

PART C

TRIENNIAL ACTUARIAL VALUATION

The triennial actuarial valuation of the Pooled Fund and each of the individual Schemes at 30 June 2006 was carried out by Martin Stevenson, FIA, FIAA of Mercer Human Resource Consulting Pty Ltd. A summary of this valuation as provided by Martin Stevenson follows.

Triennial Actuarial Valuation

Introduction

As requested by the SAS Trustee Corporation (the Corporation) I have carried out an actuarial valuation of the following Schemes as at 30 June 2006 in accordance with the relevant legislation governing each of the Schemes:

- the State Authorities Superannuation Scheme (SASS)
- the State Authorities Non-Contributory Superannuation Scheme (SANCS)
- the State Superannuation Scheme (SSS)
- the Police Superannuation Scheme (PSS).

The previous actuarial investigation of SASS, SANCS, SSS and PSS was carried out by myself as at 30 June 2003 and the results were set out in a report dated December 2003.

This report conforms to the requirements of Professional Standard 400 of the Institute of Actuaries of Australia.

For funding purposes and in accordance with legislation distinctions are made between groups of employers as set out in the following table.

Scheme	Employers
SASS	Employers are separated into Parts 1 and 3 in accordance with legislation. Part 1 includes the Crown and other employers, Part 3 includes Hospitals and other bodies.
SANCS	Employers are subdivided in the same manner as SASS above.
SSS	Employers under SSS are essentially equivalent to Part 1 employers under SASS.
PSS	No subdivision necessary.

The General Government Liability Management Fund (GGLMF) was established with effect from 10 July 2002. The GGLMF accepts monies paid by the Crown Entity and these monies were transferred to the Pooled Fund during the financial year 2006/2007. We have presented results both with and without the value of the GGLMF as at 30 June 2006 being included as an asset of the Pooled Fund.

The **number of contributors** in each of the Schemes at the current and previous investigation dates is set out below:

Contributors	SASS	SANCS	SSS	PSS	Total
30 June 2006	56,986	86,875	26,616	3,297	173,774
30 June 2003	68,272	106,263	33,536	4,489	212,560

Pensioners	SASS	SANCS	SSS	PSS	Total
30 June 2006	4,653	n/a	39,754	5,697	50,104
30 June 2003	5,617	n/a	35,354	4,877	45,848

The **Pooled Fund assets** at 30 June 2006 totalled \$28,578.1 million compared to \$22,305.5 million at the last valuation. The assets were allocated to each Scheme as follows:

Assets (\$millions)	SASS	SANCS	SSS	PSS	Total
30 June 2006	8,590	1,145	17,881	962	28,578
30 June 2003	5,278	471	15,431	1,126	22,306

Triennial Actuarial Valuation cont.

The **Employer Reserves** as at 30 June 2006 in respect of each Scheme are as follows:

\$millions	SASS	SANCS	SSS	PSS	Total
Assets	8,590	1,145	17,881	962	28,578
Less,					
➤ Member Reserves	5,511	261	4,970	407	11,149
➤ Death/ Disability Reserves	20	-	-	-	20
Adjustments	-	21	-	-	21
Employer Reserve	3,059	863	12,911	555	17,388

The adjustments noted above represent differences between the employer records (which are required for subdivision by Scheme, Part and employer) and the accounts.

As at 30 June 2006, the assets of the GGLMF amounted to \$6,729 million.

For all Schemes the key **long term economic assumptions** are as follows:

Long-term assumptions	This valuation % per annum	Last valuation % per annum
Rate of investment return	7.7% for current pensioners, 7.0% other members	7.0%
Rate of general salary escalation	4.0%	4.0%
Rate of increase in CPI	2.5%	2.5%

The rate of investment return assumption is higher for current pensioners because no tax is payable in respect of assets backing Current Pension Liabilities. The investment return assumption has been increased from 7.0% at the previous valuation to a weighted average long term rate of 7.3% per annum. In the intervalation period a very comprehensive investigation was carried out in respect of the likely tax payable by the Pooled Fund, and a reduction in the rate of tax was anticipated. This change in the expected rate of tax accounts for the increase in the rate of investment return assumption.

No special short term assumptions have been adopted with the long term assumptions applying over all time periods.

A comprehensive analysis was carried out in respect of all demographic assumptions used in the investigations of the Pooled Fund Schemes. The analysis related mainly to the three years 1 July 2002 to 30 June 2005.

This analysis led to changes in relation to the rates of resignation, preservation, mortality, disability, retirement and early retirement and proportions choosing lump sums or pensions on retirement.

Changes in pensioner mortality and deferral of retirement have offset the effect of increased disability rates in respect of the PSS and the assumed rate of people taking pensions with the result that the demographic basis changes have produced only a marginal strengthening of the basis and hence a small source of deficiency to the Schemes overall.

Triennial Actuarial Valuation cont.

