

# SUMMARY OF THE ACTUARIAL INVESTIGATION OF UNISUPER AT 30 JUNE 2013

The latest actuarial investigation of UniSuper was conducted as at 30 June 2013, and the results presented in our "Report on the Actuarial Investigation as at 30 June 2013" dated 14 November 2013 (the '30 June 2013 Report') by Kate Maartensz, FIAA and Bill Buttler, FIAA. This attachment provides a summary of the 30 June 2013 Report and our opinions as to UniSuper's financial position.

The 30 June 2013 Report has been prepared in a manner consistent with the Professional Standards issued by the Institute of Actuaries of Australia.

## Assets and Membership Data

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UniSuper's financial statements for the year ended 30 June 2013 showed the net market value of UniSuper's asset as at 30 June 2013 as \$36,332.4 million, including reserves of \$79.9 million. We understand that this value has been determined based on data and methodologies consistent with the previously audited value of assets at 30 June 2012, and is consistent with AAS 25. We believe it is reasonable to use this data in assessing UniSuper's financial position at 30 June 2013.

The net market value of assets as at 30 June 2013 in respect of the Defined Benefit Division (DBD) including indexed pensions was \$13,848.1 million. To derive the assets in respect of the DBD, we have relied on the information provided by UniSuper on accumulation account balances for Accumulation 1, Accumulation 2, the DBD, Account Based Pensions and reserves.

Membership data provided by UniSuper was used to determine the liabilities of DBD active members and pensioners. We have also determined a liability amount for exited members who had been recorded and treated as deferred and pending deferred members.

The following table summarises the membership and assets at the last actuarial investigation date of 30 June 2013 (to which this summary relates) and the investigation date of 1 January 2013 (the date of the actuarial investigation to which the previous summary related):

	1 January 2013	30 June 2013
Number of Members		
- DBD active	71,832	72,564
- DBD pensioners	7,416	7,574
Assets		
UniSuper Assets	\$33,531.2m	\$36,332.4m
Less Accum. 1* and Accum. 2 Account Balances	\$17,391.5m	\$18,784.2m
Less Account Based Pension Balances	\$3,153.3m	\$3,620.2m
Less Reserves	\$39.5m	\$79.9m
DBD (including Lifetime Pensions) Assets	\$12,946.9m	\$13,848.1m

\* Includes the accumulation account balances of DBD members and the estimated amount to be transferred to Accumulation 1 for members remaining in the DBD as "pending deferred" members, i.e. members due to be transferred to Accumulation 1 in the near future.

### Assumptions

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In setting assumptions for future financial experience it is the assumed excess (or "gap") of the investment return above salary inflation and price inflation that is most important. The financial assumptions adopted for the 30 June 2013 actuarial investigation are set out below. These assumptions are the same as those adopted for the previous actuarial investigation at 1 January 2013.

	Best Estimate Assumptions (% p.a.)	Funding Assumptions (% p.a.)
Investment Returns		
- Net of tax	7.0	5.5
- Gross	7.8	6.1
- CRIPs*	3.7	3.7
Long Term Salary Inflation (1/1/2013 onwards)	3.75	3.75
Price Inflation (CPI)	2.75	2.75

\* The investment return assumptions adopted for Commercial Rate Indexed Pensions (CRIPs) have been derived from the after-tax expected return of a 10-year Commonwealth Government inflation-linked bond.

An analysis of the DBD's demographic experience was undertaken at the previous triennial investigation at 30 June 2011. This analysis was undertaken within the previous three years and it is not expected that there has been any significant change to UniSuper's demographic experience since then. This analysis will be undertaken again at the next actuarial investigation at 30 June 2014.

The demographic assumptions from the previous actuarial investigation have been retained as we consider these continue to be reasonable and suitable.

No changes were made to pensioner mortality rates except for the standard adjustments made annually to allow for future mortality improvements, consistent with the approach adopted in previous investigations.

## Accrued Benefits

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Accrued benefits measure the amount of assets expected to be required to pay members' benefits arising in respect of membership before 30 June 2013 as they fall due. For all DBD members of UniSuper (including DBD pensioners), the accrued benefits were calculated using the *best estimate* assumptions contained in my report. They have not been subjected to a minimum of the vested benefits, which is consistent with the methodology used in the previous actuarial investigation.

