RTA v Cremona - more value in superannuation?

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This paper has been written for presentation at the 2002 National Conference of the Australian Plaintiff Lawyers Association, 17 to 20 October 2002. Richard Cumpston is a director of Cumpston Sarjeant Pty Ltd, consulting actuaries, Melbourne.

Summary

- procedures accepted by the NSW Court of Appeal in RTA v Cremona [2001] NSWCA 338 have resulted in superannuation awards that seem high in relation to earnings awards
- inadequate allowance is made for the effects of inflation in increasing contributions and reducing the purchasing power of the ultimate benefits
- discounting to present values before allowing for current tax rates assumes that tax thresholds will inflate at the discount rate
- this paper recommends the use of real accumulation rates, based on expected fund earning rates, less expected inflation
- past inflation rates, and market yields on indexed bonds, suggest that a 2% pa allowance for future inflation may be reasonable
- allowing for 2% pa inflation in one example reduced the award for superannuation from about 21% to 13% of the award for earnings
- the paper provides tables to allow approximate estimates of superannuation benefits in different circumstances.

I am grateful to Simon Garnett, Andrew Morrison and Paul Mulvany for their comments on this paper, to Intech Pty Limited for their data and to Harold Luntz for drawing my attention to the High Court's decision on 13/9/02 to reject special leave to appeal.

RTA v Cremona [2001] NSWCA 338

This case was brought by the widow of Dr Cremona, who died as a result of a motor accident on 28/5/93. Para 81 of the Court of Appeal judgement quoted the assumptions used by Mark Ronan (of Deloitte Touche Tohmatsu) in estimating the value of the superannuation benefits :

"3.4 We have used a 3% discount rate in order to reflect future dollars in today's terms 3.5 When determining an appropriate growth rate for funds invested in

3.5 When determining an appropriate growth rate for funds invested in superannuation we have had regard to rates published by 'In Tech

Market-Linked Pooled Fund Performance Survey' on 31 January 1999. The survey shows a ten-year rate of 11.0%. We note that the rate is expressed net of tax, ongoing fees and expenses."

Para 95 concluded

"Mr Ronan made no assumption and expressed no opinion about inflation or other possible future changes in wage rates or taxation. The chance of such changes was embraced by the fixed 3 per cent discount. The method by which Dowd J calculated the value of the lost superannuation benefits was based on expert evidence open to be accepted and was unexceptionable..."

The appeal court held that

"The method of calculating the value of the lost superannuation benefits was based on expert evidence open to be accepted."

In para 94, Dowd J referred to actuarial evidence on methodology

"I consider that the methodology proposed by Geoffrey McRae for calculating superannuation is correct, that is taking the gross future superannuation entitlement and that figure be reduced to present tax and thresholds and applying present tax and thresholds."

Consistency with Todorovic v Waller

When judgement was delivered in Todorovic v Waller (1981), the Chief Justice read a statement which said in part

"...Where there has been a loss of earning capacity which is likely to lead to financial loss in the future ... the present value of the future loss ought to be quantified by adopting a discount rate of three per cent in all cases, subject, of course, to any relevant statutory provisions. This rate is intended to make the appropriate allowance for inflation, for future changes in rates of wages generally or of prices, and for tax ... upon income from investment of the sum awarded."

Dowd J commented in para 95

"I reject the RTA's reliance on Todorovic v Waller ... that no future allowance should be made for inflation. Todorovic v Waller is a decision affecting the reduction of future losses using discount tables to calculate a figure for present day payment."

The appeal court noted that, consistent with Todorovic v Waller, a 3% discount rate was used to determine the present value of a future entitlement. It seems clear that Dowd J, and the appeal court, thought that the results were consistent with Todorovic v Waller.

Superannuation procedures accepted in RTA v Cremona

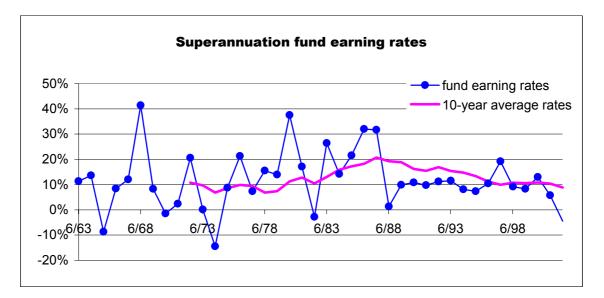
Two major procedures appear to have been accepted by Dowd J and the appeal court:

- superannuation balances can be assumed to accumulate at some rate based on expert evidence about past and likely future superannuation fund earning rates
- superannuation fund benefits are to be discounted to present values before applying the current tax rates on superannuation benefits.

