RB Super in the Australian Retirement Trust

Actuarial Investigation as at 30 June 2023

12 December 2023

Towers Watson Australia Pty Ltd
ABN 45 002 415 349, AFSL 229921

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Section 1: Purpose and Summary

Australian Retirement Trust Pty Ltd
As Trustee for Australian Retirement Trust
[redacted]
30 Little Cribb Street
MILTON QLD 4064

Dear Directors

We are pleased to present our report to the Trustee on the actuarial investigation into RB Super (the "Plan"), a sub-plan of the Australian Retirement Trust as at 30 June 2023.

Membership

At 30 June 2023, there were 2,904 members of the Plan, comprising 599 defined benefit members in employment ("active" defined benefit members), 421 preserved members, 227 retained members, 645 accumulation members and 1,012 pensioners. Of those pensioners, there were 220 pensioners who had retained part or all of their accumulation accounts in the Plan who were also included as Retained Members. The Plan was closed to new defined benefit members in August 2014. New employees can join the Accumulation section of the Plan.

Assets

The net market value of assets as at 30 June 2023 was $2,166.504 million, of which $1,704.423 million was in respect of the defined benefit liabilities. No deduction is required for the Operational Risk Financial Requirement which is held separately by Australian Retirement Trust.

A high proportion (more than 75%) of the defined benefit assets were invested in growth assets such as shares, property and infrastructure, with the remainder invested in defensive assets such as bonds and cash.

Fund Experience

The main features of the Plan's experience over the three years to 30 June 2023 were:

- The net investment return earned on the defined benefit assets averaged 10.6% per annum. This was higher than the long-term net rate of investment return of 5.75% per annum assumed in the 2020 investigation. Considered in isolation this would have resulted in a better financial position at 30 June 2023 than expected.
- The average salary increases over the period were 4.7% per annum. This was higher than the 2.7% per annum expected salary increase (inflationary and promotional) assumption set in the 2020 investigation. Considered in isolation, this resulted in a weaker financial position than expected.
- The actual pension increases granted over the period averaged 2.6% per annum which was higher than the rate of 2.0% per annum assumed in the 2020 investigation. Considered in isolation, this resulted in a weaker financial position than expected.

- Retirement rates were in line with the expected rates and rates of employees withdrawing from service were lower than expected. Active Defined Benefit death and invalidity experience over the period was not sufficient to allow for meaningful statistical analysis due to the small number of members involved.
- Pensioner death experience over the period has been in line with the expected rates.

Overall, the Plan's experience over the three years to 30 June 2023 has resulted in a better financial position than that expected based on the assumptions in the 2020 investigation.

Assumptions

The key economic assumptions used for this actuarial investigation were a long-term net investment rate of return of 6.75% per annum, a long term gross investment return of 7.50% per annum, inflationary salary and pension increase rate of 3.5% per annum. An age-based promotional salary increase scale also applies.

Our starting position for the demographic assumptions was the most recent investigation of the Plan effective 30 June 2020. We carried out an analysis of the demographic experience of the Plan in the period from 1 July 2020 to the 31 March 2023 and updated the assumptions where appropriate. See Section 7 for further details.

Valuation Results

The actuarial investigation of the Plan as at 30 June 2023 revealed that it was in a strong financial position. At 30 June 2023, for the Plan as a whole, the market value of assets was 147% of vested benefits. This indicates the Plan was in a satisfactory financial position at this date based on the current benefit liabilities.

The coverage of members' accrued benefit reserves by the market value of assets at 30 June 2023 was 144% and the past service surplus was $659.4 million. This indicates the Plan's sound financial position in respect of funding benefit liabilities over the longer term.

The surplus is large enough that the Bank and other employers are not expected to be required to contribute in future. While this is uncertain because future experience is not known, it does provide the opportunity to reduce investment risk and therefore the amount of possible top-up contributions if an adverse investment shock occurs. The preferences of the Bank are relevant to any decision in respect of investment strategy because the Bank bears the consequences of investment decisions via its funding obligations.

As the Plan is closed to new defined benefit members, the investment timeframe for the defined benefit assets will eventually decline as defined benefit members retire and move into the pension phase. As the Plan matures and moves towards an increasingly higher proportion of pension liabilities, there may be justification for moving to a more defensive portfolio which is expected to provide a less volatile funding position. However, the average age of active defined benefit Members is 47 years and the youngest defined benefit member is in their late-twenties, so the Plan still has very long term liabilities.

Following discussions with the Bank, we have recommended a contribution holiday in respect of defined benefit contributions could commence when convenient from 1 January 2024 to utilise a portion of the current surplus in the Plan. We have also recommended that further investigation be conducted into the possibility of a move towards a more defensive asset allocation at some point in the next few years.

Self-Insurance

The Plan self-insures the death and invalidity benefits for defined benefit members. Allowance is made in the cost of benefit accruals for the cost of self-insurance. Further details regarding the Plan's self-insurance, and the associated risks are detailed in Section 10.

Defined Benefit Pensions

The Plan pays defined benefit pensions. In accordance with 23(h) of SPS160 and Professional Standard 410, dated June 2023, the Actuary is required to make an opinion on the probability of the Plan being able to meet the pension payments in respect of members currently in receipt of pensions.

Under the Plan governing rules, the Reserve Bank has agreed to make financial resources available to pay the defined benefits. The Plan is in a sound financial position. Given these circumstances, at the valuation date of 30 June 2023, in my opinion there is a high degree of probability that the Plan will be able to meet the pension payments in respect of the members currently in receipt of pensions as required under the Plan's governing rules.

Post valuation update

Over the period from 30 June 2023 to 31 October 2023, the net of tax return for the Plan's assets have been less favourable than our long-term asset return assumptions. Other than already disclosed in this report, we are not aware of any events after 30 June 2023 which would cause us to reassess the financial position and our contribution recommendations.

Recommendations

The Bank and nominated employers should continue paying defined contributions at the rate of 18.3% of defined benefit salaries until 31 December 2023. For the period from 1 January 2024 and until the results of the next actuarial investigation are known, we recommend the Bank and nominated employers cease paying defined benefit contributions to the Plan, although the employers may make contributions if they wish.

We recommend that productivity contributions (where applicable) and contributions in respect of Accumulation Members continue to be paid.

I also recommend the Trustee maintain the Shortfall Limit of 100%.

We recommend that the next full actuarial investigation be made with an effective date at or before 30 June 2026, if annual investigations are not required for the Plan.

The information required under SPS160 is included in summary form at the end of this report.

Yours sincerely

[redacted]

Level 16, 123 Pitt St
Sydney NSW 2000

[redacted]

WTW
Towers Watson Australia Pty Ltd
ABN 45 002 415 349 AFSL 229921

12 December 2023

D: JD, EZ, TR: EZ, DH, LC CR/ER: DH, LC, SPR: MB

Section 2: Background

The predecessor Plan was established as a sub-plan within the Sunsuper Superannuation Fund on 21 March 2017 following the successor fund transfer from the Reserve Bank of Australia Officers' Superannuation Fund (the OSF or the former Plan). On 28 February 2022, the Trustee transferred all assets and members of the Sunsuper Superannuation Fund in respect of the predecessor Plan on a successor fund basis to the Australian Retirement Trust, called RB Super in the Australian Retirement Trust (the Plan).

The operations of the Plan are governed by:

- The RB Super Plan Rules
- The RB Super Plan Participation Deed and the RB Super Plan Nominated Employer Deeds (for Australian Prudential Regulation Authority (APRA) and Note Printing Australia Limited (NPA)); and
- The Australian Retirement Trust, Trust Deed, dated 16 February 2022 as amended.

The Plan is a regulated complying superannuation fund under the SIS Act and for taxation purposes.

RB Super provides superannuation benefits for staff of the Reserve Bank of Australia (the Bank), APRA and NPA. The Plan operates as a complying fund and therefore qualifies for concessional tax treatment. The Plan has defined benefit and accumulation members and was closed to new defined benefit members in 2014. Defined benefit members can take their benefit in the form of a life-time pension. A brief description of categories and the retirement benefit entitlements is summarised in the table below. A more detailed description of the benefits valued in this investigation is included in Appendix A to this report.

Member Category	Description	Nature of benefits	Lump Sum or Pension
Defined Benefit	Members in employment with participating employers who receive defined benefits	Defined Benefit and Accumulation	Lump Sum or Pension[1]
Preserved	Members who have elected to preserve their defined benefit membership in the Plan upon resignation from employment or electing choice of fund	Defined Benefit and Accumulation	Lump Sum or Pension[1]
Retained	Lifetime pension members who have elected to retain all or part of their accumulation balance in the Plan	Accumulation	Lump Sum
Accumulation	Members who receive accumulation benefits	Accumulation	Lump Sum
Pensioners	Former Defined Benefit and Preserved category members or their beneficiaries who are in receipt of a defined benefit pension	Defined Benefit	Pension

[1] The accumulation benefit must be taken as a lump sum while the defined benefit may be taken as a lump sum or a pension.

Under Clause 17 of the Plan Rules, the Trustee, with the prior written consent of the Bank, may amend any of the provisions of the Deed in circumstances permitted by superannuation law.

Purpose of the Investigation

In accordance with Clause 7 of the Plan Rules, I have been requested by the Trustee to carry out an actuarial investigation of the Plan as at 30 June 2023. Clause 12.2.1 (b) requires the Actuary, as a result of the investigation, to recommend a rate of contribution to be payable to the Plan by the Bank and nominated employers. The main aims of the investigation are to:

- examine the long term funding of the Plan's benefits and to recommend a contribution rate at which the Bank and nominated employers should contribute;
- examine the current financial position of the Plan;
- meet the requirements of the Plan Rules and the relevant superannuation legislation; and
- meet the reporting requirements of APRA Prudential Standard SPS160.

Current legislation requires that where a fund is paying defined benefit pensions, an actuarial investigation must be undertaken at least annually unless an exemption has been granted by APRA. If an exemption is granted for the Plan, investigations will be required every three years.

I have not been subject to any restrictions or limitations in the preparation of this report. This report has been prepared in accordance with Professional Standards 400, 402, 404 and 410 issued by the Institute of Actuaries of Australia.

Previous Actuarial Investigation

The actuarial investigation of the predecessor Plan, which was conducted by me, was carried out as at 30 June 2020. The results of that investigation were set out in a report dated 27 November 2020. The report showed that the predecessor Plan was in a sound financial position at that time. The report recommended employer contributions be in the range 9% to 21% of active Defined Benefit members' salaries, in addition to productivity contributions (where applicable) and SG contributions for Accumulation members. The Reserve Bank and other employer sponsors have been contributing at the rate of 18.3% of Defined Benefit members' salaries, 3% productivity contributions (if applicable) and SG contributions (or greater) for Accumulation members which is in accordance with the recommendations from the investigation of the predecessor Plan. Contribution arrangements have been continued in the new Plan since the transfer from Sunsuper and this is the first actuarial investigation of the Plan in Australian Retirement Trust.

