RESPONSE TO THE FEBRUARY 2011 FINANCE UPDATE REGARDING COMMONWEALTH & MILITARY SUPERANNUATION

The imprecise data and flawed assumptions of the Department of Finance now revealed

By Peter Thornton

3/30/2011

This paper provides a critical analysis of the latest Finance "Update" to the Matthews Review regarding proposed new indexation arrangements for Commonwealth and Military Defined Benefit Superannuation Schemes. Policy Makers, Representative Organisations and individuals alike, will quickly come to recognise that the estimates generated under the Matthews' Review (and now in this latest Finance Update) can only be treated with extreme caution and scepticism because of the Establishment's use of imprecise data, flawed assumptions and ill conceived ideas.

Contents

GLOSSARY AND ACKOWLDEGEMENTS

1922 Scheme	Commonwealth Superannuation Act 1922
ABS	Australian Bureau of Statistics
ACPSRO	Australian Council of Public Sector Retiree Organisations
AGA	Australian Government Actuary
CPI	Consumer Price Index
CSS	Commonwealth Superannuation Scheme, 1976
DFRB	Defence Forces Retirement Benefits Scheme
DFRDB	Defence Force Retirement and Death Benefits Scheme
DFWA	Defence Force Welfare Association
Finance	Department of Finance and Deregulation
LTCR	Long Term Cost Report
Mercer	Mercer (Australia) Proprietary Limited
MSBS	Military Superannuation and Benefits Scheme
MTAWE	Male Total Average Weekly Earnings
TAL	Future Fund Target Asset Level
SCOA	Superannuated Commonwealth Officer's Association

Acknowledgements:

Whilst this paper remains substantially the work of the Author, it would certainly not have been refined to its current state without the critical review and sound suggestions from key executives of SCOA, DFWA and ACPSRO. Their identities (and that of a lone Actuary) will remain secret to protect the innocent .... but they know who they are .... THANKS!

Also, whilst the Author is somewhat critical of COMSUPER in the first section of this paper, he would nevertheless like to express his sincere appreciation to the staff of COMSUPER for their continued professionalism and support in the provision of data and advice that underpins the Author's analysis.

Finally, this report is dedicated to all those pensioners who have been forced into early retirement because of injury or illness and it is equally dedicated to the war widows, widows and orphans of those who have fallen; all of whom are suffering from the indignation of paltry income streams because of inadequate and broken indexation.

INTRODUCTION & EXECUTIVE SUMMARY

The following research paper provides Policy Makers, Representative Organisations and Individuals alike, a critical analysis and detailed response to items that have been raised by the Department of Finance (Finance) in their 'Update' to the 2008 Matthews' Review[1], dated the 18 Feb 2011 (found here 'Pension Indexation Update')[2].

The purpose of this paper is to highlight, principally to Policy Makers, that they have been, and continue to be, misled by DoFD inter alia because their estimates lack precision both in terms of the data quality that has been used and also because of flawed assumptions and ill conceived ideas that have prevailed since the Matthews' Review.

This report details:

- How Finance has failed to apply basic quality checks in the use of external (and its own generation of) data in the calculation of averages under Matthews and in this latest Update. The reader will see firsthand errors on 'annual average pensions' for DFRDB, and by Finance's own hand, how DFRDB pensions have on average **eroded by at least 26%**.
- How Finance, its commercial consultants and the Australian Government Acutary (AGA) have grossly overstated the estimates by using the flawed assumption of "increased pension take up rates". This assumption which fails historical scrutiny could easily account for a **$10Billion error** in the liability estimates of the PSS and MSBS schemes alone.
- How FInance has not disclosed by its own hand the real message of the independent actuarial firm (Cumpston Sarjeant) who stated that they were '***not asked to review the appropriateness of base assumptions'*** and that they considered the **"take up rate assumptions"** to be ***'reasonable but highly uncertain'***.
- How the use of the Notional Employer Contribution Rates (NECR) by Finance fails to tell the whole story behind the design of Defined Benefit Schemes with the DFRDB being analysed in detail.
- How Finance is not compliant with the Australian Standard by only presenting the "fire and brimstone" side of the balance sheet by not accounting for other contingent assets / offsets in their estimates; such as the revised clawback of 30%, the $71.6Billion and $22Billion in funds under management within the Future Fund and ARIA respectfully. They continue to fail in not providing policy makers with the real "net cost"!
- How Finance has, through its Red Book and in this latest update, continue to artificially inflate and misinform Policy Makers (i.e. in the context of Commonwealth and Military Super) by **overstating the unfunded liabilities by approximately $25Billion.**

By the end of this paper the reader should be under no illusion that the estimates generated by Finance and its subsidiaries have failed even basic arithmetic at the expense of 600,000 eligible recipients of Commonwealth and Military Defined Benefits Superannuation Schemes.

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[1] '*Review of Pension Indexation Arrangements in Australian Government Civilian and Military Superannuation Schemes*', Trevor Matthews, December 2008.

[2] *The structure of this response matches the Finance Update and some headings throughout this response will link the reader directly back to the corresponding dialogue in the Finance Update.*

THE ANALYSIS

Overview and First Impressions

On review of the draft Finance Update and now the published document (Finance link is here), one gets the distinct impression that a "shot gun" approach is being applied by Finance to try and dilute and defray concerns and specific questions that have been raised and explicitly asked; particularly unanswered questions on notice in the Senate by Senator Humphries[3].

Representative Organisations and Policy Makers should insist that the original and any subsequent questions be directly and explicitly answered in considerable analytical detail, because the estimates of this latest Update lack considerable depth and transparency[4].

Updated Cost Estimates

On review of the cost estimates cited, the fact remains that Finance, Treasury, Mercer and now presumably (by implication) Cumpston Sarjeant, would all appear to have continued to perpetuate cost estimates on a foundation of flawed assumptions, imprecise data and ill conceived ideas.