Problems with RTA v Cremona

Three major problems underlie these procedures

- recent superannuation fund earning rates are a poor guide to future earning rates
- inadequate allowance is made for the effects of inflation in increasing contributions and reducing the purchasing power of the ultimate benefits
- superannuation tax thresholds are implicitly assumed to increase in the future at the discount rate.



Past superannuation fund earning rates

The above graph shows the earning rates achieved by superannuation funds over the last 40 years, together with 10-year averages. The one-year returns have been as high as 41% and as low as -15%, while the 10-year averages have varied between about 7% and 21%. The 10-year average at 30/6/02 was 8.8%, the lowest it has been since 1979.

Approach used in Todorovic v Waller

The recommended discount rate of 3% was intended to

"make the appropriate allowance for inflation, for future changes in rates of wages generally or of prices, and for tax ... upon income from investment of the sum awarded."

It is also clear that the Court had no unified view on the magnitude of each factor. As Gibbs CJ and Wilson J said:

"...the Court is forced to make a judicial guess as to the difference between prevailing interest rates on safe investments and the rate of inflation."

"...notional tax can be taken into account only in the broadest way, by making an adjustment to the discount rate, and it is impossible to make even a pretence of accuracy in doing so."

Gibbs and Wilson would have chosen a discount rate of 4%, but concurred with the 3% that the majority of the court were prepared to accept. Stephen and Murphy thought a zero discount rate appropriate, Mason 2%, and Aicken and Brennan accepted the 3%.

Stephen commented on the very special nature of the injured plaintiff as an investor:

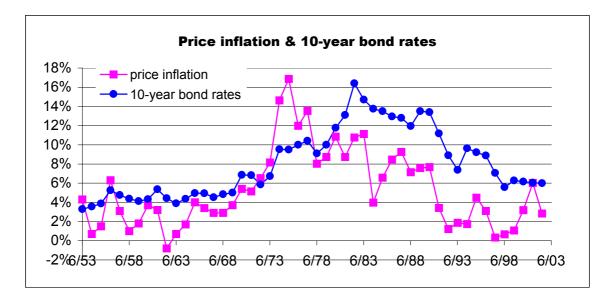
"notional investment ... must be such as such as will yield a regular and certain income; and it must also be a risk-free investment, because what it compensates for is the loss of a risk-free future stream of earnings, rendered risk-free by having been reduced so as to allow for vicissitudes."

Evidence about investment yields, inflation & taxation

Mason quoted evidence by economist Neville Norman about the differences between 10-year Commonwealth bond rates and consumer price inflation:

Period	10-year bond rate - CPI inflation
1953-1970	vicinity of 3%
1970-1980	-1.1%

With hindsight, 1970 to 1980 was the only period in which price inflation was substantially above 10-year bond rates. Over the last 50 years, 10-year bond rates have on average exceeded price inflation by about 2.7% (see the following graph). In evidence, Norman conceded that the current real interest rate was 3%, based on a long term bond rate of 13% and then current expected inflation of 10%.



Mason also quoted evidence by actuary Peter Szabo that, given the age and lost earning capacity of the plaintiff, the impact of tax on a fund invested in 13% bonds was to reduce the overall yield by about 5% pa. Economist Michael Porter gave evidence that a portfolio of 10-15% in government securities, 30-40% in debentures and shares and 40-50% in real estate would have given a real interest rate from 1953 to the seventies of about 5%. Interestingly, the judges who paid most attention to economic data chose low discount rates (Stephen 0%, Mason 2%).

Applications of Todorovic v Waller to RTA v Cremona

It is clear that all the judges in Todorovic v Waller thought it appropriate to allow for the detrimental effects of future inflation on the plaintiff. If not, they would have logically adopted the 13% then available on long-term Commonwealth bonds, less some allowance for taxation, as a reasonable discount rate.