Changes to the Plan

The Plan's Benefit Certificate was issued effective 28 February 2022 to allow for the successor fund transfer of RB Super from Sunsuper Superannuation Fund into Australian Retirement Trust.

No other material changes occurred to the current or predecessor Plan benefits over the three year period to 30 June 2023.

Reliance statement and data

This report is provided subject to the terms set out herein and in our engagement letter dated 23 March 2017 and the accompanying Terms and Conditions of Engagement and the services agreed via email in March 2023 "RB Super – Actuarial planning for 2023." 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.

The Trustee may make a copy of this report available to its auditors, the employer sponsors and to any person to whom the Trustee may be required to provide a copy under our engagement or 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 employer sponsors or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the employer sponsors 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 Plan 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 Section 2.

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 3: Membership

Membership Data

We have relied on the membership and asset information for the Plan provided to us by Australian Retirement Trust effective 30 June 2023. We reviewed the data to ensure that all dates, salaries and other amounts were internally consistent and reasonable based on our knowledge of the Plan. Our checking is not designed to identify all errors in the data, however we are satisfied that the data provided is reasonable and that there are no errors in the data which would have a material effect on the results of this investigation.

Membership Summary

The change in membership over the three years to 30 June 2023 is shown in the table below:

	Defined Benefit Active	DB Preserved	DB Pensioners[2]	Total DB	Accumulation & Retained	Total
In force as at 30 June 2020	**771**	**400**	**974**	**2,145**	**712**	**2,857**
New Entrants[1]	-	-	157	157	341	498
Transfers In	-	84	-	84	-	84
Transfers Out	(84)	-	-	(84)	-	(84)
Exits						
- Death	(3)	(1)	(119)	(123)	*	(123)
- Resignation	(13)	-	-	(13)	*	(13)
- Retirement	(72)	(57)	-	(129)	*	(129)
- Withdrawal	-	(4)	-	(4)	*	(4)
- Invalidity	-	(1)	-	(1)	*	(1)
Total Exits	**(88)**	**(63)**	**(119)**	**(270)**	**(181)**	**(451)**
In force as at 30 June 2023	**599**	**421**	**1,012**	**2,032**	**872**	**2,904**

[1] New pensioners are exits from the Defined Benefit or Preserved member categories and new Spouse pensioners.

[2] This includes 220 Pensioners who have retained part or all of their accumulation accounts in the Plan and are also included as Retained Members.

* Reason for Accumulation & Retained exits not available in the data provided by Australian Retirement Trust.

Non-pension Defined Benefit members

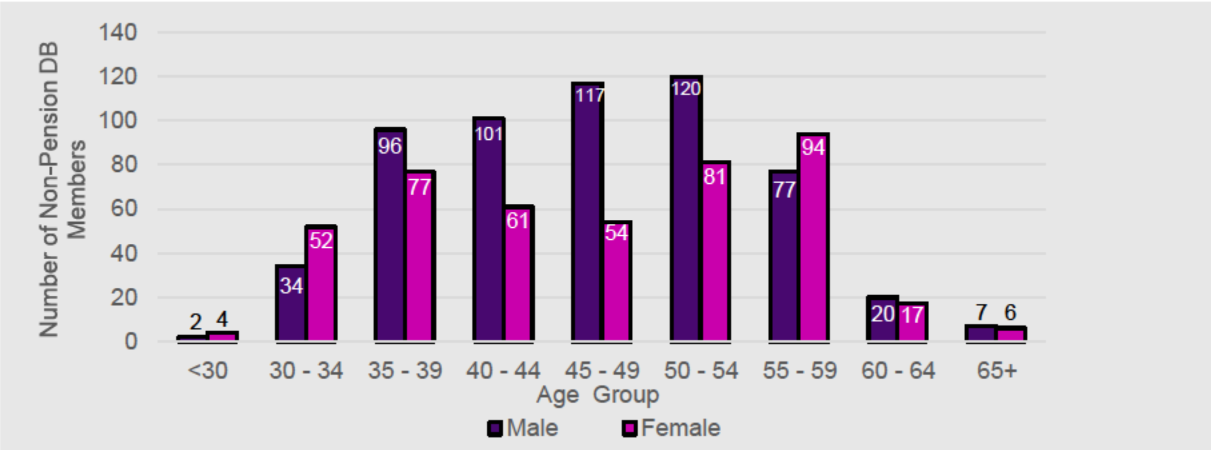
Key membership statistics for non-pension defined benefit members as at 30 June 2020 and 30 June 2023 are shown in below:

Active (employees)	30 June 2020	30 June 2023
Number of Members	771	599
Average Age (years)	44.8	47.2
Average Past Membership (years)	15.8	18.7
Total Superannuation Salaries	$109,023,125	$97,364,922
Average Superannuation Salary	$141,405	$162,546

Preserved (former employees)	30 June 2020	30 June 2023
Number of Members	400	421
Average Age (years)	47.1	47.0
Average Past Membership (years)	11.4	10.8
Total Superannuation Salaries	$40,734,243	$49,541,911
Average Superannuation Salary	$101,836	$117,677

Age Profile of Non-pension Members with Defined Benefits

The chart below illustrates the age profile of the Active defined benefit and Preserved members of the Plan.



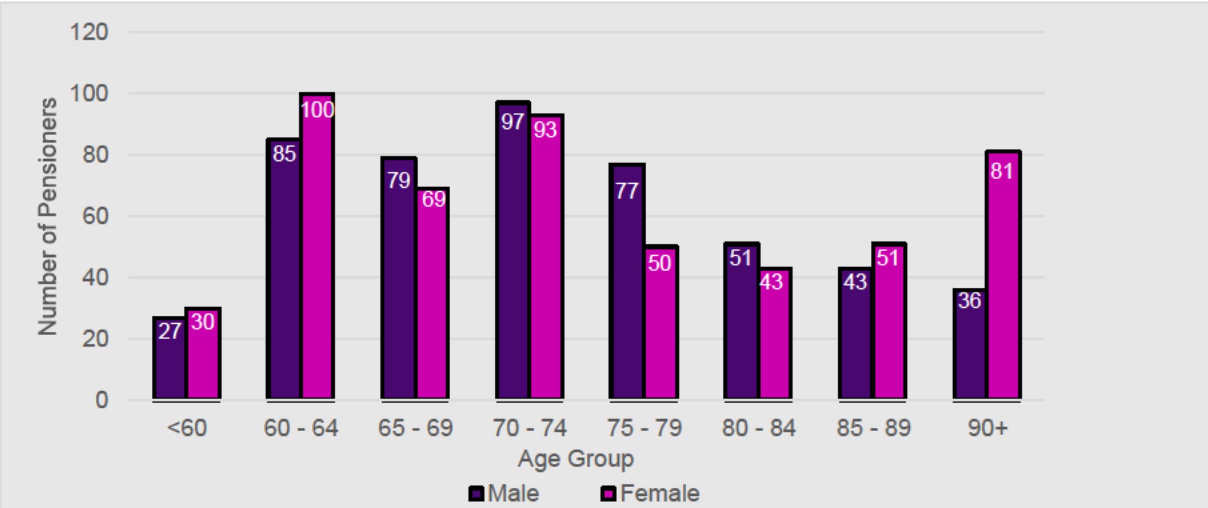
Pensioner Members

The numbers of pensioners together with the annual rate of pension used in the valuation are as follows:

	30 June 2020	30 June 2023
Number of Pensioners	743	802
Number of Spouse and Child Pensioners	231	210
Total Pensioners	974	1,012
Average Age (years)	75	75
Total Annual Pensioners	$41,799,560	$46,952,405
Average Annual Pension	$42,915	$46,396

Age Profile of Pensioners

The chart below illustrates the age profile of the pensioners in the Plan.



Our commentary on the experience of the Plan over the inter-valuation period is included in Section 7of this report.

Section 4: Assets and Investments

Data

Asset information was obtained from Australian Retirement Trust as at 30 June 2023 as well as transaction summary information over the period from 1 July 2020 to 30 June 2023. We understand the asset information has not been subject to audit at the sub-plan level, however the Australian Retirement Trust is subject to audit overall. We have relied on the information provided.

Value of Assets

For the purposes of determining contribution rate recommendations and assessing solvency, the value of the assets provided by Australian Retirement Trust has been taken as the net market value of the assets. No adjustment is required for the ORFR, which is held separately in the Australian Retirement Trust. A breakdown of the net market value of the Plan's assets at 30 June 2023 is set out below.

	$'000
RB Super DB Reserve (taxed)	1,100,793
RB Super DB Pension Reserve (untaxed)	603,922
Accumulation balances (member investment choice)	462,081
Total Plan assets at 30 June 2023	**2,166,797**
Less notified exits (members not included in member data)	(292)
Assets available to pay benefits	**2,166,504**
Made up of:	
Total Accumulation Accounts	462,081
Total Defined Benefit Assets	1,704,423

A summary of the change in the Defined Benefit assets over the three years to 30 June 2023 is shown in the table below.

	$'000
Opening asset value at 1 July 2020	1,325,514
Plus investment earnings (net of taxes and investment fees)	474,913
Plus employer contributions	54,454
Less pension payments	(132,105)
Less lump sum payments and transfers out	(7,578)
Less taxes and fees	(10,774)
Total Defined Benefit Assets at 30 June 2023	**1,704,423**

Investment Objectives

The Plan's primary investment return objective for the assets supporting the defined benefits is to achieve an after tax and fees return of Consumer Price Index (CPI) plus 4% per annum over ten year periods. This is consistent with the view that superannuation liabilities are of a long-term nature.

Investment Strategy

The Plan's investment strategy for the assets in respect of the defined benefits consists of long term Strategic Asset Allocation and shorter term Tactical Asset Allocation to achieve its objective. The Trustee have appointed an Investment Committee to oversee the Plan's investment operations and investment objectives are reviewed annually by Australian Retirement Trust in conjunction with the asset consultant. The Plan's assets are managed externally by specialist managers.

Plan Investments

The Trustee's investment objective for the defined benefit assets is to earn a high real rate of return over the long term through a mix of diversified investments. More specifically the objectives include:

- a return objective of CPI plus 4% per annum over a 10 year period;
- the risk of negative returns is five years in 20; and
- an investment horizon of at least 10 years.