To illustrate this point on the basis of imprecise data, the following observations are offered:

Dates	Contributions	Annual Pensions Paid	Commutation Payments	Transfer Values (Out)	Contributors	# of Retirement Pay Recipients	# of Invalidity Pay Recipients	# of Spouse Recipients	# of Orphan Recipients	# of Redundancy Recipients	Total # of Pensioners as calc by Thornton	Av Retirement Pay as calculated by Thornton	AV Retirement Pay as reported by COMSUPER	CPI crediting rate (% pa)
1995-1996	$50,078,000	$709,898,000	$111,234,000	$864,000	20,485	38,839	2,999	4,701	0	0	46,539	$15,253.83	$15,254	3.7
1996-1997	$48,026,000	$772,949,000	$115,125,000	$518,000	18,732	39,729	2,990	6,756	0	0	49,475	$15,623.02	$15,623	1.3
1997-1998	$45,541,000	$798,643,000	$148,648,000	$478,000	16,880	40,630	2,979	6,333	627	0	50,569	$15,793.13	$15,955	0.0
1998-1999	$42,034,134	$825,676,000	$153,913,000	$0	14,992	41,807	3,016	6,540	589	0	51,952	$15,893.06	$15,964	1.1
1999-2000	$38,542,000	$889,949,000	$144,604,000	$0	13,341	42,655	3,047	6,774	536	0	53,012	$16,787.69	$16,788	2.8
2000-2001	$35,510,000	$899,125,000	$181,824,000	$0	11,685	43,719	3,109	6,938	502	0	54,268	$16,568.24	$16,568	6.0
2001-2002	$31,925,000	$974,878,000	$141,628,000	$0	9,971	44,322	3,141	7,141	484	0	55,088	$17,696.74	$17,697	2.9
2002-2003	$29,422,000	$1,015,868,000	$176,512,000	$0	8,763	44,894	3,129	7,297	551	0	55,871	$18,182.38	$18,617	3.4
2003-2004	$28,229,000	$1,052,283,000	$149,567,000	$0	7,979	45,837	3,968	10,153	458	1,003	61,419	$17,132.86	$19,076	2.0
2004-2005	$27,717,000	$1,085,048,000	$164,680,000	$0	7,252	44,404	3,127	7,647	410	999	56,587	$19,174.86	$19,174	2.3
2005-2006	$26,083,408	$1,123,653,000	$168,554,000	$0	6,295	44,612	2,340	7,780	389	1,001	56,122	$20,021.61	$21,554	3.0
2006-2007	$23,184,716	$1,170,997,868	$160,640,000	$0	5,548	44,769	3,148	7,923	352	992	57,184	$20,477.72	$20,478	2.6
2007-2008	$25,311,828	$1,202,874,000	$118,385,000	$0	5,600	44,577	3,148	8,164	301	984	57,174	$21,038.83	$21,486	4.2
2008-2009	$24,769,662	$1,260,072,000	$155,905,000	$0	4,630	44,432	3,154	8,300	289	989	57,164	$22,043.10	$22,092	5.0
2009-2010	$22,362,485	$1,285,458,533	$95,492,000	$0	4,246	44,154	3,146	8,422	272	987	56,981	$22,559.42	$23,549	1.3

Table 1

[3] The final date of this writing is 30 Mar 2011. The Senate should be concerned that it has been six months now and no answers. What a joke!

[4] DoFD seems intent on only presenting the liabilities in broad terms by only referring to "Civilian" and "Military" schemes collectively without presenting data for each scheme individually. This amalgamation, together with a lack of detailed analytical data, makes in almost impossible to reverse engineer the estimates.

Table 1 reproduces, in part, the Defence Force Retirement Benefits (DFRB) / Defence Force Retirement & Death Benefits (DFRDB) annual data that has been compiled by the author and that was prepared and released by COMSUPER in their annual reports to Parliament. In doing so, COMSUPER also included a calculation of the "average annual retirement pay / pension" statistic for each year (this can be seen in the third last column from the right). The **red** entries[5] in this column indicate errors that the author has uncovered in COMSUPER's reported calculations as set against the author's own calculations in the preceding column.[6]

Ironically, COMSUPER's 2009-2010 average pension calculation was suppose to be a correction from an original error of $39,256[7]. In any case, and for this year alone, the corrected figure of $23,549 still represents a per capita difference/error of approximately $1,000 (or viewed another way ... a $57Million error for all recipients on average).

Whilst the reader may consider this to be nit picking, it must be remember that the aggregation of a number of small errors here and there can compound the size of the liability over the long term. I am sure by the time you get the end of this paper you will have a new perspective of this fact.

In concert with the foregoing, Table 2 below is reproduced directly from the Finance Update (i.e. from Question & Answer 17 (Finance link).

	Scheme						
	DFRB	DFRDB	MSBS	1922 Scheme	CSS	PSS	Total
Number of pensioners	4,196	52,753	7,227	6,017	109,596	18,818	**198,607**

Table 2

Here again we see errors in the precision of data being presented directly by Finance because, by comparison, COMSUPER's annual report data is reproduced at Table 3.[8]

	DFRDB	DFRB	Total
Retirement	43 372	1060	44 432
Invalidity	2428	726	3154
Reversionary			
- spouses	5904	2396	8300
- children and orphans	282	7	289
Redundancy	988	1	989
Total pensions	52 974	4190	57 164

Table 3

[5] The red entry in Table 1 for 1996-1997 highlights a retrospective and subsequent correction by COMSUPER in their 1997-1998 report.

[6] The author has undertaken a careful review of all these errors and has found (in most cases) where these errors have occurred. The main cause has been predominately where DFRB specific data has not been included in the aggregation of the statistic for "total # of pensioners".

[7] This correction came about because of the keen observations of Military Retirees, not least that of Major Bernie McGurgan (Rtd).

[8] Comsuper/DFRDB 2008-2009 Annual Report http://www.dfrdb.gov.au/_lib/pdf/dfrdb_0809_.pdf, Table 5, page 32.

It begs the question: Why are there differences in totals when the demographic numbers have been derived from the same source and have been formally published and tabled before Parliament?

In addition to errors in the precision of base data, Finance seems to have a propensity to artificially inflate averages. By way of example, Table 4 is reproduced in part directly from the Matthews' Review.[9]

DFRDB							
Retirement Year		2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
New Pensioners	Number	1,086	818	828	778	729	485
	Average Pension 2007–08	$23,959	$25,424	$27,686	$27,980	$27,906	$29,740
Those who took full Pension	Number	42	38	29	25	17	21
	Average Pension 2007–08	$34,132	$31,144	$39,328	$50,228	$42,206	$46,377
Those who took part Pension and part Lump Sum	Number	1,044	780	799	753	712	464
	Average Pension 2007–08	$23,550	$25,145	$27,263	$27,241	$27,565	$28,987
	Average Lump Sum	$121,200	$133,973	$148,895	$153,410	$160,006	$168,406

Table 4

On inspection, the reader will quickly see that there is a **whopping $7,948 difference** in the 2007-2008 stated "average pension" figures as compared to the figures for the same period from Table 1 of this document[10]. However, some consideration should be given for the fact that the main population of retirees from Table 1 also has a percentage of revisionary pensioners equalling approximately 14.3% of all pensioners; the resultant pension still represents a **huge difference of approximately $7522**.

When the reader considers that as at 30 June 2007, 58% of all retirement pay in the DFRDB was less than $20,000, it just reinforces the erosion that has occurred.

Contrary to what Finance tries to portray in Matthews (i.e. that average pensions are high), by their own hand these figures only reinforce the fact that on average, **the relativity of one's <u>retirement pay</u>, and therefore one's purchasing power and standard of living, has been <u>significantly eroded on average by an incredible 26%!</u>.**[11]

Finance's lack of precision and quality assurance in the presentation of data together with their attempts to mislead Policy Makers significantly undermines the confidence that 600,000 eligible recipients and their representatives have in any advice being tendered to the Parliament.

