject to the DB Guarantee	$258,891,000
DB Reserve	$10,984,000
Net Market Value of Assets subject to the Defined Benefit Guarantee	**$269,875,000**
Accumulation Account Balances not subject to the DB Guarantee	$400,391,000
Total Net Market Value of Assets	**$670,266,000**

B. Projection of Defined Benefit Vested Benefit Index

Based on the actuarial assumptions and the recommended contributions set out in G below, I project that the likely future financial position of the Sub-fund over the three years following the investigation date will be as follows:

Date	Defined Benefit Vested Benefits Index
30 June 2022	104.0%
30 June 2023	103.5%
30 June 2024	103.0%
30 June 2025	102.6%

C. Accrued Benefits

The value of the defined benefit accrued liabilities (excluding accumulation account balances not subject to the DB Guarantee) of all members as at 30 June 2022 was $259,914,000.

In my opinion, the value of the assets of the Sub-fund at 30 June 2022 was adequate to meet the liabilities in respect of accrued benefits in the Sub-fund (measured as the present value of members' accrued entitlements using the actuarial assumptions).

This assessment has been made using assumptions and a valuation method which I regard as reasonable.

D. Vested Benefits

The value of the defined benefit vested benefits (excluding accumulation account balances not subject to the DB Guarantee) of all members as at 30 June 2022 was $259,520,000.

In my opinion, the financial position of the Sub-fund is not unsatisfactory and the shortfall limit does not need to be reviewed at this time.

E. Minimum benefits

The value of defined benefit liabilities in respect of the minimum benefits (excluding accumulation account balances not subject to the DB Guarantee) of members as at 30 June 2022 was $259,520,000 which is less than the value of assets held at that date.

F. Funding and Solvency Certificates

Funding and Solvency Certificates applicable to the Sub-fund covering the period from 30 June 2020 to 30 June 2022 required by the Superannuation Industry (Supervision) Act have been provided. In my opinion, I am likely to be able to provide Funding and Solvency Certificates for the Sub-fund covering the period from 30 June 2022 to 30 June 2025.

G. Employers Contributions

The report on the actuarial investigation of the Sub-fund at 30 June 2022 recommends that there is no need to make additional contributions above the contributions required to fund members' standard accumulation benefits.

H. Payment of Pensions

This investigation excludes the liabilities in respect of fixed term and lifetime pensioners of the Sub-fund, which have been investigated in conjunction with the liabilities of the fixed term pensioners within the Stevedores Division of the Fund with whom their underlying assets have been co-invested.

I. Pre-July 1998 Funding Credit

No pre-July 1998 funding credits have been granted to the Sub-fund.

Chris Porter
Fellow of the Institute of Actuaries of Australia

6 December 2022

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DO: AV | TR: EC | CR/ER: CJP