Mercer's approach in 2018 to setting the FF Target Asset Level versus Dept of Finance 2019 calculation of the APS Unfunded Liability.

Mercer is the 'Designated Actuary' under Schedule 3 of the Future Fund Act and in 2018 published a declaration that included the following:

I declare the following revised target asset levels for the financial years 2017-18, 2018-19 and 2019-20:

Financial Year	Target Asset Level
2017-18	$180.2 billion
2018-19	$186.9 billion
2019-20	$193.7 billion

The target asset level for a particular financial year is intended to be my best estimate of the assets that would be required in order that, together with investment earnings on those assets, they would be sufficient to meet future unfunded benefit payments in respect of service rendered before the start of the year. As such, the discount rate used to calculate the present value of future payments needs to represent the expected investment return on Future Fund assets.

Based on the above factors, I have assumed a rate of future investment return of 6% per annum.

This rate is used to discount expected unfunded superannuation cash outflows to determine the projected unfunded superannuation liability in respect of services rendered before the start of the relevant financial year.

The above declaration by Mercer included a statement that the Target Asset Levels relates to all Australian Government unfunded superannuation liabilities, civilian and military.

The Department of Finance Annual Report for 2018-19 at pages 147 – 153 included estimates of the unfunded liability of the civilian Superannuation Schemes as follows:

C3.4 Superannuation Schemes

	CSS	PSS	Other	Total
30 June 2019	**$'000**	**$'000**	**$'000**	**$'000**
Closing value of the net defined benefit liability	**95,503,267**	**134,289,616**	**3,259,826**	**233,052,709**

The key actuarial assumptions for the defined benefit obligation are set out in the table below:

	CSS	PSS	Other
Discount rate	1.7%	1.9%	1.9%
Discount rate	The relevant Australian Government Treasury Bond rates were used for the calculation of defined benefit obligation.		

The Department of Defence Annual Report for 2018-19 at pages 188 – 204 included estimates of the unfunded liability of the military Superannuation Schemes as follows:

Department of Defence
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
For the period ended 30 June 2019

4.5: Administered - Defined Benefit Plans (continued)

The actuarial estimate of the net defined benefit liability for DFRB, DFRDB, MSBS, ADF Cover and in aggregate is presented below. The net defined benefit liability equals the present value of future defined benefit obligation less the fair value of defined benefit plan assets. The most recent actuarial estimates were calculated by the AGA as at 30 June 2019. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the Projected Unit Credit Method.

The reconciliations included below show movements in the net defined benefit liability, the present value of the defined benefit obligation and the fair value of the defined benefit plan assets. The disclosures below are in line with requirements of AASB 119.

	2019 $'000 DFRB	2019 $'000 DFRDB	2019 $'000 MSBS	2019 $'000 ADF Cover	2019 $'000 Total
The amounts recognised in the Administered Schedule of Assets and Liabilities are as follows:					
Present value of funded obligations	-	-	10,263,000	-	10,263,000
Fair Value of plan assets	-	-	(10,263,000)	-	(10,263,000)
Present value of unfunded obligations	513,900	55,023,000	125,745,000	736,300	182,018,200
Unrecognised past service cost	-	-	-	-	-
Net liability recorded in the Administered Schedule of Assets and Liabilities	513,900	55,023,000	125,745,000	736,300	182,018,200

Principal actuarial assumptions for the various schemes are as follows:

The demographic assumptions utilised for the 30 June 2019 actuarial estimate of DFRB, DFRDB, MSBS and ADF Cover are based on the assumptions used in the 30 June 2017 LTCR.

	2019	2018
DFRB		
Discount rate at 30 June	**1.4%**	2.7%
DFRDB		
Discount rate at 30 June	**1.9%**	3.0%
MSBS		
Discount rate at 30 June (active members and pensioners)	**1.9%**	3.1%
ADF Cover		
Discount rate at 30 June	**1.9%**	3.1%

Comment:

The total Unfunded Liability as represented in the current annual DOF and DOD annual reports is:

Civilian Schemes	$233.1bn
Military Schemes:	$182.0bn
Total	$415.1bn

The use by DOF and DOD of very low Discount Rates has pushed the total Unfunded Liability to $415bn, way beyond any capacity of the Future Fund. This figure is more than double the estimates by Mercer in 2018, the Designated Actuary under the Future Fund Act. Mercer's view was that "the discount rate used to calculate the present value of future payments needs to represent the expected investment return on Future Fund assets" i.e. 6% per annum.