Inflation affects the value of lost superannuation benefits in several ways

- superannuation fund investment returns are likely to be higher in periods of high inflation (although some years can give low returns and high inflation)
- superannuation contributions are usually a fixed percentage of wages, and will thus increase with wage inflation
- superannuation tax thresholds are likely to increase broadly in line with inflation over long periods (a similar assumption is made in assuming a constant deduction from earnings to allow for income taxes).
 - the purchasing power of the after-tax superannuation proceeds will be reduced by price inflation .

Approximate allowances for future inflation

A reasonable indication of future inflation can be obtained by comparing the yields of selected Commonwealth securities. For example, yields on 13/9/02 of fixed coupon and capital indexed bonds maturing in 2015 were quoted in the Financial Review of 16/9/02 as

Type of bond	Yield %pa
Fixed coupon	5.57%
Capital index	3.39%
Implied inflation	2.18%

A judicial guess as to "the difference between prevailing interest rates on safe investments and the rate of inflation" might thus reasonably be about 3% at the present time.

The Commonwealth has been issuing capital-indexed bonds since July 1985. The differences between the yields of long-term fixed and indexed bonds provide a handy measure of the capital market's view about consumer price inflation. But more importantly, these are real investments. An injured person could buy indexed bonds, and thus be largely protected against the risks of investment fluctuations and price inflation.

Assumptions in se	ample calc	alations	

Assumptions in sample calculations

Assumption	Value
age at judgement of injured person	35
assumed retirement age	65
assumed earnings per week	972.1
assumed employer contribution rate	9.0%
assumed fund accumulation rate pa	9.0%
assumed future inflation rate	2.0%
assumed tax on contributions	15.0%
statutory discount rate	5.0%
calculation date	1/7/02

The assumed earnings are those for a full-time adult male in May 2002, as published by the Australian Bureau of Statistics in "Average weekly earnings Australia May 2002" (catalogue no 6302.0). The assumed fund accumulation rate is based on the 10-year average return of 8.8% for growth funds in the 10 years to 30/6/02, as well as the higher returns in earlier periods (A).

Results of sample calculations

Basis	Appendix	Value of super	Super as % of
			earnings
As in RTA v Cremona, with 9% accumulation 9% accumulation and 2% inflation 7% real accumulation	B C D	125334 74992 77587	20.8% 12.4% 12.9%

Following the calculation methods apparently used in RTA v Cremona, together with an assumed fund accumulation rate of 9%, I have estimated the value of the after-tax superannuation lump sum as about \$125,000, ie about 20.8% of the value of lost earnings of about \$603,000. No allowance has been made for vicissitudes.

Making explicit allowances for the effects of 2% pa inflation on contributions, taxation and purchasing power, I have estimated the present value of the after-tax superannuation as about \$75,000, or about 12.4% of the value of lost earnings. This modest assumption about future inflation dramatically reduces the estimated value of superannuation.

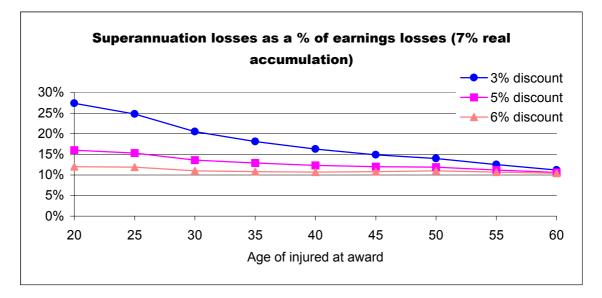
Calculations with a real accumulation rate of 7% pa, and no other allowance for inflation, estimated the present value of the superannuation as about \$78,000, or 12.9% of the value of lost earnings. These calculations are simpler than those making explicit allowances for inflation, but give broadly similar results.