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[9] Matthews Review, Table 2 Appendix F, pg 58.
http://www.finance.gov.au/superannuation/docs/Pension_Review.pdf
[10] This difference has been calculated between the Matthews figure and that of the author's figure in the proceeding table. If the COMSUPER figure was to prevail then the difference would be approx $1,000 less.
[11] This figure is basis 2007-2008. The percentage erosion would be considerably larger if the median retirement pay benefit was considered here.

This now begs the question:

"Were averages used by Finance (and their subsidiaries) in the calculation of any estimates in the Matthews' Review and this new Finance Update? "

If the answer is yes, then apart from the errors presented within this document, averages significantly overstate the situation faced by many retiree recipients, and would in turn (and again) generally overstate the estimates calculated.[12]

Peer Review of Actuarial Advice

Finance's advice in the Update clearly shows a lack of transparency and perhaps even a degree of aloofness by the Actuarial fraternity. Given the serious concerns that have been raised in the past and again within these pages, Policy Makers should insist that all actuarial assumptions be peered reviewed and validated by not only independent actuarial entities, but also from industry, academic and representative organisations that have the skills and a specific interest in such matters.

Given the high variability of the estimates that have been generated, and given the significance of this matter in relation to the retirement outcomes of 600,000 constituents, I believe the Senate Sub-Committee for Finance should be the approving authority and arbitrator on all assumptions used, and any future changes thereof, in the determination of Commonwealth superannuation liabilities.

Clawback

The new "clawback" figure is a welcome acknowledgement by Finance that the figure presented in the Matthews Review was considerably underestimated. However, given this revelation, it now begs the question:

How and why has there not been an effective reduction in the overall figures for the 2020 liability?

Given that Finance has stated under the heading "Assumptions" that the new Update utilises the same assumptions that were used in Matthews;   a new question now emerges:

How and what other parameters have significantly changed (within 3 years) that would explain the differential increase in the 2020 estimate?[13]

Assumptions

It has been reinforced in the new Update that Finance and the Australian Government Actuary (AGA) continue to perpetuate the assumed but flawed notion that new indexation will result in "increased take up rates of pensions" in lieu of (in part or in total) a lump sum for the PSS and MSBS.

Given the considerable significance of such an assumption on the calculation of the forward estimates, the question still remains:

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[12] The author believes that Finance inter alia should be utilising the full frequency distribution of payments (where available) in order to calculate and present the forward estimates with greater precision.

[13] The figures are now $61.0B and $87.8B as opposed to Matthews's $57B and $82B for the indexation mechanisms cited. This represents a $4B and $5.78B increase /error in the Matthews estimates of 2009. Again, we see a large variation in estimates that just don't seem to stack up.

"On what historical basis has this assumption been made and where's the hard data that substantiates such a proposition?"

The author believes that the establishment will be unable to adequately produce any evidence to support their assumption because the assumption fails to recognise that human nature will almost always gravitate to a "bird in the hand". This tendency will be even more the case as people approach retiring age (i.e. 55-60-65) because people instinctively realise that they only have about 20 years or so to live, if they're lucky.

It is highly unlikely that human nature will change in the foreseeable future (and in the context of the schemes in question) when members make their choice about the average size of lump sum they wish to access.

However, in order not to perpetuate the practice of presenting unsubstantiated assumptions or speculations about human behaviour or preferences, an analysis of over 40 years of DFRB/DFRDB payments data has been undertaken and is captured (in part) within the following graphs[14].

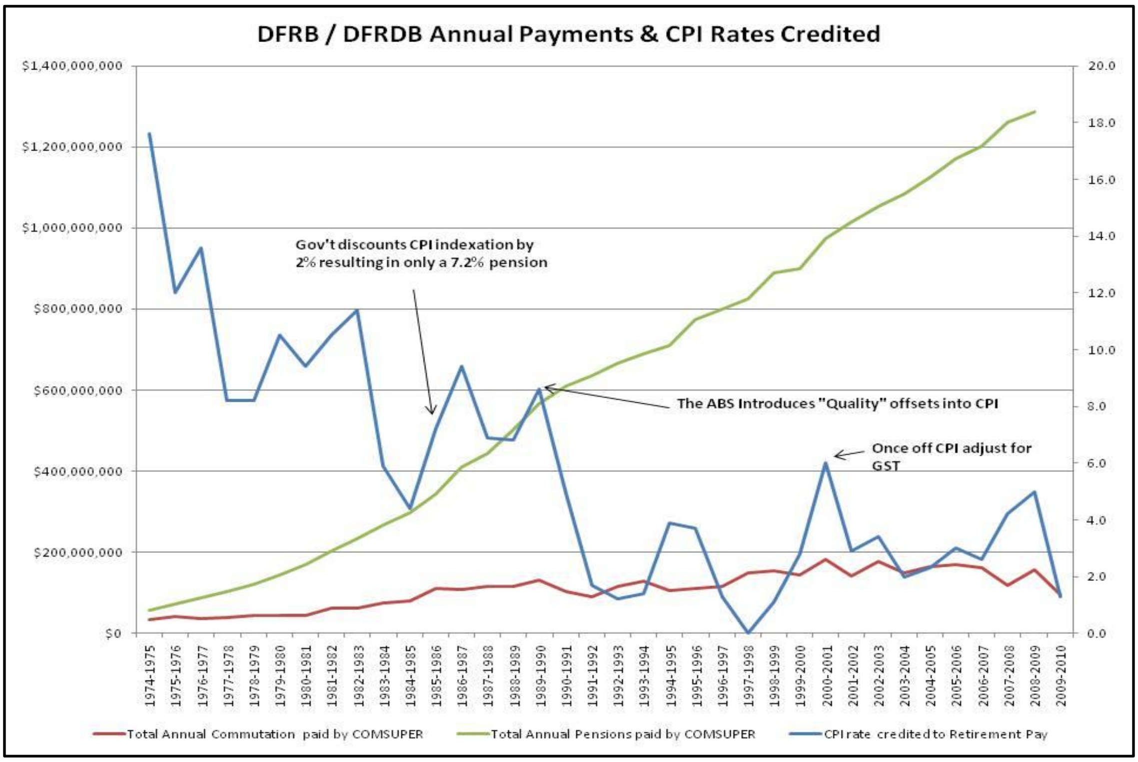

Figure 1

Firstly, it is considered important to show readers the history of payments data in its raw form so that you can see the growth in Pensions (green line) and Commutation (red line) over time. Overlayed upon these two projections is the Consumer Price Index ((CPI) ... blue line) that has been

[14] It was my intention to add CSS, PSS and MSBS data into this analysis but unfortunately the annual reports for these schemes did not generate a consistent and contiguous comparative data set that could be easily interpreted and analysed against the DFRB / DFRDB schemes. An FOI request has been submitted to COMSUPER but this request is yet to be satisfied.

credited to annual pensions, which explains, in part, the rise in pensions relative to commutation lump sums.