The allocation of the Plan's defined benefit investments to the various investment classes at 30 June 2023 was as follows:

Investment Sector*	30 June 2023 %
Domestic Equities	28.0
Overseas Equities	24.0
Emerging Market Equity	2.0
Property	10.0
Private Equity	10.0
Infrastructure	10.0
Alternative Strategies	2.5
Cash & Short-term Securities	1.0
Fixed Interest Securities	12.5
Total	**100.0**

* Some asset classes shown have both growth and defensive characteristics hence the actual allocation to Growth assets is in the range of 75% to 85% depending on how the assets are classified.

We also note some minor changes to the asset allocation will be implemented in 2024, however these changes are not expected to impact on the results or conclusions in this report.

The asset allocation is expected to support the long-term funding position of the Plan by generally producing higher real returns, but it carries a degree of cashflow mismatch between the defined benefit assets and the defined benefit liabilities. As at 30 June 2023, the defined benefit section of the Plan is well funded and the Bank ultimately bears all of the investment risk for funding the defined benefits.

As the Plan is closed to new defined benefit members, the investment timeframe will eventually decline as defined benefit members retire and move into the pension phase. As this occurs, there may be justification for moving to a more defensive portfolio which would reduce the expected volatility of the financial position of the Plan. The current financial position of the Plan does support a move to a more defensive portfolio and we have recommended that further investigation be carried out to understand the implications of such a change.

The Plan has a very long term investment horizon with the youngest active defined benefit members aged in their late-twenties. If they remain in the Plan until retirement age, they will be able to take a pension which could be payable for another 40 or 50 years, taking the total investment horizon out to over 70 years. Given this very long investment timeframe we consider that the investment objectives and strategy adopted by the Trustee for the defined benefit assets of the Plan are appropriate, however moving to a more defensive portfolio could be considered in the coming years if the strong funding position is maintained or strengthened by favourable experience. In our opinion, an appropriate investment strategy should also depend upon the preferences of the Bank.

Accumulation Balances Member Investment Choice

Member Investment Choice (MIC) is available to all accumulation accounts of Plan members. Under MIC, members are entitled to select from a range of investment options available to apply to their accumulation accounts. There is no minimum value or proportion of members' accumulation accounts required to be invested in any particular investment option.

The default option is a Lifecycle Investment Strategy for members who do not elect investment choice. The Lifecycle Investment Strategy transitions from a balanced investment strategy for ages up to 55 to a more defensive investment strategy as the member approaches age 65.

Investment earnings are applied to members' accumulation accounts based on the changes in the underlying unit prices of the investment options chosen by those members. Unit prices are calculated daily based upon the value of the underlying assets in each investment option and the number of units issued to members.

Section 5: Funding Method

Over the life of a defined benefit fund, the total income (mainly contributions and investment income) must be sufficient to meet the total expenditure (mainly benefits, tax and any expenses met from the Plan). The funding method is the method by which the actuary considers the long-term financial position of the Plan with a view to ensuring the Plan's assets will be sufficient over the long term to meet its liabilities as they arise.

The amount of benefits which the Plan will be liable to pay from the pool in future cannot be known in advance since benefits depend on members' salaries at their date of leaving, their completed membership at that date and their reason for leaving. The amount of future tax and expenses also cannot be known in advance. It is therefore necessary to estimate these future liabilities and hence the amount that will be required in the pool of assets. The estimate is made based on a set of assumptions about future experience. More details on the individual assumptions used are included in Section 7 of this report.

The amount in the pool of assets at any time is determined by the level of contributions and investment income. The rate at which the employer contributes to the Plan is usually the only variable inflow over which the employer can exercise control and is the main determinant of the pace of funding of benefits. The actuarial funding method is the method of determining this contribution rate.

For this investigation we have used the Attained Age funding method. The defined benefit section of the Plan has been closed to new members since 2014, and this is a suitable funding method as it can be expected to adequately fund accrued benefits without over-funding, with the annual employer cost related to the actual increase in the cost of accrued benefits each year.

This method involves calculating a Normal Cost, which is the employer contribution required to fund benefits for current members accruing over their future working lifetimes, ignoring any over or under funding of Accrued Benefits at the investigation date. We then calculate an adjustment to the Normal Cost to take account of any over- or under-funding of Accrued Benefits at the investigation date.

The Normal Cost is determined by:

- calculating the amount of benefits expected to be paid in all future years to existing members in respect of future membership following the investigation date, allowing for all the contingencies under which benefits can be paid (retirement, death, invalidity and resignation) and for future salary increases;
- discounting these amounts to determine the present value of benefits arising in respect of future membership for current members; and
- dividing by the present value of future salaries to determine the cost of benefits as an annual rate.

Adjustments are also made to allow for taxes and administration costs.

As a percentage of salary, this Normal Cost is an approximation of the employer contribution required over the remaining lifetime of the membership based on the profile of existing members.

By varying the way in which any surplus or deficit is spread, this allows us to directly target a contribution rate and to understand any implications of doing so. We can also develop funding strategies based on other objectives, for example the level of risk of a short term deficit or a longer term approach to stable funding.

Section 6: Experience and Assumptions – General

The valuation of the Plan's liabilities is an essential part of examining the long term financial position of the Plan, as described in Section 5. To value the liabilities, it is necessary to make assumptions regarding the timing and amount of future benefit payments, expenses and contributions since these cannot be known in advance. These assumptions are divided into two categories:

- financial assumptions relating to the rates of salary growth, inflation and investment income; and
- demographic assumptions relating to the rates of retirement, resignation, death and invalidity.

While each of the assumptions used is normally the actuary's best estimate of future experience, in practice, the Plan's 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, and when all the assumptions are combined, they will provide a reasonable estimate of the likely future experience and financial position of the Plan.

When the Plan's actual experience differs from the assumptions used in the actuarial investigation this will result in the financial position of the Plan being different from that expected. Comparing actual experience to that expected based on the assumptions used in the last investigation also enables an explanation of changes in the financial position of the Plan. It should be noted that any change in the assumptions will itself have an impact on the financial position of the Plan as measured by the long-term funding calculations. To maintain as much consistency as possible in the employer contribution rate over time, it is therefore appropriate to change the actuarial assumptions only when there is sufficient evidence to suggest that the previous assumptions are significantly different from a fund's expected long term future experience.

A summary of the assumptions used in this investigation is included in Appendix B.

It is likely that actual future experience will be different to the assumptions used in this valuation. This will impact on the future financial position of the Plan. Accordingly, it is appropriate to review the sensitivity of our valuation results to changes in the assumptions where material. Those results are set out in Section 8 of this report.

Section 7: Experience and Assumptions – Financial and Demographic

In this section, we have compared the actual experience of the Plan for the three year review period to the financial and demographic assumptions made in the actuarial investigation in 2020. A summary of our review of the main financial assumptions is set out below:

- An increase in the expected rates of investment return by 1.00% per annum to 6.75% per annum (net of tax) for active and preserved members and an increase of 1.25% per annum to 7.50% per annum (gross of tax) for pensioners. A reduction of 0.06% per annum has been made to the gross of tax expected return as an allowance for pension administration expenses;
- An increase in the salary inflation assumption of 0.5% per annum to 3.5% per annum. The salary inflation assumption at the last valuation was 3.0% per annum with a short-term salary inflation assumption of 2.00% per annum for the first three years;
- An increase in the assumed rate of increase for pension indexation based on Male Total Average Weekly Earnings (MTAWE) by 0.5% per annum to 3.5% per annum. The pension indexation assumption at the last valuation was 3.0% per annum with a short-term rate of pension indexation of 2.0% per annum for the first three years; and
- No change to the assumed rate of increase for preserved member benefits which is based on the Consumer Price Index, which is assumed to be 2.5% per annum over the long term.

A summary of our review of the demographic assumptions is set out below:

- For Defined Benefit Members in active employment with the Bank:
  - A change to the age-based rates of promotional salary increases, that extends the duration of the higher promotional increases;
  - A change to the resignation rates, whereby it is now assumed that all members stay until retirement age;
  - No change to retirement rates;
  - Updated rates of death and invalidity based on the 2023 RB Super Plan death and TPD insurance premiums;
  - No change to the pension take-up rate for retiring active members or for preserved members which has remained at 100%; and
  - Updated assumptions for the proportions of members assumed to have a spouse, whereby now it is assumed that 90% of all active members are assumed to have a spouse.
- For pensioner members:
  - No change to the base rates of mortality for pensioners where is it assumed to be in line with ALT 15-17, scaled by 60% up to age 65, reaching 100% at age 105, with 25-year improvement factors from 30 June 2016.

Further detail on these assumptions are set out in the rest of this section.

Investment Returns

In the previous actuarial investigation of the Plan a long term net investment return assumption of 5.75% per annum was used for active and preserved members and 6.25% per annum gross of tax was used for pensioners.

The rate of return on the Plan's assets used to fund defined benefits from 1 July 2020 to 30 June 2023 was 10.6% per annum for active and preserved member assets and 11.6% per annum for pension assets based on unit prices provided by Australian Retirement Trust over the period.

We have based our assumptions for future investment returns on the investment objectives and strategic asset allocation for the assets backing the liabilities, which are invested as described in Section 4. While short term differences between actual investment return experience and the actuarial assumption can affect the long term financial position of the Plan as measured by the actuarial investigation, the assumption used in the investigation must be based on long-term expectations since the investigation involves valuing expected payments for many decades into the future.

In setting the financial assumptions, we have considered output from the WTW Investment Modeller which enables us to set assumptions for different funds on a consistent basis having regard to differences in their long term asset allocations. This model uses sector specific expected returns, standard deviations and correlations generated from past experience along with Plan specific projected cash flows to estimate the Plan's future long term levels of inflation and investment returns. We have used the asset allocation effective 30 June 2023 and asset class returns for a 50 year term in the model.

Our best estimate for future asset returns is 6.75% per annum (net of tax) for active and preserved members and 7.50% per annum (gross of tax) for pensioners for this investigation. In comparison with the 2020 investigation of the Plan, these return assumptions are higher by 1.00% per annum (net of tax) and 1.25% per annum (gross of tax) mainly reflecting higher assumed underlying cash returns.

Salary Increases

For the purpose of the actuarial investigation, salary increases are generally split into two components, namely inflationary (non-promotional) increases and promotional increases. Inflationary increases are generally assumed to be in line with increases in Average Weekly Ordinary Time Earnings over time while promotional increases are often related to age, the industry in which members are employed and the type of work performed.

The average salary increase over the investigation period for active Defined Benefit members who were in the Plan at 1 July 2020 and remained in employment at 30 June 2023 was 4.7% per annum, compared to 2.7% per annum expected under the 2020 investigation assumptions, after including inflationary and promotional components. Over the same period, average national salary inflation measured by the increase in Average Weekly Ordinary Time Earnings for full-time adults) was around 2.4% per annum.