	Superannuation losses as a % of earnings losses							
Age	7% real ea	arnings accu	mulation	9% real ea	9% real earnings accumulation			
	Discount	Discount	Discount	Discount	Discount	Discount		
	3% pa	5% pa	6% pa	3% pa	5% pa	6% pa		
20	27.4%	16.0%	12.0%	46.7%	27.3%	20.5%		
25	24.8%	15.3%	11.9%	40.3%	24.9%	19.3%		
30	20.5%	13.6%	11.0%	33.5%	22.2%	17.9%		
35	18.1%	12.9%	10.8%	26.0%	18.4%	15.4%		
40	16.3%	12.3%	10.7%	21.5%	16.3%	14.1%		
45	14.9%	12.0%	10.8%	18.4%	14.8%	13.2%		
50	14.0%	11.9%	11.0%	16.3%	13.9%	12.8%		
55	12.5%	11.2%	10.7%	13.8%	12.5%	11.8%		
60	11.2%	10.6%	10.4%	11.8%	11.2%	10.9%		

Superannuation losses as percentages of earnings losses

Particularly in jury trials, it can be very helpful to have some idea of value of superannuation losses, as a percentage of the value of earnings losses. For example, a jury may decide that an award of \$500,000 is appropriate for the earnings losses of a person aged 35. The above table suggests that, with a statutory discount rate of 5% pa, superannuation losses may be worth about 12.9% of

earnings losses, ie about \$64,500.



Comments on superannuation values

Statutory superannuation contributions are now 9% of most earnings, and a 15% tax applies on contributions (as well as surcharges for those on higher incomes). Taxes on average earnings are generally a little higher than 15%, and taxes on accumulated lump sums are zero up to a threshold. There is thus a small tax advantage in superannuation as compared with earnings, and this is why even at the oldest ages the superannuation awards are worth at least 10% of those for earnings.

At younger ages, the difference between the assumed accumulation rate and the discount rate is crucial. In Tasmania, with a 7% discount rate, a 7% assumed accumulation rate would give superannuation equal to about 10% of earnings at all ages. By contrast, a 3% discount rate with a 9% assumed accumulation rate would give superannuation equal to about 47% of the earnings award for an injured person aged 20.

Estimates for each age from 20 to 64 are in appendix E. Percentages for persons under 20 are identical to those aged 20, as the estimates assume no employment before age 21. The estimates are for persons earning about \$50,000 a year, and those on much higher or much lower earnings may have superannuation percentages a little lower than those in the table.

Conclusion

Cremona v RTA is bad mathematics, but cannot be ignored in any lower court. If inflation is to be ignored, then for consistency benefit taxes should be applied before discounting.

Date	Price	Wage	10 year	Fund	10-year
	inflation	inflation	bond	earning	fund
			rates	rates	earning
					rates
30/6/53	4.3%	8.8%	3.3%		
30/6/54	4.3% 0.7%	8.8% 7.7%	3.5% 3.6%		
30/6/55	1.5%	6.0%	3.0%		
	6.3%	0.0 <i>%</i> 7.1%			
30/6/56 30/6/57	3.1%	7.1% 5.3%	5.3%		
	1.0%	5.3 <i>%</i> 2.8%	4.8%		
30/6/58			4.4%		
30/6/59	1.8%	3.2%	4.1%		
30/6/60	3.7%	8.0%	4.3%		
30/6/61	3.2%	5.3%	5.4%		
30/6/62	-0.8%	2.1%	4.4%	44.00/	
30/6/63	0.7%	2.2%	3.9%	11.3%	
30/6/64	1.7%	4.8%	4.4%	13.6%	
30/6/65	4.0%	7.4%	5.0%	-8.7%	
30/6/66	3.4%	3.7%	4.9%	8.4%	
30/6/67	2.9%	8.0%	4.5%	12.0%	
30/6/68	2.9%	5.4%	4.8%	41.4%	
30/6/69	3.7%	8.4%	5.0%	8.3%	
30/6/70	5.4%	8.6%	6.9%	-1.5%	
30/6/71	5.1%	11.2%	6.8%	2.4%	
30/6/72	6.5%	10.3%	5.9%	20.6%	10.8%
30/6/73	8.2%	8.6%	6.7%	0.1%	9.7%
30/6/74	14.6%	15.9%	9.5%	-14.5%	6.9%
30/6/75	16.9%	25.5%	9.5%	8.7%	8.6%
30/6/76	12.0%	14.4%	10.0%	21.3%	9.9%
30/6/77	13.5%	12.4%	10.4%	7.3%	9.4%
30/6/78	8.0%	9.9%	9.1%	15.5%	6.8%
30/6/79	8.7%	7.7%	10.0%	13.9%	7.4%
30/6/80	10.8%	9.9%	11.8%	37.5%	11.3%
30/6/81	8.7%	13.5%	13.1%	17.1%	12.8%
30/6/82	10.8%	7.9%	16.4%	-2.8%	10.4%
30/6/83	11.1%	11.4%	14.7%	26.4%	13.0%
30/6/84	4.0%	8.4%	13.8%	14.2%	15.9%
30/6/85	6.6%	6.8%	13.5%	21.5%	17.2%
30/6/86	8.5%	6.4%	13.0%	32.0%	18.3%
30/6/87	9.3%	6.2%	12.8%	31.7%	20.7%
30/6/88	7.1%	6.0%	12.0%	1.3%	19.3%
30/6/89	7.6%	6.8%	13.5%	9.8%	18.9%
30/6/90	7.7%	6.6%	13.4%	10.8%	16.2%
30/6/91	3.4%	5.9%	11.2%	9.8%	15.5%
30/6/92	1.2%	2.9%	8.9%	11.2%	16.9%
30/6/93	1.9%	2.0%	7.4%	11.5%	15.4%
30/6/94	1.7%	2.9%	9.6%	8.1%	14.8%
30/6/95	4.5%	3.4%	9.2%	7.3%	13.4%