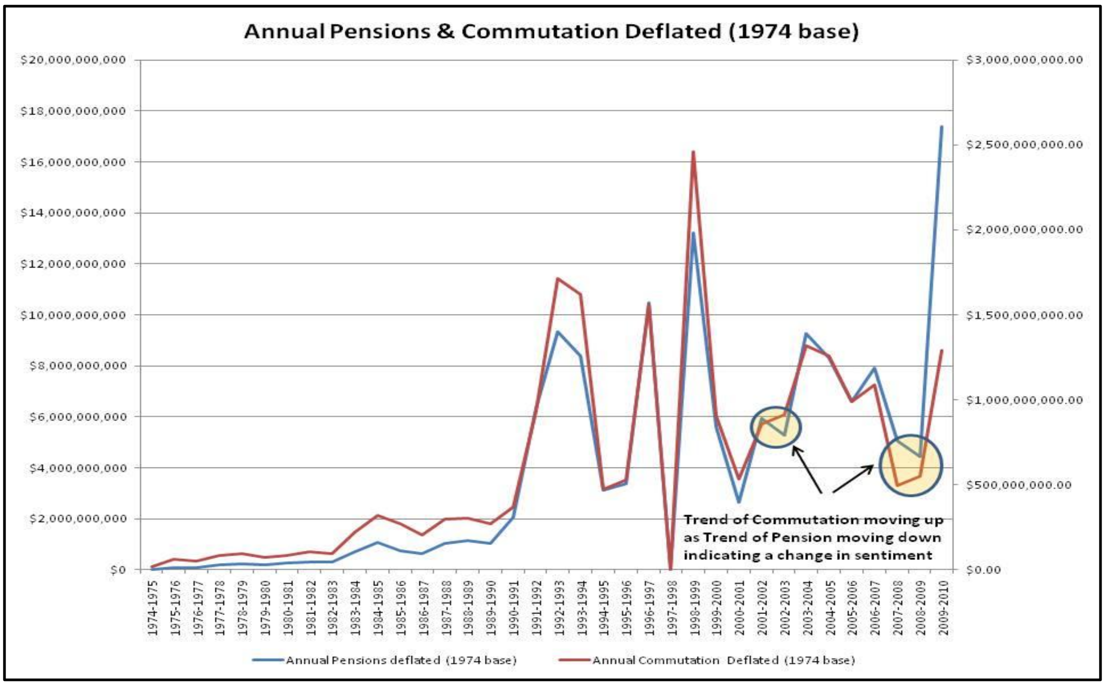

Figure 2

In the field of economics, we use a technique to deflate price-related time series in order to try and extract and evaluate underlying trends and/or cycles that maybe obscured by external forces such as inflation.

As can be seen in Figure 2., once you deflate the CPI crediting rates out of the pension and commutation projections from Figure 1, you can see a much clearer interrelationship between the two and the subsequent preferences of scheme members in general.

Whilst the deflated projections show some amplitude variation between pensions and commutation at various points in time, the projections nevertheless exhibit (almost without exception) the same trend in the peaks and troughs over time. For the purposes of our investigation, any amplitude variation is not overly important in the determination of a member's pension / lump sum preference here.

However, what is extremely important is where you can find divergences between commutation and pensions (i.e. where commutation moves out of sync with pensions) as can be seen in the areas marked by the circles. These two divergences show a clear change in member preferences, where the balance of individuals took more lump sum relative to pension; presumably because of a fear of the then ensuing Dot Com bubble and SARs epidemic (2000-2003), or the more recent Global Financial Crisis (2007-2009).

These two junctures demonstrate unequivocally that the "bird in the hand" principle reigned supreme, which brings into serious question the assumptions made by Finance inter alia. On the basis of this investigation and not withstanding possible variations in other schemes, the author believes that the only way Finance's assumption would hold true in the future is if somebody found a cure for death!

Given the advice and data contained within Cumpston Sarjeant's peer review, one can only guesstimate that there would be at least a $10Billion error in the combined forward estimates due to the multiplier effect of this single assumption alone.[15]

With the foregoing in mind, the historical evidence is clear that the Establishment's assumption of pension "take up rates" has no historical basis in fact when extreme levels of indexation percentages are present (i.e. extremely high rates of inflation had no effect on preferences). Therefore, it is strongly recommended that Policy Makers insist on having this assumption immediately removed from all calculations.

The reader will find further compelling evidence of this flawed assumption at my Q and A 3 comments later in this paper (link is here).

Unfunded Liability Estimates

Given the data errors and flawed assumptions that have been uncovered in the past and again in the foregoing, together with further items of concern to be presented later in this paper, the author believes that it is unacceptable for Finance to aggregate the estimates of individual schemes into two broad liability categories of just 'Civilian' and 'Military'.

Statistical data and estimates for each scheme should be clearly and individually identified to provide transparency and thereby allow Policy Makers and Observers to gain a better perspective of all the dimensions and liabilities at hand, on a scheme by scheme basis.

In addition to this, and as I have stated many times before, the Matthew's Review (and now this latest Update) fails to provide Policy Makers with a balanced view of the **"real net cost"** of the current liabilities and any resultant increases in liabilities to ameliorate the indexation of public sector superannuation[16]. Sadly, it would appear Finance only wants to present the "fire and brimstone" side of the balance sheet, which seems to be inconsistent with the expectations of the Australian Standard (i.e. AASB 119).

The author believes that under AASB 119, Finance would be required to recognise the net surplus or deficit of the Commonwealth's obligation by undertaking a valuation of the gross liability towards

[15] http://www.finance.gov.au/superannuation/CumpstonSarjeantReport.html

[16] Current indexation has been substantially broken since 1989 after Australia's adoption and manipulation of "quality" changes into the CPI together and with the abandonment of centralised wage arbitration in the early 1990s, which was underpinned substantially by the old CPI. In 1989 the ABS changed the construction of the CPI to be in accordance with the principles set out by the International Labour Organisation (ILO) in the publication Consumer Price Indices; An ILO Manual, by Ralph Turvey et al (ILO, Geneva 1989). These changes are paramount to a breach of the "employment contract" of former Australian public sector employees. For a more detailed view of "quality" issues please see http://www.smh.com.au/business/how-damned-lies-hit-the-consumer-price-index-20100330-rbkh.html or indeed ABS website submissions on the recent CPI Review, which can be viewed here(Rob Bray's detailed submission regarding "quality" is required reading: http://www.abs.gov.au/websitedbs/D3310114.nsf/Home/Sixteenth+series+review+of+the+CPI+-+Submissions

employees less the fair or market value of any scheme assets. Surely the Future Fund and ARIA funds under management should be resolved to a total net liability or surplus (aka the "real net cost").