Results

When the GGLMF is taken into account, the unfunded liability for the Pooled Fund has reduced from \$15,006.6m to \$10,435.7m over the three years to 30 June 2006. Excluding the GGLMF, the unfunded liability is \$17,164.7m as at 30 June 2006.

The unfunded liabilities of each of the Schemes or sub-divisions within schemes are as follows:

\$millions	SASS	SANCS	SSS	PSS	Total before GGLMF	GGLMF	Total
Employer Accrued Benefits							
➤ Contributors	5,888.2	2,094.6	6,487.9	1,846.7	16,317.4	-	16,317.4
➤ Deferreds	-		830.6	20.4	851.0	-	851.0
➤ Pensioners	258.8		13,744.2	3,380.5	17,383.5	-	17,383.5
Total Employer Accrued Liability	6,147.0	2,094.6	21,062.7	5,247.6	34,551.9	-	34,551.9
Less, Employer Reserve Account	3,059.0	862.7	12,910.6	554.9	17,387.2	6,729.0	24,116.2
Employer Unfunded Liability	3,088.0	1,231.9	8,152.1	4,692.7	17,164.7	(6,729.0)	10,435.7
Unfunded Liability at 30 June 2003	3,621.9	1,450.7	8,099.4	3,489.0	16,661.0	(1,654.4)	15,006.6

The employer unfunded liabilities shown above have not been grossed up for contributions tax.

Employer contributions towards meeting unfunded liabilities must be grossed up to allow for tax on contributions. Wherever employer contribution rates have been calculated in this report, the contribution rates have been grossed up accordingly.

Triennial Actuarial Valuation cont.

If the current balance in the GGLMF is allocated to each section of the Fund in proportion to current unfunded liability and allowing for future tax on employer contributions the theoretical required contribution rates (over the expected working life-time of contributors) are:

		Contribution rate required	As % members' salaries
SASS	Part 1	2.58 times contributor contributions	14.5%
SASS	Part 3	3.88 times contributor contributions	24.1%
SANCS	Part 1	4.8% of members' salaries	4.8%
SANCS	Part 3	4.0% of members' salaries	4.0%
SSS		4.8 times members' contributions	65.8%
PSS		251% of members' salaries	251%

Sensitivity runs were carried out, and the results are set out in the following table:

Basis	Unfunded liability under varying assumptions (\$million)					
	SASS	SANCS	SSS	PSS	GGLMF	Total
Standard	3,088.0	1,231.9	8,152.1	4,692.7	(6,729.0)	10,435.7
Investment return plus 1%	2,627.9	1,083.3	5,416.5	4,132.7	(6,729.0)	6,531.4
Investment return minus 1%	3,622.4	1,401.3	11,531.0	5,478.0	(6,729.0)	15,303.7
Salary increases plus 1%	3,564.2	1,402.3	8,604.6	4,851.2	(6,729.0)	11,693.3
Salary increases minus 1%	2,666.0	1,079.9	7,733.5	4,593.4	(6,729.0)	9,343.8
CPI increases plus 1%	3,146.6	1,231.9	11,090.3	5,157.8	(6,729.0)	13,897.6
CPI increases minus 1%	3,038.0	1,231.9	5,687.0	4,347.0	(6,729.0)	7,574.8

The above table demonstrates that the rate of investment return has the major impact on the financial condition of the Pooled Fund.

Triennial Actuarial Valuation cont.

Major items contributing to current results

The major items of surplus and deficiency which have affected the Schemes over the period since the last actuarial investigation are as follows:

Item	Comment	Amount of deficiency / (surplus) \$ billion
Unfunded liability as at 1 July 2003 (before GGLMF)		16.7
Investment Earnings	Investment Earnings of the Pooled Fund were significantly higher than assumed and this resulted in an item of surplus.	-5.1
Contributions	Contributions to the Crown funded employer reserves were less than the accruals over the period resulting in a deficiency.	1.6
Change of actuarial basis	The overall impact of the changes in the valuation basis was an item of surplus.	-1.2
Impact of disability experience in PSS	The impact of the higher actual than expected disabilities in the PSS was an item of deficiency.	0.2
Other exits	Generally fewer other exits was a further item of deficiency.	0.1
Salary Increases	Higher than expected salary increases led to a deficiency.	1.2
CPI Increases	Lower than anticipated CPI increases led to a surplus.	-0.1
Interest on the previous Unfunded Liability.	Interest on the previous unfunded liability at 1 July 2003 resulted in a deficiency.	3.7
Other		0.1
Unfunded liability as at 30 June 2006 before GGLMF		17.2
Effect of GGLMF	The GGLMF balance.	-6.7
Unfunded liability as at 30 June 2006 after GGLMF		10.4

The major items of surplus were investment earnings being higher than anticipated, and the change in the actuarial basis while interest on the opening unfunded liability and higher than anticipated salary increases were the major items of deficiency. The effect of lower contributions than benefit accruals continued to be off-set by contributions to the GGLMF.



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