### *Method of determining accrued benefits*

In determining the value of accrued benefits, the benefits of current DBD members need to be apportioned between past membership up to 30 June 2013 and future membership after that date. The method of apportioning benefits to past membership is as follows, effectively recognising the portion of future benefits arising due to membership to date:

- a) Retirement benefits – the past membership benefit (based on accrued lump sum and pension multiples) at 30 June 2013, with allowance for future salary growth and increases in accrual rates to the assumed retirement date.
- b) Death and disablement benefits – the total benefit value multiplied by membership to 30 June 2013 over the period of membership to the assumed date of death or disablement.
- c) Resignation Benefit – the past membership benefit at 30 June 2013 with allowance for future salary growth and increases in the lump sum accrual rates up to the assumed resignation date.

### *Accrued Benefit Index*

The ratio of net market value of assets to accrued benefits is called the Accrued Benefits Index (ABI).

The following table shows the accrued benefits of UniSuper relating to the Defined Benefit Division including indexed pensioners as at 30 June 2013 and the ABI. In determining the ABI, the value of accumulation accounts are excluded from both the assets and the accrued benefit liabilities.

	Best Estimate Assumptions	Funding Assumptions
DBD Assets at 30 June 2013	\$13,848.1 m	\$13,848.1 m
Accrued Benefits for DBD active and deferred members	\$9,836.2 m	\$11,297.8 m
<u>DBD Pension Liabilities</u>	<u>\$3,229.9 m</u>	<u>\$3,791.9 m</u>
Total DBD Accrued Benefit Liability	\$13,066.1 m	\$15,089.7 m
DBD Accrued Benefits Index (ABI)	106.0%	91.8%

As the ABI calculated using the *best estimate* assumptions was greater than 100%, the DBD's assets were expected to be sufficient to meet future payments in respect of benefits accrued at 30 June 2013. Although the DBD's assets were expected to be sufficient at 30 June 2013 we would prefer a higher level of coverage.

Based on investment experience since 30 June 2013, the ABI was estimated to have increased to approximately 112% at 31 March 2014 on the *best estimate* assumptions.

## Vested Benefits

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The vested benefits of contributing DBD members are the total of the DBD benefits that would be payable if all members voluntarily left the service of their Participating Institutions on 30 June 2013.

The ratio of net market value of assets to vested benefits is called the Vested Benefits Index (VBI).

The following table shows the vested benefits of UniSuper relating to the DBD (including indexed pensioners) as at 30 June 2013 and the resulting VBI. For the purpose of determining the VBI, the value of accumulation accounts are excluded from both the assets and the vested benefits.

	Best Estimate Assumptions	Funding Assumptions
DBD Assets at 30 June 2013	\$13,848.1m	\$13,848.1m
Vested Benefits for DBD active and deferred members	\$10,330.5 m	\$10,826.4 m
<u>DBD Pension Liabilities</u>	<u>\$3,229.9 m</u>	<u>\$3,791.9 m</u>
Total DBD Vested Benefit Liability	\$13,560.4 m	\$14,618.3 m
DBD Vested Benefits Index (VBI)	102.1%	94.7%

As at 30 June 2013 the VBI was above 100% on the *best estimate* assumptions but not on the *funding* assumptions. The VBI on the *funding* assumptions is usually reported to the UniSuper Board.

UniSuper was found to be in an Unsatisfactory Financial Position as at 30 June 2013, in terms of Superannuation Industry (Supervision) Regulation 9.04.

Based on investment experience since 30 June 2013, the VBI was estimated to have increased to approximately 101% at 31 March 2014 on the *funding* assumptions.

With the VBI at the levels reported (both at 30 June 2013 and the later date of 31 March 2014), members' minimum benefits (required for compliance with Superannuation Guarantee legislation) continue to be fully covered by the assets with some margin.

### Statement of Financial Condition

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The employer and member contribution rates to fund the DBD benefits are specified in the UniSuper Trust Deed. The actuarial investigation considered the current contribution arrangements, including the arrangements introduced from 1 July 2006 whereby DBD members have flexibility in respect of their rate of contribution.