With this in mind, the Update did not disclose (as a liability offset) the $71.6B sitting in the Future Fund and/or the approximate $22B in funds under management with COMSUPER / ARIA.

With AASB119 aside, why is it that Finance/Treasury seems reluctant to provide Policy Makers with a "net cost" based upon projected earnings forecasts as potential offsets to extant and prospective liabilities under new indexation arrangements? If these organisations are capable of producing far flung forecasts on commodity prices for a Rent Resource Tax and can somehow model cause and effect and taxation receipts with regard to Climate Change, then why can't they model scenarios on the future earnings of the Future Fund and ARIA with respect to Commonwealth Super liabilities?

The author has it under good authority that Finance somehow "nets off" ARIA funds from the liability estimates. If this is the case, then I believe the Establishment's approach and calculations here are flawed, particularly when you consider the situation of members with preserved benefits.

To explain, when benefits in the PSS/MSBS schemes are preserved the sum of the earnings of employee and employer productivity components generally increase at a greater rate than the notional employer component over time as can be seen in Figure 4.

The very nature of the compound growth on earnings could under certain circumstances, result in the total employer component being substantially smaller in percentage terms when the retirement benefit is fully crystallised. The graph in Figure 3 tries to illustrate this point. [17]

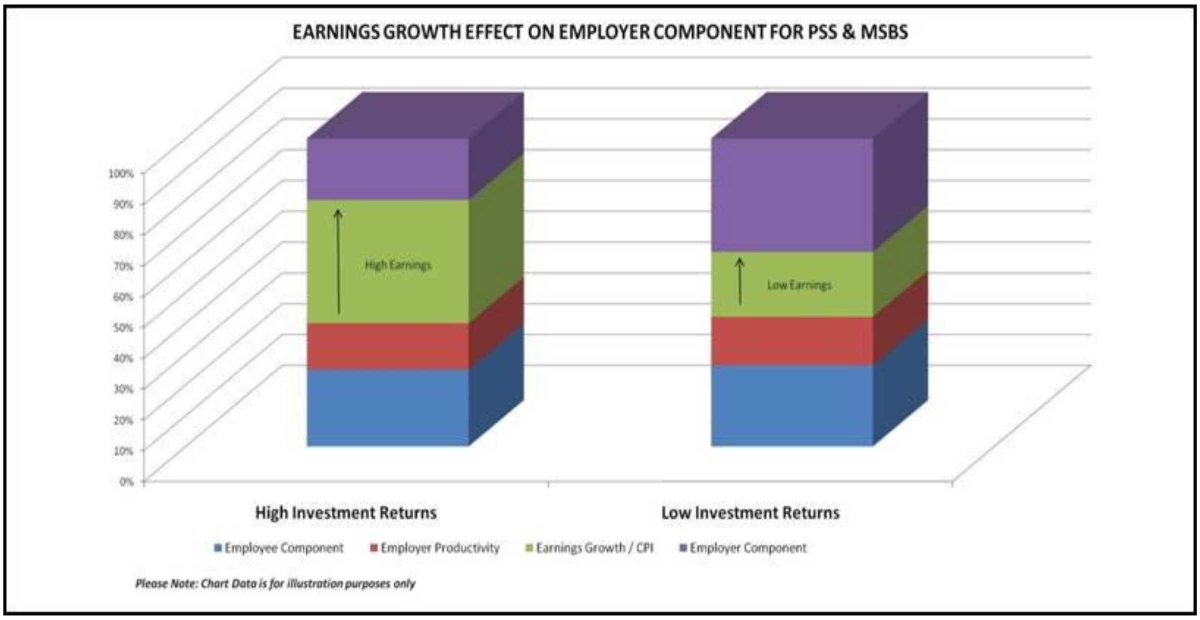

Figure 3

[17] An example here might be a young 20 year old and who only serves 10 years on the default contribution rate of 5% and then leaves. At age 60, after 30 years of compound growth the final crystallised balance would have a huge affect on the combined employee/employer productivity components as compared to the employer unfunded component in percentage terms.

Figure 4 below provides a different perspective of Figure 3 by instead illustrating a real world view of PSS crediting rates to CPI crediting rates compounded over the period shown.[18]

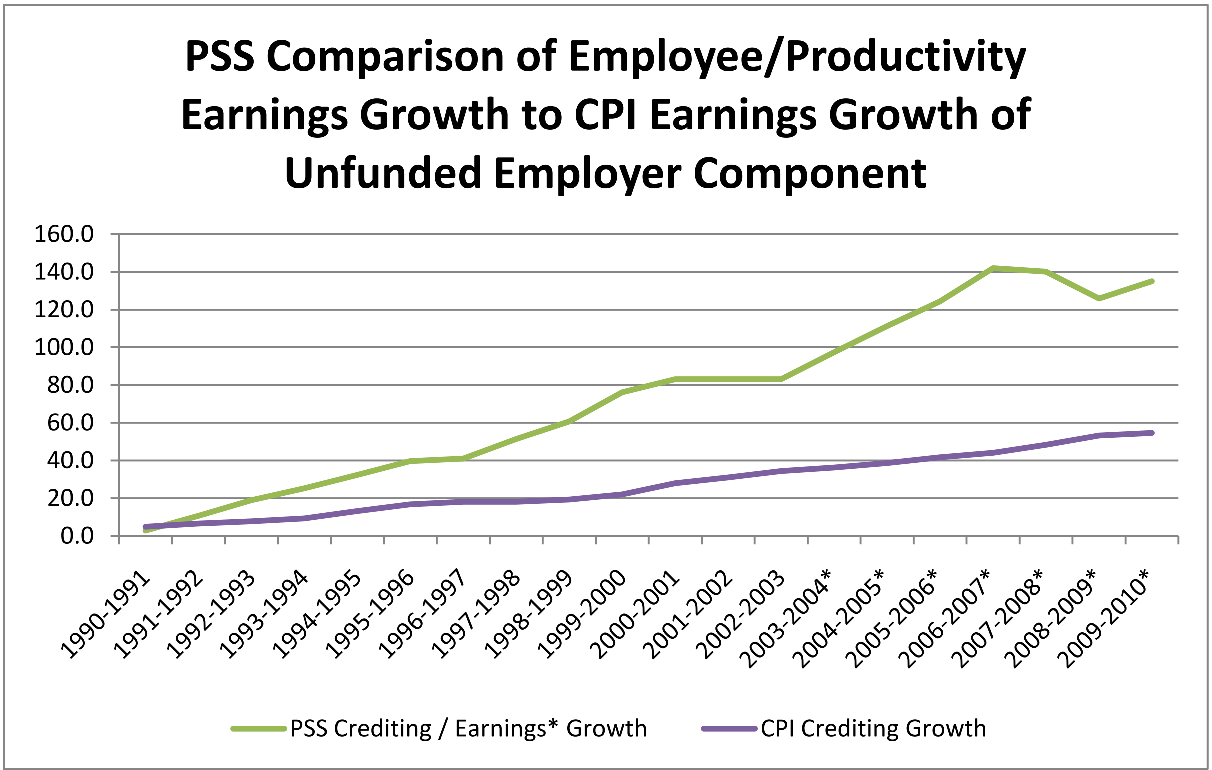

Figure 4

In addition to the foregoing, the employer component and any crediting of CPI continues to remain notional as payments begin; but at the outset of retirement beginning, the entire crystallised balance is transferred to Consolidated Revenue and therefore continues to grow (notionally) in the hands of the Commonwealth until the entire balance is exhausted.[19]