Our best estimate of long-term salary inflation is 3.5% per annum after taking into account the very long-term expectations for wage inflation. This has increased by 0.5% per annum compared to the long-term rate assumed in the 2020 investigation of the Plan. A rate of 3.5% per annum is comparable with the projected long-term wage growth rates estimated in the 2023 Intergenerational Report (3.7% per annum). In addition, a Plan-specific age-based scale of promotional salary increases applies, as shown below:

Promotional Salary increase at each age	
Age	**%**
20	9.0
25	7.9
30	5.9
35	4.0
40	2.2
45	1.1
50	0.3
55	0.2
60	0.1

The age based scale is has been updated from the rates assumed in the 2020 investigation of the Plan, reflecting our analysis of experience over the period from 2020 to 2023.

Pension Increases

Our assumption for pension increases at the previous investigation was 3.0% per annum, with a short-term assumption of 2.0% for the first three years. Over the investigation period these increases averaged 2.6% per annum. Based on current long-term expectations of Male Total Average Weekly Earnings (MTAWE), we have assumed a long-term rate of 3.5% per annum, which is an increase of 0.5% per annum compared to the long-term rate assumed in the 2020 investigation.

Benefits for preserved members increase in line with increases in the CPI. Over the investigation period, these increases averaged 2.8% per annum compared to our assumption at the previous investigation of long-term CPI increases of 2.5% per annum. Based on very long-term expectations of CPI increases, we have retained the assumption of 2.5% per annum for this investigation.

'Gap' Between Investment Returns and Salary/Pension Increases

The assumptions of major significance in the valuation of the Plan's future benefit liabilities and contributions are the differences (or 'gaps') between the assumed future rate of investment earnings and the assumed rate of future salary growth or pension indexation respectively. These factors offset each other in their financial effect, hence the difference between the rates is important rather than the absolute values ascribed to them. The greater the assumed gap, the lower the value placed on the liabilities and the lower the resulting estimated employer contribution rate required.

The 'gap' over salary inflation resulting from the assumptions used at the last investigation was 2.75% per annum, with the apparent 'gap' being reduced on average by a further 0.70% per annum (over the three year valuation period) due to the promotional salary increase scale, giving an effective gap of 2.05% per annum. The actual real rate of return (net of tax), in excess of actual salary growth, achieved by the Plan over the three years to 30 June 2023 was 5.90% per annum.

It is appropriate to value long term superannuation liabilities based on expectations for real rates of return over the long term. For this valuation, the long term 'gap' (before allowing for promotional increases) has increased by 0.50% to 3.25% per annum. We have estimated that promotional salary increases are expected to be 1.2% per annum through to the next investigation in 2026. Hence, there is an effective average 'gap' of 2.05% per annum after considering the effect of promotional increases. The effective average 'gap' over salary inflation for this investigation is therefore unchanged from the last investigation.

The long term 'gap' between the assumed gross future rate of investment return and assumed rate of future pension increases has increased from 3.25% per annum to 4.00% per annum for this investigation. In isolation, the higher 'gap' for pension liabilities has reduced the liabilities of the Plan.

Expenses

The administration expenses for the Plan overall are met by a deduction from the defined benefit assets. For this investigation, an allowance of 0.5% of defined benefit salaries has been assumed for expenses in relation to active members of the Plan, and an allowance of 0.06% per annum of pension assets has been made by adjusting the assumed gross future rate of investment returns to meet the cost of expenses in relation to pensioners, over the period until the results of the next actuarial investigation are known.

The expense allowance will need to be reviewed and updated at each actuarial investigation as it is largely based on asset-based fees charged to the Plan and not correlated with changes in the defined benefit salaries. The expense assumption remained unchanged from the previous investigation.

Insurance

The Plan presently self-insures all death and invalidity benefits for defined benefit members. We have maintained an allowance of $1 million for claims incurred but not finalised in the accrued benefit liabilities. Further discussions on the self-insurance arrangements in respect of death and invalidity benefits are included in Section 10.

Taxation

We have assumed that the current taxation regime will continue and that the tax rate presently applying to the Plan will be maintained in future i.e., a concessional tax rate of 15% is applied to net deductible contributions and investment earnings.

Demographic Assumptions

An overview of the demographic assumptions adopted and experience over the period from 1 July 2020 to 31 March 2023 is shown below. As part of this investigation, we have analysed the Plan's experience of rates of retirement, death, invalidity, resignation and commutation compared to the assumptions used in the last investigation. This analysis has been used to determine the effect of this experience on the Plan's financial position and to modify the assumptions for this investigation in the light of the Plan's experience.

Where relevant, detailed age-based tables of rates are provided in Appendix B.

Retirement

The occurrence of retirements may place a small strain on the Plan due to the benefit paid being slightly greater than the actuarial reserve held for the member at that time. We would ideally not underestimate the rate of early retirements in making assumptions about the Plan's future experience.

Our analysis of the underlying rates of retirement in the Plan over 2020 to 2023 showed a total of 66 Defined Benefit members retired from the Plan during the investigation period, compared to 67 expected retirements based on the assumptions used in the previous investigation.

The experience shows that the actual level of early retirements was similar to the expectations. We have retained the retirement assumptions from the last investigation.

Death and Invalidity

The Plan self-insures the future service portion of the death and invalidity benefits for defined benefit members. A potentially large cost is incurred when a death or invalidity occurs because the benefit paid from the Plan is generally greater than the actuarial reserve held for the member, however the expected number of deaths and disablements in any three-year period is typically in the range of two to four members.

Amongst the Defined Benefit members, there were four deaths and one invalidity over the investigation period.

Given the relatively small numbers of members, it is difficult to develop statistically reliable information on the Plan’s experience which can be used to create an age-based table of rates. We have therefore based our assumptions for deaths and invalidity on the underlying insurance premium rates for the accumulation members of the Plan. This has been updated since the previous investigation to be based on the RB Super death and TPD premium rates applying in 2023.

Resignation

The lump sum resignation benefit for some defined benefit Members can be less than the actuarial reserve held for the member, so that if more members resign than were expected, it can lead to some excess assets. The actuarial assumptions should not overestimate future resignations as a safeguard against overestimating any excess generated by resignations.

The number of lump sum resignations observed over the review period was 17 compared to 62 expected based on the assumptions used in the previous investigation. Given the small numbers of lump sum resignations, and the desire to not overestimate, we have reduced the lump sum resignation rate to nil for all ages at this investigation. This effectively assumes that all members withdrawing from the Plan take a lifetime pension (by age 65).

Pensions or Lump Sums

Our analysis showed that approximately 92% of active members retiring over the period from 2020 to 2023 chose to take their benefits as a pension rather than a lump sum benefit. Given the consistently high rate of retiring members to take a lifetime pension and the higher actuarial value placed on a pension compared with a lump sum, we have maintain the pension take-up rate of 100% for active retiring members at this investigation.

As there are a relatively small numbers of death benefits and invalidity benefits expected each year, we have assumed the pension take-up rate for these benefits is the same as that for active members.

As noted above, we have now adopted an assumption that no members resign prior to age 55 and as such, all active members under age 55 are assumed to take their benefit in the form of a lifetime pension. For preserved members, for prudence, we assume they take all of their benefit in pension form, by age 65, as this is the more valuable benefit. The proportions are summarised in the table below.

Member type at valuation date	Pension proportion	Lump sum proportion
Active retiring	100%	Nil
Active resigning	N/A	N/A
Already resigned with preserved benefits	100%	Nil
Death and invalidity	100%	Nil

Proportions married or with a spouse

In valuing the benefits for members in the pre-retirement phase, it is necessary to make assumptions about the proportion of members who are married or have a spouse (including de-facto and same-sex couples). Benefits which are payable to a surviving spouse will usually be more valuable than those payable in respect of a single life.

The assumptions for the male and female members were developed many years ago and were based on data held by the OSF for their membership. In the 2017 investigation, we reviewed these assumptions and compared them with statistics from the 2016 Census data published by the Australian Bureau of Statistics and adopted the higher of the two rates where relevant. There were no changes to these rates in the 2020 investigation.

For this 2023 investigation, given the limited impact this assumption has on the Plan liabilities, we have adopted a simplified methodology where it is now assumed that 90% of all active members, regardless of age or gender, have a spouse. This revised assumption represents a small increase, in aggregate, compared to the age and gender-based assumptions adopted at the previous investigation.

For lifetime pension members where no spouse details are recorded, we have assumed there are no eligible spouse reversionary entitlements.

Pensioner Mortality

The number of pension members in the Plan is not sufficient to allow us to develop age based mortality tables which are specific to the experience of Plan. We have therefore looked to more readily available Australian population mortality experience and made adjustments to reflect factors such as differences in the general population and Plan pensioners (who are initially former Bank employees) as well as future improvements in mortality.

For the previous investigation, we assumed Plan pensioners experience mortality based on a percentage (60% for males and 50% for females) of the ALT 2015-17 for pensioners aged 65 and below and increasing linearly to 100% of ALT 2015-17 at age 105. In addition, the 25 year rates of mortality improvement published in ALT 2015-17 have been assumed to apply from June 2016. Using these tables, the actual and expected number of deaths are shown in the table below.

Number of Actual and Expected Pensioner Deaths			
Group	**Actual**	**Expected**	**Ratio of Actual to Expected**
Male Pensioners	49	50	98%
Female Pensioners	59	59	100%

For this investigation, we have maintained the existing pensioner mortality assumptions as there has been no updates released to the Australian Life Tables over the investigation period.

Section 8: Solvency and Other Measures of Financial Position

When assessing the adequacy of the assets and future contribution rates, both the long term funding and short term solvency positions should be considered. The measures we have calculated and a brief explanation of their purpose are set out below.

- **Vested Benefits Index –** a fund is in a "satisfactory financial position" under superannuation law if the ratio of the fund assets to the vested benefits is 100% or more. The value of vested benefits represents the total amount the fund would be required to pay if all members were to voluntarily leave service on the valuation date. This a short-term solvency measure and is the focus of the superannuation regulator, APRA.
- **Minimum Requisite Benefit Index –** a fund is "technically solvent" under superannuation law if the Minimum Requisite Benefits Index is 100% or more. This index represents the ratio of the assets at market value to the "Minimum Requisite Benefits" (MRBs) on the valuation date. The MRBs are the minimum benefits that must be paid under Superannuation Guarantee legislation. If a fund's assets are insufficient to cover the MRBs, there are significant consequences for the management of payment of benefits from the fund.
- **Accrued Benefits Reserve Index –** this is a measure of progress towards fully funding the benefits on a going concern basis and is a long term measure rather than an immediate solvency test. This index compares the actuarial value of assets with the present value of the accrued benefits of members at the valuation date. The method of calculating the accrued benefit reserves is the same as that used to determine the present value of accrued benefits for the purposes of AASB1056.