Appendix A : Prices, wages & investment yields

30/6/96	3.1%	2.5%	8.9%	10.4%	11.2%
30/6/97	0.3%	3.0%	7.1%	19.2%	10.0%
30/6/98	0.7%	3.2%	5.6%	9.2%	10.7%
30/6/99	1.1%	2.4%	6.3%	8.2%	10.6%
30/6/00	3.2%	2.2%	6.2%	13.0%	10.8%
30/6/01	6.0%	5.5%	6.0%	5.7%	10.4%
30/6/02	2.8%	4.2%	6.0%	-4.5%	8.8%
Average 50 yrs to 6/02	5.3%	7.0%	8.0%		
Average 40 yrs to 6/02	6.0%	7.4%	8.9%	11.7%	
Average 30 yrs to 6/02	6.8%	7.5%	10.2%	12.0%	12.7%
Average 20 yrs to 6/02	4.6%	4.9%	9.9%	12.8%	14.4%
Average 10 yrs to 6/02	2.5%	3.1%	7.2%	8.8%	11.6%

Most of the above statistics are from the Reserve Bank of Australia's website (rba.gov.au). Older figures are from "Australian economic statistics 1949-50 to 1994-95", RA Foster, Reserve Bank of Australia, June 1996. Fund earning rates from 86-87 on are InTech Pty Limited weighted average reurns for growth funds

Date	Balance	Super	Taxes on	Invest-	Balance	
	at start	contri-	contri-	ment	at end	
	of year	butions	butions	earnings	of year	
1/07/02	0	4565	685	175	4055	
1/07/03	4055	4565	685	540	8475	
1/07/04	8475	4565	685	937	13293	
1/07/05	13293	4565	685	1371	18544	
1/07/06	18544	4565	685	1844	24268	
1/07/07	24268	4565	685	2359	30507	
1/07/08	30507	4565	685	2920	37308	
1/07/09	37308	4565	685	3532	44721	
1/07/10	44721	4565	685	4199	52801	
1/07/11	52801	4565	685	4927	61608	
1/07/12	61608	4565	685	5719	71207	
1/07/13	71207	4565	685	6583	81671	
1/07/14	81671	4565	685	7525	93076	
1/07/15	93076	4565	685	8551	105508	
1/07/16	105508	4565	685	9670	119059	
1/07/17	119059	4565	685	10890	133829	
1/07/18	133829	4565	685	12219	149929	
1/07/19	149929	4565	685	13668	167478	
1/07/20	167478	4565	685	15248	186606	
1/07/21	186606	4565	685	16969	207455	
1/07/22	207455	4565	685	18846	230181	
1/07/23	230181	4565	685	20891	254952	
1/07/24	254952	4565	685	23120	281953	
1/07/25	281953	4565	685	25550	311384	
1/07/26	311384	4565	685	28199	343464	
1/07/27	343464	4565	685	31086	378430	
1/07/28	378430	4565	685	34233	416544	
1/07/29	416544	4565	685	37664	458088	
1/07/30	458088	4565	685	41403	503371	
1/07/31	503371	4565	685	45478	552729	
Factor to di	scount to pres	ent values	at 5% pa		0.23138	
Present val	127889					
Tax on lum	2555					
Value of aft	125334					
	weekly earning				733.6	
	of \$1 pw to a	-			822	
	er-tax weekly	-			603019	
	per as % of va	ě	ings		20.8%	