The Compound growth rate of those notional funds in the hands of the Commonwealth (i.e. directed elsewhere into the domestic economy) should not be underestimated and should be front and centre on the balance sheet, because at the moment, the balance sheet is skewed to make the Public Sector retiree look like a parasite on the public purse.

But wait on; Figure 4 tells yet another story! If the PSS, CSS and MSBS schemes had been engineered differently, from their inceptions, the fund's earnings together with retiree benefits could have remained within ARIA to continue to earn and substantially reduce or perhaps even extinguish any appropriation from Consolidated Revenue.

With the foregoing in mind, Policy Makers should seriously revisit scheme designs and consider legislative reengineering of the COMSUPER benefit payment process and ARIA funds management. Notwithstanding some additional risk, an investigation might very well reveal considerable savings

[18] The CSS and MSBS Schemes would exhibit similar projection profiles to that represented in Figure 4.
[19] A fuller explanation of growth in the hands of the Commonwealth will be provided in the next section.

in overall superannuation liabilities and provide yet another (organic) means of funding new indexation (please see my treatment re: Future Fund).[20]

Whilst the liability estimates under new indexation might increase by a factor of wages or living costs as compared to CPI; an incremental increase of say 2% at most above CPI pales into insignificance when the total funds under management of the Future Fund and ARIA have, and are likely to continue to provide, returns well in excess of their respective legislative mandates.

In order to substantiate this even further, Figure 5 provides an historical view of the third order compound growth rates of stock accumulation indices for Australia and the US stock markets over time[21].

Stock Market Trend Annual Growth Rates

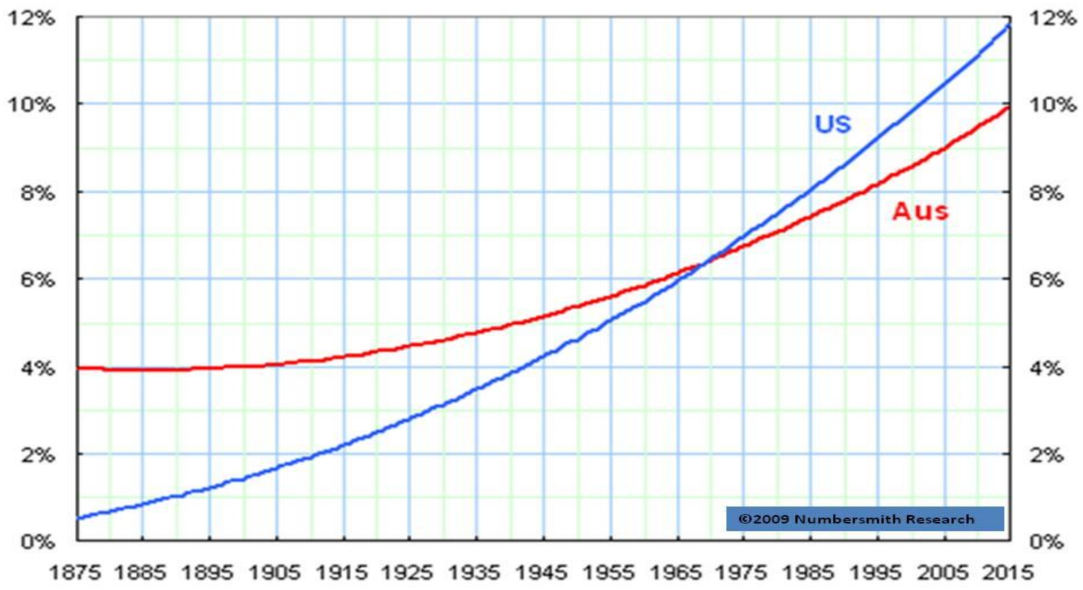

Figure 5

With an annual return of 10.6% for June 2010, and a current and similar annualised return likely for 2011, the author continues to affirm (as indicated in Figure 6 below) that the utilisation of some of the <u>excess earnings from the Future Fund alone would be more than enough to satisfy and offset any annual cash cost increase incurred by new indexation,</u> whilst still maintaining and achieving the Future Fund's original legislative intent.[22]

By accessing excess earnings from the Future Fund (and/or the proposed reengineered ARIA funds under management) the Parliament could effectively keep the entire cost of new indexation "off

[20] Policy Makers should consider reengineering the schemes so that crystallised retirement balances (less the notional employer component) remain within ARIA to continue to grow. COMSUPER then draws on ARIA funds to fully pay down benefits internally, only drawing upon Commonwealth Appropriation where necessary in the future.

[21] Source: Robert Vagg in his article http://www.investors.asn.au/bulletins/equities/2009/11/us-australian-stock-markets-comparison/default.asp#footnote,

[22] The reader is once again directed to the author's original "Net Cost Analysis" document, dated Nov 2009.

book" from the main budget, potentially freeing up current appropriations and allowing the Government of the day to focus on its programme agenda whilst keeping the "on book" budget in balance.[23]