In respect of the long-term financial condition of the DBD:

- At 30 June 2013, the DBD's assets and future fixed contributions were expected to be sufficient on the *best estimate* assumptions to provide the future benefits of all existing members. However, they were expected to be inadequate on the *funding* assumptions.
- The average expected new entrant contribution rate was approximately 19.7% of salary (where a member contributes at 7% of salary) on the *best estimate* assumption – lower than the fixed contribution rate of 21%. However, under the more conservative *funding* assumptions, the expected new entrant contribution rate was 22.3%, more than the 21% fixed contribution rate. Although contributions of 21% of salary are expected to be inadequate for new DBD members on the more conservative *funding* assumptions, they are expected to be sufficient on the *best estimate* basis. These new entrant rates are the same as those determined as at 1 January 2013 since there have been no changes in the actuarial assumptions. These results are also consistent with those for existing members.
- We also considered the impact of changes post 1 January 2015 based on the decision made by the Trustees under Clause 34. After allowing for the Clause 34 changes, the new entrant contribution rate reduces to 18.5% under the *best estimate* assumptions. Under the more conservative *funding* assumptions, the expected new entrant contribution rate is 20.9%.

marginally below the member contribution rate of 7% plus fixed employer contribution rate of 14% that applies for members contributing at the standard rate of 7%.

- The results for existing members also show a material improvement once the Clause 34 changes are allowed for, due to the reduction in total benefit liabilities. However, the liability remains slightly underfunded on the more conservative funding basis, reflecting that the changes are not occurring for two more years for existing members and also the different age/membership profile for existing members compared to new members.

## Material Risks

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The report on the actuarial investigation at 30 June 2013 set out the key actuarial risks relating to the DBD. These risks include:

### *Risks relating to future experience*

The DBD's funding is dependent upon future experience. Adverse experience can mean that the fixed contributions are not adequate to provide future benefits for new members. It can also mean that the financial position of the DBD will be adversely affected, for example a VBI above 100% may fall below 100%, it may take longer than expected for a DBD VBI that is below 100% to return to 100%, or it may again become necessary for the Trustee to reduce benefits in accordance with Clause 34.

- The most significant risk facing the DBD is that investment returns will not be as high as expected – either because of poor investment performance over protracted periods or because of changes to the inherent nature of investment markets.
- Salary increases or price inflation exceeding expectation will have a negative impact on funding.
- Largely because of the geographic spread of the DBD membership, there is a very low risk of a catastrophe causing a significant number of self insured benefits to be paid because of a single event, which could have a material impact on funding. Higher than expected death, disability (or terminal medical condition) and temporary disablement benefits would also put a strain on funding.
- There is a risk that continued increases in longevity could be larger than assumed.
- Eligible new employees have 24 months to elect between the DBD and Accumulation 2. This introduces a risk that only members who will be advantaged by being in the DBD (e.g. those who expect high salary increases) may remain members.

The experience of the DBD is examined as part of the regular triennial actuarial investigations and assumptions about future experience modified appropriately as considered appropriate.

### Other Risks

- Re-balancing and crediting rate approximations within the Accumulation section, adversely impacting DBD assets. This risk is managed.
- Material retrenchment programs or other large downsizing of the DBD membership, while the VBI is less than 100% because each benefit payment further erodes the VBI. The large number of employers mitigates this risk, although employment across the university sector is likely to be correlated. If a large number of members were to voluntarily resign it would have a similarly adverse impact.
- The long term financial stability of the DBD is based on Clause 34 operating effectively at the end of the monitoring period if required. The exercise of Clause 34 also relies in part on APRA approval and appropriate and timely Trustee actions and decisions. While there is no reason to doubt the operation of Clause 34, to the extent that a course of action appropriate under Clause 34 is hindered or constrained, Clause 34 may not operate properly to maintain the DBD as financially viable over the longer term.

- Allowing members to voluntarily transfer from the DBD (other than on resignation) while the VBI is less than 100% would adversely affect the VBI, as each such transfer further erodes the funding. UniSuper is appropriately managing this risk.

#### Benefit Changes under Clause 34

The Trustee has announced its decision under Clause 34, which introduces benefit changes from 1 January 2015. These changes reduce the level of benefits accruing after 1 January 2015 for most Division A and B members. DBD pensions are not affected, nor are benefits for accumulation members and flexi pensioners or CRIPs.

The impact of the Clause 34 changes on the ABI or VBI levels will emerge over time as post 1 January 2015 benefits accrue. However the Clause 34 changes do immediately affect the assessment of the adequacy of future contributions to fund future benefit accruals.

Although the ABI was above 100% at 30 June 2013, as a result of the VBI being less than 95% at 30 June 2013, under the provisions of Clause 34(a), the Trustee must notify each employer and the Division A and B members accordingly.



Kate Maartensz, FIAA



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RUSSELL EMPLOYEE BENEFITS

30 May 2014