Vested Benefits Index (VBI)

This index represents the ratio of the assets at market value to the "vested benefits". By vested benefits we mean:

- For defined benefit members and preserved members aged under 55, the greater of:
  - the equivalent capital value of their pension at age 55 discounted to date, based on membership to date and current salary, with full allowance for preservation to age 55; and
  - their lump sum benefit based on membership to date and current salary.
- For defined benefit members aged 55 or above – the equivalent capital value of their pension based on membership to date and current salary.
- In addition, for all members – their accumulated member, award and superannuation guarantee accounts.
- For current pensioners – the equivalent capital value of their current pension.

The whole Plan VBI at 30 June 2023 is shown in the following table, together with the VBI at the previous investigation.

Date	Market Value of Assets $'000	Vested Benefits $'000	VBI
30 June 2023	2,166,504	1,469,492	147%
30 June 2020	1,698,725	1,341,621	127%

The VBI of the Plan has increased over the three years since 2020, mainly as a result of strong investment returns and the effects of the increase in the pension discount rate assumption.

For defined benefit liabilities alone, the DB VBI is shown in the table below.

Date	Market Value of Assets $'000	Vested Benefits $'000	DB VBI
30 June 2023	1,704,423	1,007,411	169%
30 June 2020	1,325,514	968,410	137%

As the VBI is in excess of 100% as at 30 June 2023, the Plan is in a satisfactory financial position in accordance with superannuation law.

Minimum Requisite Benefits Index (MRBI)

We have estimated the minimum requisite benefits for the whole Plan at 30 June 2023 and the results are shown in the table below.

Date	Market Value of Assets $'000	Minimum Requisite Benefits $'000	MRBI
30 June 2023	2,166,504	1,236,904	175%
30 June 2020	1,698,725	1,106,495	154%

As the MRBI of the whole Plan is above 100%, the Plan was technically solvent as at 30 June 2023.

Accrued Benefits Reserve Index (ABRI)

The ABRI is shown in the table below for the whole Plan.

Date	Market Value of Assets $'000	Accrued Benefits Reserve $'000	ARBI
30 June 2023	2,166,504	1,507,056	144%
30 June 2020	1,698,725	1,385,446	123%

Looking at the defined benefit liabilities alone, the DB ABRI is shown in the table below, together with the DB ABRI at the previous investigation for comparison.

Date	Market Value of Assets $'000	Accrued Benefits Reserve $'000	DB ARBI
30 June 2023	1,704,423	1,044,975	163%
30 June 2020	1,325,514	1,012,235	131%

The ratios in the table above show that the Plan was in a satisfactory position on a going concern basis as at 30 June 2023. The DB ARBI of the Plan increased over the last three years since 2020 mainly as a result of the difference between actual and expected financial experience (including investment return experience) and the combined changes in assumptions.

Pension buy-out basis

We note that if current pension liabilities were to be transferred to a third party such as a life insurer, the assets required to be transferred could be significantly higher than the amount of vested benefits shown above because of the capital adequacy requirements of life insurers, as well as the different underlying investment portfolio and expense basis.

Section 9: Valuation Results

Long Term Funding Results

The past membership liabilities are those accrued in respect of membership to the date of the valuation for current active members, preserved members and pensioners. Any assets exceeding the present value of the past membership liabilities are generally considered to be “surplus” assets.

The value of past membership liabilities based on the assumptions summarised in Section 7 are set out in the following table, with the results from the previous investigation also shown:

Value of Past Service Liabilities	30 June 2020 ($'000)	30 June 2023 ($'000)
Active Defined Benefit Liabilities:		
- Retirement	315,868	331,700
- Death	3,584	3,704
- Invalidity	7,922	7,673
- Resignation	24,165	0
Total active Defined Benefit Liabilities	**351,539**	**343,077**
Preserved Member Liabilities	91,914	89,703
Pensioner Liabilities	567,782	611,195
Self-Insurance claims allowance	1,000	1,000
Accumulation Account Balances	373,211	462,081
Total Liabilities	**1,385,446**	**1,507,056**
Market Value of Assets available for benefits	**1,698,725**	**2,166,504**
Past Service Surplus (Assets less Liabilities)	**313,279**	**659,448**

We have also calculated the Normal Cost (as described in Section 5), with the results from the previous investigation also shown.

Calculation of Normal Cost	2020	2023
Value of total service liabilities	$1,593m	$1,700m
Less past service liabilities	($1,385m)	($1,507m)
Value of future service benefits to be funded	$208m	$193m
Present value of 1% of future salaries	$10.00m	$9.97m
Normal Cost as percentage of salaries (before tax and expense allowance)	20.8%	19.4%
Expense and tax allowance	4.2%	3.9%
Normal Cost as percentage of salaries (including tax and expense allowance)	25.0%	23.3%
Long term contribution rate with allowance for full use of surplus/deficit over remaining active membership (including tax and expense allowance)	(11.8%)	(54.5%)

The normal cost has decreased as a result of the change in assumptions and the change in membership profile of the Plan over the period since 2020.

The negative long term contribution rate with full allowance for the use of surplus/deficit means that no further employer contributions are expected to be required. If experience is as expected, even if the Bank and employers cease contributions in respect of defined benefits, a material surplus is expected to remain in the long term when the final pensions cease.

Analysis of Surplus

We have analysed the change in the past service surplus from 30 June 2020 to 30 June 2023. We have sought to quantify the important sources of the change in the past service surplus and these are set out below:

Item	$ million
Opening Surplus at 30 June 2020	**313.3**
Investment earnings on surplus	116.1
Changes in assumptions:	
Gross and net discount rate	174.9
Actives salary inflation	(11.3)
Actives promotional salary scale	(6.5)
Pension indexation	(52.5)
Other Demographic	(7.1)
Experience:	
Difference between actual and expected investment returns	156.2
Effect of salary increases being higher than expected	(28.0)
Effect of pension increases being higher than expected	(11.5)
Effect of preserved benefit indexation (CPI) being higher than expected	(0.9)
Effect of Bank contributions being less than Normal Cost	(17.6)
Other effects (such as demographic changes and timing for above items)	34.3
Closing Surplus at 30 June 2023	**659.4**

Overall, both the experience over the three year period and the changes in actuarial assumptions have resulted in an increase in the surplus.

Sensitivity of Results

"De-risking" scenario

Based on the current investment strategy, even if the Bank and other employers cease contributions, a material surplus is expected to remain. An option that could be considered is utilising some of the surplus by reducing investment risk.

This may be attractive to the Bank as the Plan is a defined benefit fund which provides pensions, and the Bank may prefer a lower risk of funding shortfalls once there are few employed members and the Plan is predominantly pensioners. This means considering the asset allocation for the defined benefit assets and whether these should be moved away from higher return/high risk assets such as equities and towards a more conservative or defensive investment arrangement over a suitable period. This process of "de-risking" the investment strategy aims to lower the risks of volatile asset movements by reducing exposure to growth assets, thereby leading to a more stable funded status.

This will become particularly important when the Plan no longer has any active employee members and consists solely of former employees and their dependants who are in receipt of pensions. Given the average age of the active defined benefit members is currently 47 years and the youngest defined benefit member in their late twenties, this position is many years away. However, the pension liabilities held by the Plan represent over 59% of the defined benefit liabilities and this proportion will gradually increase over time.

The cost to provide the pensions will ultimately depend on investment returns earned, the mortality experience and how the pensions change with indexation. The estimated value of the liabilities is also very sensitive to the assumed rates of return on the Plan assets. While we expect the Bank and the nominated employers would wish to minimise the long-term cost of funding the liabilities of the Plan, we also expect that they would seek to minimise short-term volatility in the funding level and the potential need for additional contributions to eliminate a funding deficit if one should occur due to poor investment returns. It is therefore important to consider the expected return as well as the level of risk of the investment arrangements.

Member benefit payments ultimately need to be funded from investment returns, contributions or surplus assets in the Plan. However, if the cost of de-risking can be funded from existing surplus in the Plan, there is no immediate payment required from the Bank to support that de-risking.

Any change in the allocation to growth assets will result in a trade-off between long-term funding costs and the stability in asset level and funded status and the desired level of risk tolerance is a decision for the Bank. We also note that it is the obligation of the Trustee to determine the investment strategy, while acting in the best interest of members and taking into consideration the views of the employer sponsor on its willingness to accept volatility in contributions (as the employer ultimately bears the cost of providing the benefits).

To illustrate the effect of de-risking, we have valued the Plan liabilities on an alternative assumption set, which is based on a more defensive asset allocation for assets supporting the Plan's defined benefit liabilities. We note the modelled scenario is similar to a move to the ART Conservative investment option. We have assumed a net of tax investment return of 4.75% per annum (in respect of Active member assets) and a gross of tax investment returns at 5.50% per annum for assets supporting pensions. All other assumptions are unchanged.

The results as at 30 June 2023 under the valuation assumptions and the alternative scenario are set out in the following table:

Item	Actuarial Investigation	Defensive scenario
Gross Discount Rate (pension phase)	7.5% p.a.	5.50% p.a.
Net Discount Rate (active phase)	6.75% p.a.	4.75% p.a.
Value of Past Service Liabilities	$1,507m	$1,899m
Market Value of Assets	$2,167m	$2,167m
Past Service Surplus/(Deficit)	$659m	$267m
Normal Cost as % of salaries	23.3%	36.1%
Long term contribution rate with allowance for full use of surplus/deficit	(54.5%)	9.4%

Under the defensive asset scenario, there would have been a reduction in the surplus to $267 million and the normal cost would have increased from 23.3% of salaries to 36.1%. Also, the surplus would no longer be large enough to cover all the expected future service cost, which would mean the Bank and other employers would be expected to need to continue contributing (9.4% of salaries). This indicates that there would be a significant cost to move to a defensive asset allocation, both in the short-term and in the longer term with higher contributions, but the existing Plan surplus provides a significant buffer. (Note we have not considered any transaction costs or implementation issues which may apply in changing the asset allocation).

Projections of Vested Benefit Index

For all defined benefit funds, it is prudent to retain some buffer of assets over the value of accrued liabilities to protect against possible "shocks" to the funding position, such as sudden significant falls in asset values. The Plan has a surplus of approximately 44% over the value of accrued liabilities as at 30 June 2023. This represents a comfortable buffer over past service liabilities.

In determining an appropriate level of employer contributions in the short term, we also need to consider the expected value of the VBI over the three years following the actuarial investigation.