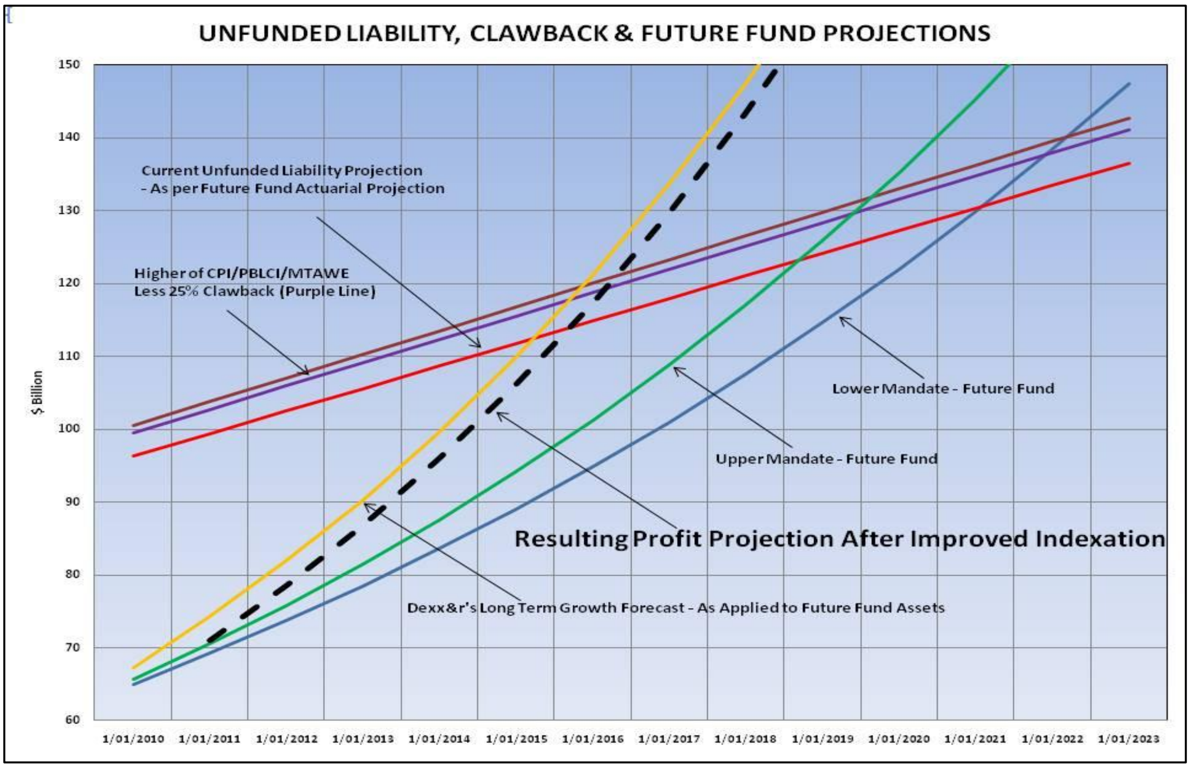

Figure 6

Notional Employer Contribution Rates (NECR)

The utilisation and constant reporting of NECR figures fails considerable logic in my mind because once again these statistics only provide one side of the balance sheet.

The NECR figures fail to allude to or take into account the long term effects of the employee's after tax contributions or indeed make an allowance for the Government's own deferment of notional employer contributions that have been ploughed directly into (or remain notionally within) Consolidated Revenue. These real and notional contributions over time have provided the Commonwealth with an interest free loan at the employee's expense.[24]

In fact, the evidence is clear that on average only about 25% of all DFRB/DFRDB members served the required 20+ years to qualify for retirement pay. The other 75% only received their contributions back without interest and of course with NO access to the employer's notional contribution.

[23] Future Fund earnings continue to track the forecast represented by yellow line in Fig 6.
[24] It needs to be remembered that a 5.5% after tax contribution is equivalent to a reduction in a member's disposable income of approx 8% depending upon their prevailing marginal tax rate. This very fact forced a lot of younger Defence Force and Commonwealth members (and their families) below the poverty line in the 1980s when pay rises were few and far between.

In addition to the foregoing, and in the case of DFRB/DFRDB, the NECR fails to acknowledge or account for the $126.94M that was transferred into Consolidated Revenue from the DFRB Accumulation Fund in 1976[25]. The net present value of those funds as at 30 Jun 2010 would have been approximately $3.77Billion (nominal).[26]

Also, NECR figures do not account for the fact that the Government has and continues to assume a huge NECR for the whole community through tax concessions and therefore lost revenues.

The NECR figures presented by Finance, and earlier by Matthews, only shows their lack of analytical depth in accounting for, or illustrating, the real opportunity cost of that foregone revenue in the context of the NECRs for former employees.[27]

In order to illustrate this point further, and from an historical stand point in time, another Researcher (Julia Perry) found that:

"in 1986-87 the cost of tax concessions [for superannuation] *had been estimated by the Treasury at $3,470Million ... for 2.3 million contributors ... and that the public subsidy on employer contributions was equivalent to the amount of the contribution times the employee's marginal tax rate, so an employee earning more than $35,000pa would be subsidised at a rate of 49% while someone with half that income would be subsidised at 29%"*[28].

With respect to the public sector schemes in question, the NECR figures presented by Finance do not account for or evaluate the Return on Investment (ROI) that employee contributions and indeed the deferment of "notational" employer contributions had on the increased productive capacity of the economy in the provision of not least improved infrastructure and services including schools, health, communications, roads, trade ports etc.

In order to expand on this further, Figure 7 attempts to capture graphically the third order compound effects (in real terms) of the DFRDB employee and notional employer-deferred contributions that benefited the Commonwealth as compared to total Commonwealth outlays for the DFRDB scheme from the Consolidated Revenue Fund (CRF).[29]

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[25] Source: '*Defence Forces Retirement Board Report to Government'*, dated 28 Jun 1979. However, there is evidence within the annual reports of 1971 and 1972 that the DFRB Fund had in fact approximately $160M in funds under management at that time.

[26] $3.77B has been calculated on the annual declared 10 year bond rate in June each year Source: RBA, Australian Government Bond Rates at http://www.rba.gov.au/statistics/tables/xls/f02hist.xls?accessed=1803-07:42:28

[27] The Matthew's Review makes a superficial comment about NECRs and presents a nebulous cost comparison between some obscure AMP reference and Commonwealth and Military NECRs. Chapter 2 page 10 refers.

[28] Social Research Paper No 43 – "Income Support for Older Woman", dated October 1998, pg 22 http://www.fahcsia.gov.au/about/publicationsarticles/research/dss/Policy_Research_Series/Documents/policyresearchpaperno43.pdf

[29] The inflation adjusted long term 10 year bond rate has been applied to the employee and employer-deferred contributions. In order to provide some degree of relativity to community standards, the deferred notional employer contribution rate was peg by the author at 9% of the extrapolated superannuation salaries as opposed to the 15-16% that is often quoted. However, whilst the long term bond rate has been used here for ease and for potential further comparative research, it must be said that it is not a preferred statistic for