Appendix B : Sample calculations as in RTA v Cremona

Date	Balance	Super	Taxes on	Invest-	Balance	
	at start	contri-	contri-	ment	at end	
	of year	butions	butions	earnings	of year	
1/07/02	0	4565	685	175	4055	
1/07/03	4055	4656	698	543	8556	
1/07/04	8556	4750	712	952	13545	
1/07/05	13545	4845	727	1404	19067	
1/07/06	19067	4941	741	1905	25173	
1/07/07	25173	5040	756	2458	31915	
1/07/08	31915	5141	771	3069	39354	
1/07/09	39354	5244	787	3742	47554	
1/07/10	47554	5349	802	4484	56585	
1/07/11	56585	5456	818	5301	66524	
1/07/12	66524	5565	835	6200	77454	
1/07/13	77454	5676	851	7188	89467	
1/07/14	89467	5790	868	8273	102661	
1/07/15	102661	5906	886	9465	117146	
1/07/16	117146	6024	904	10774	133040	
1/07/17	133040	6144	922	12209	150471	
1/07/18	150471	6267	940	13782	169580	
1/07/19	169580	6392	959	15507	190521	
1/07/20	190521	6520	978	17396	213459	
1/07/21	213459	6651	998	19466	238578	
1/07/22	238578	6784	1018	21731	266075	
1/07/23	266075	6919	1038	24211	296168	
1/07/24	296168	7058	1059	26925	329092	
1/07/25	329092	7199	1080	29894	365105	
1/07/26	365105	7343	1101	33140	404487	
1/07/27	404487	7490	1123	36690	447543	
1/07/28	447543	7639	1146	40571	494608	
1/07/29	494608	7792	1169	44813	546044	
1/07/30	546044	7948	1192	49448	602248	
1/07/31	602248	8107	1216	54512	663651	
Tax on lum	76566					
After-tax lui	587085					
Factor to al	0.55207					
Lump sum	324112					
Factor to di	scount to pres	ent values	at 5% pa		0.23138	
Present val	ue of after-tax	lump sum			74992	
Value of su	per as % of va	alue of earn	ings		12.4%	
	1 5					

Appendix C : Sample calculations allowing for inflation

Date	Balance	Super	Taxes on	Invest-	Balance
	at start	contri-	contri-	ment	at end
	of year	butions	butions	earnings	of year
	,				,
1/07/02	0	4565	685	136	4016
1/07/03	4016	4565	685	417	8314
1/07/04	8314	4565	685	718	12912
1/07/05	12912	4565	685	1040	17832
1/07/06	17832	4565	685	1384	23096
1/07/07	23096	4565	685	1753	28729
1/07/08	28729	4565	685	2147	34756
1/07/09	34756	4565	685	2569	41206
1/07/10	41206	4565	685	3020	48106
1/07/11	48106	4565	685	3503	55490
1/07/12	55490	4565	685	4020	63390
1/07/13	63390	4565	685	4573	71844
1/07/14	71844	4565	685	5165	80889
1/07/15	80889	4565	685	5798	90568
1/07/16	90568	4565	685	6476	100924
1/07/17	100924	4565	685	7200	112004
1/07/18	112004	4565	685	7976	123861
1/07/19	123861	4565	685	8806	136547
1/07/20	136547	4565	685	9694	150122
1/07/21	150122	4565	685	10644	164647
1/07/22	164647	4565	685	11661	180188
1/07/23	180188	4565	685	12749	196818
1/07/24	196818	4565	685	13913	214611
1/07/25	214611	4565	685	15159	233650
1/07/26	233650	4565	685	16491	254022
1/07/27	254022	4565	685	17917	275819
1/07/28	275819	4565	685	19443	299143
1/07/29	299143	4565	685	21076	324099
1/07/30	324099	4565	685	22823	350802
1/07/31	350802	4565	685	24692	379375
Tax on lum	p sum at prese	ent tax rate	s		44050
After-tax lump sum					
Factor to discount to present values at 5% pa					
Present val	ue of after-tax	lump sum			77587
Value of su	per as % of va	lue of earn	ings		12.9%