We have projected the VBI using the long term best estimate net of fees and tax investment return of 6.75% per annum (net of tax) over the three year projection period. We have also projected the VBI under a 1 in 20 year "good return" scenario and a 1 in 20 year "poor return" scenario where the net of fees and tax investment return over the year to 30 June 2024 is 27% and -10% respectively. The values of +27% and -10% have a five percent probability of occurring (i.e. once in 20 years).

The table below shows our estimates of the projected DB VBI at each year-end between 30 June 2023 and 30 June 2027 under the three return scenarios and assuming the employers cease defined benefit contributions around 1 January 2024.

Date	Best Estimate DB VBI	Good Return Scenario (27% in 2024/25)	Poor Return Scenario (-10% in 2024/25)
30 June 2023	169%	169%	169%
30 June 2024	171%	171%	171%
30 June 2025	169%	201%	142%
30 June 2026	169%	202%	141%
30 June 2027	170%	204%	141%

The results show that under these three investment return scenarios, the VBI remains well above 100% over the projection period. Note that the variations in returns shown in the analysis above do not indicate upper or lower bounds of all possible outcomes.

Recommended Contribution rates

As a result of the strength of the funding position and the sizeable buffer against adverse experience, I recommend that the Bank and nominated employers contribute at least as follows:

- At the current rate of 18.3% of defined benefit salaries until 31 December 2023; and
- From 1 January 2024 until the results of the next actuarial investigation are known, no contributions are required.

Productivity contributions (where applicable) and contributions in respect of Accumulation Members are to be paid in addition to the amounts described above.

Shortfall Limit

Shortfall Limit is defined in SPS 160 as:

"The extent to which an RSE Licensee considers that a fund can be in an unsatisfactory financial position with the RSE Licensee still being able to reasonably expect that, because of corrections to temporary negative market fluctuations in the value of fund assets, the fund can be restored to a satisfactory financial position within one year".

Should the financial position of the Plan breach the Shortfall Limit, additional interim actuarial investigations will be required with rectification plans to be put in place to address the unsatisfactory financial position.

The defined benefit assets of the Plan have a very high proportion in growth assets as well as a high proportion of salary related benefits. Given the funding objectives of the employer sponsor and the desire to maintain a strong funding position, we recommend a Shortfall Limit of 100%.

Based on the assumptions used for this investigation and provided the employer sponsors contribute in line with the recommendations set out in this report, the Plan's Vested Benefits Index is expected to exceed the Shortfall Limit.

Section 10: Insurance

We have reviewed the Plan's self-insurance arrangements as set out below.

External insurance has been obtained for death and invalidity benefits for accumulation members, with the cost of that insurance being funded by the accumulation members or the employers (via the defined benefit assets) and having no self-insurance exposure. We note the premiums paid from the defined benefit assets over the three-year inter-valuation period were under $500 and are therefore immaterial in the context of the defined benefit funding.

Self-insurance exposure

The excess of death and invalidity benefits over the value of benefits accrued for membership to date in the Plan is self-insured for defined benefit members. The valuation process allows for this self-insurance of "risk benefits" to be funded through employer contributions.

We note that although the death and invalidity benefits for Active defined benefit and Preserved members are defined in a similar form, there is no self-insurance exposure for Preserved members. This is because the death and invalidity benefits for Preserved members do not exceed the accrued benefits for these members.

The Plan's self-insurance exposure based on the assumptions set out in this report as at 30 June 2023 is shown in the table below.

30 June 2023	Death	Invalidity
Number of members	599	599
Self-insurance exposure	$241.5m	$411.5m
Actuarial surplus over accrued benefits	$659.4m	$659.4m
Net exposure i.e. not covered by surplus assets	**Nil**	**Nil**

The table shows that the Plan's exposure to death and invalidity risk benefits is completely covered by its assets.

The table shows the value of the permanent invalidity benefits at risk is considerably higher than the value of death benefits. This reflects the higher valuation placed on disability pension payments, where both a member and potentially a spouse are entitled to pensions for the rest of their lives, compared with death benefits where the pension would apply for the life of the spouse.

Cost of Self-insurance

All self-insurance risks are backed by the unallocated defined benefit assets and the ongoing contributions obligations of the Bank and other employers participating in the Plan. The actuarial valuation of accrued and future benefits allows for the self-insurance in the Plan by including the value of death and invalidity benefits when determining the contribution rates to be paid by the employer sponsor. We understand that all Plan expenses associated with administering self-insurance are met by the administration fees charged to the Plan.

The majority of the self-insured liabilities are expected to be paid out in the form of a pension to a member or their dependants. As shown above, the assets available in the Plan at the 30 June 2023 exceed the total value of death and invalidity risk benefits and therefore it is extremely unlikely that any benefits payable over a short period would exceed the assets available in the Plan (i.e. only in the event of a very significant investment market shock).

As the cost of self-insurance is incorporated into the recommended Bank contributions, under reasonable and foreseeable circumstances, the Plan's assets are expected to cover the insurance benefits that emerge over time.

Claims incurred but not finalised

The valuation of liabilities allows for current members who may become disabled or die in future. It does not allow for members who may already be in the process of a claim (claims incurred but not yet finalised). We have made an allowance of $1 million for such claims in determining the accrued benefits for the Plan, considering the very small number of claims expected from time to time.

Claims history

The claim history in the OSF and the predecessor and current Plans has been consistently low, with only 20 claims over the past 12 years, comprising 17 deaths and three invalidity claims. Amongst the defined benefit members, there were four death claims approved and one invalidity claim approved over the three years to 30 June 2023. Over the same period, the expectations based on assumptions were for approximately four invalidity and three deaths claims. It is noted that experience has not been sufficient to allow for a meaningful statistical analysis due to the small numbers of members and claims involved.

Impact of a catastrophe or pandemic

Based on the small number of deaths and disabilities and the level of actuarial surplus, we determined that it was extremely unlikely that the death and invalidity benefits payable over a short period would exceed the assets available to meet payments. This assumes the statistical independence of the claims, where the occurrence of one claim makes it neither more nor less probable that another claim occurs. If the assumption of independence fails, e.g. in the event of a catastrophe or a pandemic, the above analysis is not applicable.

The majority of active Plan members are employed at a small number of locations in Sydney (notwithstanding patterns of working from home), creating a risk that a catastrophic event involving head office could result in a significant number of death or invalidity benefits being paid. There is also a risk that a pandemic affecting the general population could lead to a significant number of deaths or invalidities, although the impact could be offset to some extent by deaths among the current pensioners. If an event such as those described were to happen, there could be a requirement for additional funding.

Although there has been a sustained number of deaths attributed to the COVID-19 pandemic over the last several years, we are not aware of Plan members being significantly adversely affected by the COVID-19 pandemic at this stage. The total number of deaths that have occurred in Australia as a result of COVID-19, as reported by the World Health Organisation (WHO)[1], was 23,188 as at

[1] https://covid19.who.int/region/wpro/country/au
[2] https://www.actuaries.digital/2023/10/06/covid-19-mortality-working-group-while-still-high-excess-mortality-falls-a-little-in-june/

4 October 2023. The Actuaries Institute COVID-19 Mortality Working Group[1] estimates that excess mortality in the first six months of 2023 was 7%, with just over half of the excess deaths being directly as a result of a COVID-19 infection. It is noted, however, that the majority of the excess deaths are in people above working age (65+ years) who would not be active members of the Plan with a self-insured death benefit. It therefore does not appear likely that the COVID-19 pandemic will materially impact the overall financial position of the Plan.

There remains a risk that further developments in the current pandemic (for example incursion of vaccine resistant variants, or long term post-viral effects), or indeed another type of pandemic, could lead to a significant number of deaths or invalidities of active members. If this were to happen, the financial impact may be offset to some extent by deaths among the current pensioners. The more significant impact of such a pandemic could be on investment markets resulting in negative investment returns. If events such as those described were to happen, there could be a strain on the financial position. We will continue to monitor the emerging experience of mortality and morbidity for the Plan and in Australia more generally.

Sensitivity Analysis

We have carried out sensitivity analyses under two scenarios to analyse the sensitivity of the Plan's funding level to adverse experience in claims. We have considered invalidity claims in this testing as their value is typically higher than the value of the death benefits.

The first scenario assumed the number of claims in a year is three standard deviations from the mean (on the basis the claims are independent), where the mean is the experience over the three years to 30 June 2023. This equates to approximately 1.7 claims in a year, resulting in self-insured benefit payments with a lump sum present value of $1.2 million. This was calculated based on the average self-insured invalidity benefit of approximately $687,000 at 30 June 2023. If this scenario were to occur, the value of additional claims at $1.2 million would be covered by the Plan assets in excess of vested benefits as at 30 June 2023.

The second scenario assumes that a catastrophe or pandemic leads to 10% of the active defined benefit workforce with an invalidity claim. This equates to approximately 60 invalidity claims in a year, resulting in total self-insured invalidity retirement benefits with a present value in the order of $41.2 million.

The Plan had surplus assets, in excess of vested benefits, of $697 million as at 30 June 2023 which would mean that if this scenario were to occur, the claims would be covered by the Plan assets. We also note that a high proportion of the self-insured liabilities are expected to be paid out in the form of a pension to members or their beneficiaries and therefore the whole present value of benefits is not due to be paid out immediately. Therefore, it is currently extremely unlikely that the self-insured benefits payable over a short period would exceed the assets available to the Plan.

We believe any adverse experience in claims of this magnitude will not significantly impact the Plan's funding level, and the self-insurance arrangements of the Plan are appropriate.

Underwriting and Claims Management

From 1 August 2014, all new employees are offered Accumulation membership (which does not have self-insurance exposure), hence there is no need to maintain an underwriting process.

We have been advised by Australian Retirement Trust that the assessment of self-insured disablement claims is carried out by the Trustee’s Claims Review team with additional support being sourced as required. We are not aware of any concerns with the effectiveness of the claims process.

Ongoing monitoring

On an annual basis, the actuary determines the total self-insured benefits for the Plan in the course of preparing certain actuarial certificates and other year-end reporting. Claims made and claims in progress are also reported as part of that process. That information can assist the Trustee in determining whether they can attest that, in formulating and maintaining their policy in relation to self-insurance, the Trustee continue to act in the best interests of beneficiaries as required under APRA Prudential Standard SPS 160 (refer to paragraph 36(c) of this Prudential Standard).

This actuarial investigation, and the separate annual reporting, provide the ongoing actuarial oversight of the self-insurance arrangements required by paragraph 37 of APRA Prudential Standard SPS 160. In accordance with paragraph 36(a) of this prudential standard APRA has approved other arrangements in respect of the management of the self-insurance arrangements so it is not necessary to hold a self-insurance reserve.

External Insurance

In the event that the Trustee decided that it is not appropriate to continue to self-insure the death and invalidity benefits, it would be necessary to tender the insurance for cover with an external insurer.

It may be possible for the Trustee to obtain insurance for the death and invalidity benefits provided by the Plan. However the death and invalidity benefits for defined benefit Members of the Plan can be paid in pension form and this adds a level of complexity to the nature of the insurance cover required. This may make it more difficult to completely insure against the risks for death and invalidity benefits. For example, the insurer may pay the Plan a capital sum on the death of a member, which can then be used to support the payment of a pension to the surviving spouse. The Plan would bear the risk that the capital sum (along with the other Plan assets) would be insufficient to provide the pension over the life of the spouse.

Conclusion

The Plan is large enough to retain some risk relating to death and disability benefits and we have no concerns about the level of self-insurance provided or the funding arrangements for the self-insurance. We have concluded that the level of self-insurance remains reasonable given that:

- The Plan has more than sufficient assets to cover claims under the valuation assumptions;
- In circumstances where the assets of the Plan are not sufficient to cover claims, e.g. in the event of a catastrophe or a pandemic, the Bank has agreed to support the Plan and ensure that the shortfall in benefits can be covered (Rule 13.19 in the Plan Rules);
- There is annual and triennial monitoring of the self-insurance arrangements;
- The nature of the insured benefits provided means that it may be difficult to fully insure all the death and invalidity risks; and
- The claims history in the OSF, the predecessor Plan and the current Plan have been consistently low.

Section 11: Material Risks

The purpose of this section of this report is to identify the material risks for the Plan which are associated with the actuarial assumptions or actuarial management of the Plan, of which we are aware as Actuary that have not already been raised elsewhere in this report. We also comment on the way in which the identified financial risks are being managed by the Trustee. The material risks are:

Underperformance of Investments

The risk faced by the Plan is that the investment returns earned on the assets will not be as high as expected over the long term. This means that the financial position of the Plan could deteriorate and employer contributions may need to increase. Given the current investment strategy, there is a significant risk of short term volatility in investment performance from the mismatch between the Plan's assets and liabilities. This investment strategy remains appropriate on the basis that the Bank continues to support the mismatch risk.

Inflation

The defined benefit liabilities are linked to salary and therefore a higher than expected rate of inflation could have a negative impact on the financial position. Salary increases should continue to be monitored at each triennial valuation, in order to determine if adjustments to the employer contribution levels are required. Similarly, pension liabilities are linked to Male Total Average Weekly Earnings and increases above those assumed could lead to an increase in employer contributions.

Increasing Life Expectancy

The majority of the Plan liabilities relate to current or future pensioners. The assumptions regarding pensioner mortality that were used for this valuation allow for future improvements in mortality. However, a future breakthrough in medical diagnosis or treatment which leads to a significant increase in life expectancy could increase Plan liabilities and require increased employer contributions.

Mortality experience should continue to be monitored at each triennial valuation, in conjunction with relevant population data, to assess whether adjustment to the employer contribution rates are necessary.

Credit Risk

The continuation of the Plan is dependent on the continued funding support of the Bank. If the Bank was unwilling or unable to pay defined benefit contributions to the Plan, that may affect the ongoing viability of the Plan. Given the nature of the enforceable obligation from the Bank, and the responsibilities of the Commonwealth under the Reserve Bank Act (1959), we do not believe that credit risk should be seen as a material issue.

Credit risk from the investments of the Plan is managed by holding a diversified portfolio of assets.

Liquidity Risk

The majority of the Plan's liabilities relate to current and future pensions which we expect to be paid out over a very long timeframe. This allows the Plan to hold some illiquid investments consistent with the term of those liabilities. The Plan needs sufficient liquidity to make regular pension payments and any lump sum payments required in respective of defined benefit and preserved members.

Given the small proportion of Plan assets that were held in unlisted investment vehicles and considering the long-term nature of the defined benefit payments, we do not consider the liquidity risks to be material. The Plan is also part of the much larger Australian Retirement Trust which can effectively provide liquidity to sub-funds such as RB Super in the short term.

Total benefit payments over a 12 month period are expected to be approximately $48 million, including expected pension payments of $46 million for 2023/2024. The Plan has access to sufficient liquid assets and cash flow to meet the expected pension and lump sum payments as they fall due.

Other

The Plan faces a variety of operational and other risks which may in some circumstances lead to cost increases. We understand that the Trustee monitors and takes action on such risks as part of the risk management framework. An Operational Risk Financial Reserve (ORFR) is held in a separate reserve to help mitigate any loss arising from operational risks.

Appendix A: Summary of Benefits and Conditions

Full details of the benefits applicable to members are set out in the Australian Retirement Trust Trust Deed and the RB Super Plan Rules. A summary of the RB Super rules is set out below.

Definitions

Defined Benefit Membership

Final Salary

The highest full-time annual base salary over the course of membership. For preserved members, final salary is increased on 1 July each year in line with the annual increase in the Consumer Price Index for the previous March quarter.

Normal Retirement Age

The age of 60 years.

Early Retirement Age

A member may retire within 5 years of the normal retirement age.

Pension Increases

The indexed pension is increased on 20 March and 20 September each year in line with the prior six month increase in the Male Total Average Weekly Earnings.

Member Contributions

Member contributions to the Plan are voluntary. Members are able to contribute from either pre tax (salary sacrifice) or post tax salary, or a combination of both.

Accumulated Contributions

Contributions paid by the member to the Plan together with net earnings on those contributions. Compound interest is at the rate determined by the Plan Trustee applicable to each member investment option, having regard to the net earnings attributable to each member investment option.

Membership

Membership is measured in days.

Benefits Financed by the Employer

Age Retirement at or after age 60

A member who has attained the age of 60 or over may choose to receive a Retirement Benefit in the form of an indexed lifetime pension or a lump sum payment, or a combination. The benefit is equal to a multiple of final salary. The multiple is derived having regard to the member's membership before 18 September 1990, membership between 18 September 1990 and 3 September 2002, and membership from 3 September 2002 to their retirement date, according to a set scale. The scale is as follows:

	Membership before 18 September 1990		Membership from 18 September 1990 and before 3 September 2002		Membership from 3 September 2002	
	Pension	Lump Sum	Pension	Lump Sum	Pension	Lump Sum
	(Percentage per annum of indexed final salary)		*(Percentage per annum of indexed final salary)*		*(Percentage per annum of indexed final salary)*	
Up to 20 years	2.0	20.0	1.7	17.0	1.7	17.0
Over 20 years and up to 30 years	1.0	10.0	0.85	8.5	0.85	8.5
Over 30 years	0.25	2.5	0.2125	2.125	0.85	8.5

If a pension benefit prior to age 65 is taken a reduction factor, depending on attained age, applies as follows.

Member's age attained in years on becoming a pensioner	Percentage factor to be used for calculating indexed pension
65	100
64	98
63	96
62	94
61	92
60	90
59	89
58	88
57	87
56	86
55	85

The pension is guaranteed payable for ten years. On the death of a pensioner member a pension is paid to the spouse equal to 67% of the member's pension. The percentage is increased by 11%, 22% and 33% (of the member's Invalid Retirement Benefit) where there is one, two and three or more dependent children.

Early Retirement Before age 60

The Early Retirement Benefit is available from age 55 and is calculated in the same way as the Normal Retirement Benefit.

Invalid Retirement Before age 60

The Invalid Retirement Benefit may be taken as a lump sum or an indexed pension, or a combination. The benefit is equal to a multiple of final salary. The multiple is based on member's prospective membership to age 60 and is calculated in the same way as the Retirement Benefit. Membership is limited to a maximum projected service of 30 years. Where a pension is being paid, the age 60 reduction factor applies.

Death before Retirement

The spouse of a member who dies in service is entitled to a lump sum benefit of 100% of the member's Invalid Retirement Benefit.

Alternatively, the spouse may elect to take a pension equal to 67% of the deceased member's Invalid Retirement Pension. If there are also dependent children then an additional pension of 11%, 22% and 33% (of the member's Invalid Retirement Pension) is payable where there are one, two and three or more dependent children, respectively. In addition to the pension, a lump sum is payable equal to 3.3, 2.2, 1.1 or 0 times the member's Invalid Retirement pension where there are 0, 1, 2 or 3 or more dependent children respectively.

If there are no dependants, the lump sum Resignation Benefit is paid to the member's estate.

If the member dies after age 60, similar benefits are available to the spouse and children, but are related to the Retirement Benefit instead of the Invalid Retirement Benefit.

Benefit on Resignation

Cessation of Membership

A member is entitled to a lump sum Resignation Benefit. The Resignation Benefit is equal to a multiple of final salary. The multiple is derived having regard to the scale set for deriving the lump sum Retirement Benefit and the member's prospective membership to age 55. This multiple is then reduced by the ratio of actual membership to prospective membership at age 55. A compound reduction of 1.5% per annum for the period (in days) from the member's age at resignation to age 55 years is also applied.

Preserved Membership

A member who resigns from the Bank after having completed five years' membership may, by electing not to take his Resignation Benefit immediately become a "preserved member" and preserve their benefits in the Plan. A preserved member may elect to take his Accumulated Contributions as a lump sum or may preserve this benefit as well.

Benefits for Preserved Members

A preserved member may transfer their lump sum resignation benefit to another complying fund at any time between resignation and attaining age 55. The resignation benefit is calculated as noted in the Cessation of Membership section above using final salary indexed to the date of exit and a compound reduction of 1.5% per annum for the period from age at exit to age 55.

Upon attaining age 55, a preserved member may take their preserved early retirement benefit and must take the preserved early retirement benefit by age 60. From age 55, the benefit is calculated as for Defined Benefit Members using assumed membership to the member's age on accessing their benefit. The multiple is then reduced by the ratio of actual membership to assumed membership to age 55. The benefit may be taken either as a pension or a lump sum or a combination. If the benefit is taken as a pension, the pension reduction factor used is based on the member's age as at the commencement of the pension.

On invalidity or death prior to age 55, the benefit is calculated as for Defined Benefit Members using prospective membership to age 55 (limited to 30 years). The multiple is then reduced by the ratio of actual membership to prospective membership to age 55. The benefit may be taken either as a pension or lump sum, or a combination. If a pension is paid the reduction factor at age 55 applies. For invalidity or death at age 55 and over, the benefit is calculated using assumed membership to the member's age upon accessing their benefit and reduced by the ratio of actual membership to assumed membership to the member's age upon accessing their benefit. If a pension is paid, the pension reduction factor that applies varies according to the member's age at the commencement of the pension. The benefit is subject to a minimum of the Resignation Benefit.