Appendix D : Sample calculations at real accumulation rate

The above calculations assume a real accumulation rate of 7% :

assumed fund accumulation rate	9.0%
less assumed inflation rate	-2.0%
real accumulation rate	7.0%

Age	7% real earnings accumulation			9% real earnings accumulation		
	Discount 3% pa	Discount 5% pa	Discount 6% pa	Discount 3% pa	Discount 5% pa	Discount 6% pa
21	27.4%	16.0%	12.0%	46.7%	27.3%	20.5%
22	26.7%	15.8%	12.0%	44.9%	26.6%	20.2%
23	26.1%	15.6%	12.0%	43.3%	26.0%	19.9%
24	25.4%	15.5%	11.9%	41.7%	25.4%	19.6%
25	24.8%	15.3%	11.9%	40.3%	24.9%	19.3%
26	24.2%	15.2%	11.9%	38.9%	24.4%	19.1%
27	23.7%	15.0%	11.9%	37.5%	23.9%	18.8%
28	23.1%	14.9%	11.8%	36.2%	23.4%	18.6%
29	22.6%	14.8%	11.8%	34.8%	22.8%	18.2%
30	20.5%	13.6%	11.0%	33.5%	22.2%	17.9%
31	20.0%	13.4%	10.9%	32.3%	21.7%	17.6%
32	19.5%	13.3%	10.9%	31.1%	21.2%	17.3%
33	19.0%	13.1%	10.8%	30.0%	20.7%	17.1%
34	18.6%	13.0%	10.8%	29.0%	20.3%	16.8%
35	18.1%	12.9%	10.8%	26.0%	18.4%	15.4%
36	17.7%	12.7%	10.7%	25.0%	17.9%	15.1%
37	17.3%	12.6%	10.7%	24.0%	17.5%	14.8%
38	17.0%	12.5%	10.7%	23.1%	17.1%	14.6%
39	16.6%	12.4%	10.7%	22.3%	16.7%	14.3%
40	16.3%	12.3%	10.7%	21.5%	16.3%	14.1%
41	16.0%	12.2%	10.7%	20.8%	15.9%	13.9%
42	15.7%	12.2%	10.7%	20.1%	15.6%	13.7%
43	15.4%	12.1%	10.7%	19.5%	15.3%	13.5%
44	15.2%	12.1%	10.7%	18.9%	15.0%	13.4%
45	14.9%	12.0%	10.8%	18.4%	14.8%	13.2%
46	14.7%	12.0%	10.8%	17.9%	14.5%	13.1%
47	14.6%	12.0%	10.9%	17.4%	14.3%	13.0%
48	14.4%	12.0%	11.0%	17.0%	14.2%	12.9%
49	14.3%	12.1%	11.1%	16.6%	14.0%	12.9%
50	14.0%	11.9%	11.0%	16.3%	13.9%	12.8%
51	13.6%	11.8%	10.9%	15.9%	13.7%	12.7%
52	13.3%	11.6%	10.9%	15.3%	13.4%	12.5%
53	13.0%	11.5%	10.8%	14.8%	13.1%	12.3%
54	12.7%	11.4%	10.7%	14.3%	12.8%	12.1%
55	12.5%	11.2%	10.7%	13.8%	12.5%	11.8%
56	12.2%	11.1%	10.6%	13.4%	12.3%	11.6%
57	11.9%	11.0%	10.6%	12.9%	11.9%	11.5%
58	11.7%	10.9%	10.5%	12.5%	11.9%	11.3%
58 59	11.4%	10.9%	10.5%	12.5%	11.4%	11.3%
60	11.4%	10.8%	10.4%	11.8%	11.4%	10.9%
60 61						
62	11.0% 10.7%	10.5%	10.3% 10.3%	11.4%	11.0% 10.7%	10.7%
	10.7%	10.4%	10.3%	11.1%	10.7%	10.6%
63 64	10.5% 10.3%	10.3%	10.2% 10.2%	10.7%	10.5% 10.3%	10.4%
04	10.3%	10.2%	10.2%	10.4%	10.3%	10.3%

Appendix E : Superannuation awards as a % of earnings awards