Productivity Benefit

A lump sum benefit equal to a contribution of 1.5% of salary for membership during 1988 and 3.0% of salary thereafter accumulated (net of 15% tax) with compound interest for Defined Benefit Members. Members may elect to have these contributions paid in salary rather than super contributions. The benefit is payable as a lump sum, in addition to all other benefits, on leaving the Plan for any reason.

Orphan Benefits

On the death of a pensioner member with dependent children but with no spouse, a benefit is payable to the dependants equal to a percentage of the pension the member was receiving. The percentage depends on the number of dependants as follows:

	Percentage of Pension
One child	45
Two children	80
Three children	90
Four or more children	100

On the death of a member in service with dependent children but no spouse, a benefit is payable to the dependants equal to a lump sum of 100% of the member's Invalid Retirement Benefit. Alternatively, the dependents may receive a proportion of the member's Invalid Retirement Pension (MIRP) as a pension plus the remainder as a lump sum, as per the schedule below:

	Pension (% of MIRP)		Lump Sum (Multiple of MIRP)
One child	45	plus	5.5
Two children	80	plus	2.0
Three children	90	plus	1.0
Four or more	100	plus	0.0

Benefits Financed by Member Contributions

Age Retirement

A lump sum benefit equal to member contributions accumulated with compound interest.

Invalid Retirement

A lump sum of accumulated contributions plus compound interest. Alternatively, the member may elect to be paid an additional non-indexed pension of 40% of his/her initial Employer-financed pension in lieu of being paid his accumulated post-tax contributions provided contributions were at least 2% of post-tax salary for the entire length of membership.

Death

Upon the death of a member, the member's spouse is entitled to a lump sum of the member's accumulated contributions plus compound interest. Alternatively, the member's spouse may elect to be paid an additional non-indexed pension of 26.8% (being 40% x 67%) of the member's initial Employer-financed pension in lieu of the member's accumulated post-tax contributions. This proportion is increased where there are dependent children.

Resignation and Retrenchment

A lump sum equal to the total of the member's accumulated contributions plus compound interest.

Retained Membership

Retained members who have taken their defined benefit and left some or all of their member contributions are entitled to a lump sum benefit equal to the value of their remaining member contributions accumulated with compound interest.

Accumulation Members

All new Plan members are offered membership of the Accumulation category. The benefit for an Accumulation member on leaving service for any reason is the lump sum balance of the accumulation of contributions and any rollovers (if any) (less applicable fees, premiums and taxes) in respect of the member plus investment returns in accordance with the investment option(s) of the member's choice.

Minimum Level of death cover

Some accumulation members have been provided with a minimum level of death cover as a result of past legislative requirements and this is payable in additional to their account balance. The amount payable is based on an age related scale ranging from $50,000 for those aged under 35 and reducing to nil by age 56. For Defined Benefit Members, if the value of the member's defined death benefit does not exceed the sum of their resignation benefit and the mandatory minimum level of cover as described above, the death benefit is increased to ensure the total death benefit meets the minimum cover requirements.

Appendix B: Summary of Actuarial Assumptions

Rate of Investment Return

A rate of 6.75% per annum compound has been assumed, net of investment expenses and tax.

A rate of 7.50% per annum compound has been assumed in relation to pension assets. This is net of investment expenses but gross of tax.

Rate of Salary Increases

A rate of general inflationary salary increases of 3.5% per annum.

Promotional Increases

In addition to salary increases from inflation, age related promotional increases have been assumed as follows:

Salary increase at each age	
Age	**All Members %**
20	9.0
25	7.9
30	5.9
35	4.0
40	2.2
45	1.1
50	0.3
55	0.2
60	0.1

Pension Increases

Male Total Average Weekly Earnings of 3.5% per annum, being consistent with the salary inflation assumptions.

Mortality, Resignation and Invalidity in Service

Specimen rates are as follows:

Number of 10,000 members aged X at the beginning of the year assumed to leave the Plan during the year on account of:			
Age	**Death**	**Resignation**	**Invalidity**
20	2	-	1
25	2	-	1
30	2	-	1
35	2	-	2
40	3	-	3
45	4	-	5
50	7	-	9
55	12	-	18
60	20	-	34

Pensioner Mortality

Assumed pensioner mortality was based on 60% of the Australian Life Table (ALT) 2015-17 for male pensioners age 65 and below (50% for females) and increasing linearly to 100% of ALT 2015-17 at age 105. In addition, the 25 year rates of mortality improvement published in ALT 2015-17 have been assumed to apply from June 2016. Samples of the assumed pensioner mortality rates are shown below:

Number assumed to die out of 10,000 at each age shown		
Age	**Males (variable % of ALT 15-17)**	**Females (variable % ALT 15-17)**
65	58	28
70	101	54
75	184	105
80	352	217
85	694	471
90	1,291	992
95	2,018	1,787
100	2,876	2,890

Age Retirement

Specimen rates are as follows:

Number of 10,000 members aged X at the beginning of the year assumed to leave the Plan during the year on account of age retirement		
Age	**Defined Benefit Members**	**Preserved Members**
55	1,000	1,000
56	1,000	1,000
57	1,000	1,000
58	1,000	1,000
59	1,000	1,000
60	2,000	10,000
61	2,000	-
62	2,000	-
63	2,000	-
64	2,000	-
65	10,000	-

Proportions Married

For active members where no spouse details are available, we have assumed 90% are married (including de facto and same sex spouses). For lifetime pension members, where no spouse details are recorded, we have assumed there are no eligible spouse reversionary entitlements.

Expenses

We have assumed that expenses are met from the assets of the Plan. An allowance has been made of 0.5% of defined benefit salaries for the three years from 1 July 2023 to meet expenses in relation to active defined benefit and preserved members.

An allowance of 0.06% has been made for pension expenses. This has been deducted from the gross of tax discount rate, resulting in a rate of 7.44% per annum compound assumed in relation to pension assets.

Expenses for investment management are allowed for by assuming a net rate of investment return.

Taxation

We have assumed that the taxation environment applying at 30 June 2023 will remain unchanged and that the Plan will remain a complying fund and therefore be entitled to concessional tax treatment. Accordingly, future employer contributions have been assumed to be taxed at 15%.

Age Difference between Pensioners and their Spouses

For future pensioners, it has been assumed that male pensioners were three years older than their spouses while, for female pensioners, it was assumed they were three years younger than their spouses. For current pensioners, we have used the actual date of birth of the spouse given to us in the data.

Assumed mix of lump sums/pensions

Defined Benefit Members eligible for a pension were assumed to take their benefits as a combination of lump sum and pension as follows:

Benefit	Percentage of Defined Benefit taken as Pension (%)
Retirement	100
Death	100
Invalidity	100

We have assumed that all current preserved members take the pension benefit by age 60.

Appendix C: Statements required under Paragraph 23 of SPS 160

The statements required under paragraphs 23(a) to (h) of SPS 160 for regular investigations are set out below. Note, these are provided in relation to the Plan's defined benefit liabilities only.

(a) Plan Assets

The net market value of the Plan's assets attributable to the defined benefit liabilities at 30 June 2023 was $1,704,423,000. This amount is the amount provided by the Plan Administrator and excludes assets attributable to accumulation members or the accumulation balances of defined benefit members.

This value of assets at 30 June 2023 was used to determine the recommended employer sponsor contribution rates and assess the funding status measures and is also referred to as the "actuarial value" of the assets.

(b) Projection of Vested Benefits

The projected likely future financial position of the defined benefit section of the Plan during the three years following the valuation date and based on my best estimate assumptions and a contribution rate of 18.3% of salaries for the period 1 July 2023 to 31 December 2023 and at a rate of nil thereafter, is as follows:

Date	Assets ($m)	Vested Benefits ($m)	Vested Benefits Index (%)
30 June 2023	1,704	1,007	169%
30 June 2024	1,780	1,044	171%
30 June 2025	1,850	1,094	169%
30 June 2026	1,924	1,135	169%

(c) Accrued Benefits

In my opinion, the value of the assets of the defined benefit members of the Plan at 30 June 2023 was adequate to meet the liabilities in respect of the accrued benefits of defined benefit members of the Plan (measured as the value of members' accrued entitlements using the valuation assumptions). The value of accrued benefits for active and preserved members has been taken as the present value of future benefit payments which are attributable to service prior to the valuation date of 30 June 2023. The value of accrued benefits for pensioners has been taken as the present value of pension payments on the valuation assumptions. The assumptions adopted to calculate accrued benefits are best estimate assumptions. In my opinion, these methods and assumptions are appropriate for the purpose of determining accrued benefits.

(d) Minimum Benefits

At 30 June 2023 the value of the minimum benefits of the defined benefit members of the Plan were $774.8 million which was less than the defined benefit assets at that date. Minimum benefits are as defined in Regulation 5.04 of the Superannuation Industry (Supervision) Regulations.

The coverage of the MRBs for all defined benefit and pension members of the Plan as at 30 June 2023 was 220%, and for all Plan members (including accumulation members) was 175%.

(e) Financial Position

The financial position of the Plan as at the valuation date of 30 June 2023 is not unsatisfactory and I have recommended the Trustee maintain a Shortfall Limit of 100%.

(f) Funding and Solvency Certificates

Funding and Solvency Certificates have been obtained for the Plan covering the period from 28 February 2022 to 30 June 2023 for the current Plan and in respect of the period 1 July 2020 to 28 February 2022 for the prior Sunsuper Plan. The Plan was solvent, as defined in the Superannuation Industry (Supervision) Regulations, at 30 June 2023 and in my opinion, under the valuation assumptions, the solvency of the Plan will be able to be certified in any Funding and Solvency Certificate required under the Regulations during the three year period to 30 June 2026.

(g) Recommended Employer Contributions

The Bank and nominated employers should continue paying defined contributions at the current rate of 18.3% of defined benefit salaries until 31 December 2023. For the period from 1 January 2024 until the results of the next actuarial investigation are known, we recommend the Bank and nominated employers cease paying contributions to the Plan in respect of defined benefit liabilities. Contributions in excess of this recommendation are also acceptable.

Productivity contributions (where applicable) and contributions in respect of Accumulation Members are to be paid in addition to the amounts described above.

(h) Defined Benefit Pensioners

In my opinion, as at the valuation date of 30 June 2023, there was a high degree of probability that the Plan will be able to pay the pensions as required under the Plan's governing rules.

[redacted]

12 December 2023

About WTW

At WTW (NASDAQ: WTW), we provide data-driven, insight-led solutions in the areas of people, risk and capital. Leveraging the global view and local expertise of our colleagues serving 140 countries and markets, we help you sharpen your strategy, enhance organisational resilience, motivate your workforce and maximise performance. Working shoulder to shoulder with you, we uncover opportunities for sustainable success — and provide perspective that moves you. Learn more at wtwco.com.