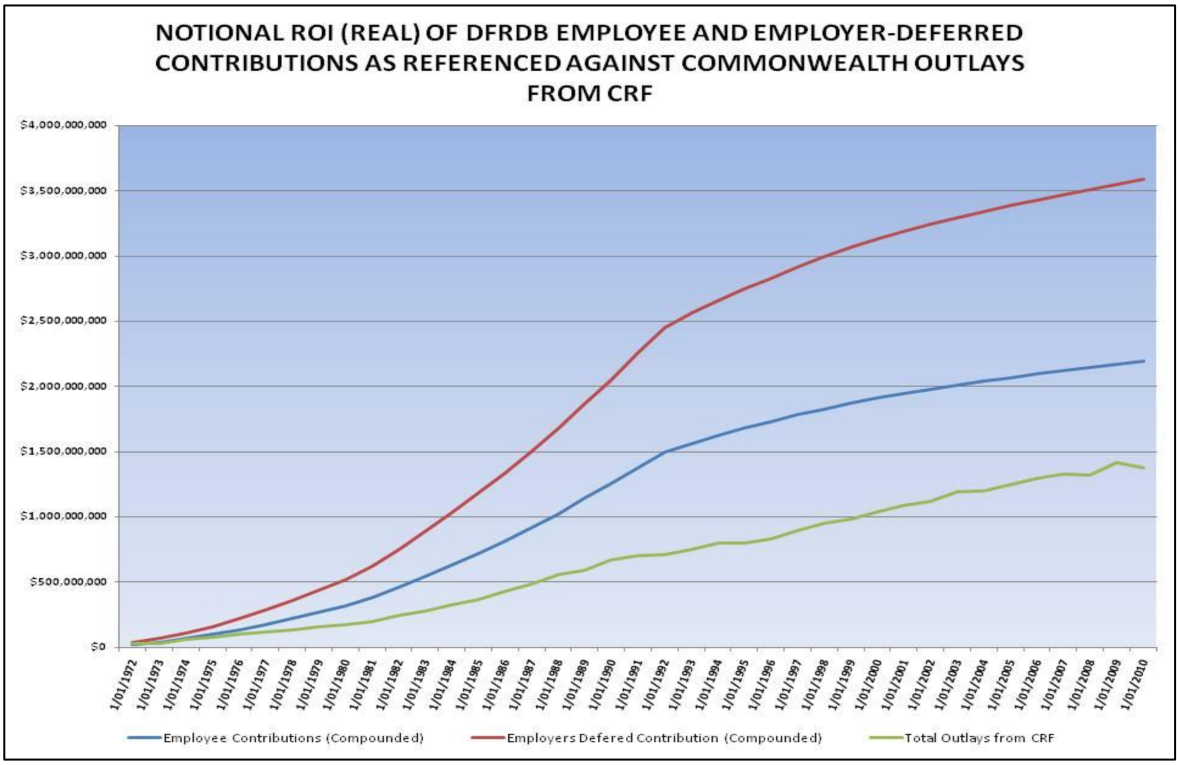

Figure 7

As can be seen in Figure 7, apart from a number of negative returns in the early 1970s, **the Commonwealth has been a significant net beneficiary of the DFRDB's design** where the third order compounding growth of those contributions has produced an inflation adjusted ROI that has and continues to outstrip the actual cost outlay of the scheme by a country mile[30]. I have every confidence that the other defined benefit schemes that are under consideration would also exhibit similar results as Figure 7 illustrates.

Contrary to the assertion and falsity of Matthews, Professor Pollard ("who was an Actuary" in 1972) clearly understood that the "Commonwealth Servant" had contributed to "national productivity" in a number of ways (i.e. through national income and wealth). He in turn recommended that the "Servant" should be afforded a share of that productivity through an indexation mechanism of the CPI multiplied by a factor of 1.4. An explicit copy of Professor Pollard's recommendation is enclosed at **ANNEX_A**.

With the foregoing in mind, it is an absolute nonsense and an affront to public sector superannuates that they should continue to be treated differently to the rest of the community in terms of appropriate indexation and taxation of their "paid for" superannuation entitlements.

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illustrating the underlying multiplier effects that would have undoubtedly influenced the growth in GDP over time.

[30] These projections are considered conservative because they only use a 9% notional employer contribution rate and annual inflation adjusted compounding factor based on the 10 year bond, but as we know, the employee's contributions were paid fortnightly into the CRF (but this affect is somewhat negated in fortnightly pension outlays from the CRF in payment).

COMMENTS ON FINANCE'S Q&A (Finance's Q&A main link is here)

Comments on Finance's Q_and_A_1 (Link)

No specific comments to this answer but please see comments at Q&A 4 below.

Comments on Finance's Q_and_A_2 (Link)

No specific comments to this answer

Comments on Finance's Q_and_A_3 (Finance Link)

As stated previously, Finance makes a specific point that it has engaged an independent actuarial firm Cumpston Sarjeant to provide an assessment of the "reasonableness" of Mercer and AGA assumptions.

Cumpston Sarjeant concluded in broad terms *'that the estimates of financial impacts of changes to indexation arrangements within the Australian Government's civilian and military superannuation schemes are reasonable'* presumably because they considered the impact of the assumptions to be small by comparison to the overall liability. However, I would contend (and I am sure many Politicians would agree) that any error that is stated in the $Billions is a cause for concern.

Cumpston Sarjeant also makes it very clear (under the 'Review of Economic Assumptions') that they were ***'not asked to review the appropriateness of base assumptions'*** (i.e. the discount rate of 6%, CPI of 2.5%, and salary inflation of 4%).

Cumpston Sarjeant also stated under the 'Review of Behavioural Assumptions' (i.e. with reference to "take up rates") that they ***'consider that the assumed change is reasonable but highly uncertain'.***

They also state that '***In discussions, Michael Burt* [from the AGA] *indicated that the change in pension take-up represented perhaps 20-30% of the initial increase in liability, although he had not directly quantified it.***'

In other words, there is absolutely no historical foundation to the "take up rate" assumptions that have been made .... they have just been plucked out of thin air!

What irks me to no end here, is that Finance (whilst disclosing this information deep in the bowels of the Q&A) did not make it clear in their executive summary that Cumpston Sarjeant had some very clear caveats about their observations of "reasonableness". **In my mind, this matter eats at the very heart of the Department's transparency when it comes to providing unbiased policy advice.**

The link to Cumpston Sarjeant's full report is here (Return to Unfunded Liability Estimates)

Comments on Finance's Q_and_A_4 (Link)

On review of this answer it has now been explicitly disclosed that the unfunded liabilities Tabled in their Answer and the 2010-2011 budget papers (i.e. the Red Book) now include the ***"Parliamentary Contributory Superannuation Scheme, Governors-General Scheme and Federal Magistrates Statutory Death and Invalidity Benefits Scheme"*** .... **schemes that were not in scope and that are predominately non-contributory and indexed by wages!**

Given the intent of Finance's Update was to update the Matthews' Review and to address issues about the indexation of Commonwealth and Military Superannuation alone, it seems quite inappropriate and indeed extremely misleading when you consider the answer to Question 1 (i.e. the schemes that are under serious contention) that Policy Makers are now being bamboozled by the inclusion of liability estimates for additional schemes, which overstate the liabilities that are specifically in question.

With the foregoing in mind, it now begs the question:

What are the actual specific liability estimates for each scheme that were considered under the Terms of Reference for the Matthews' Review and which were referenced in Finance's Question 1 of this latest Update?

Comments on Finance's Q_and_A_5 (Link)

No specific comments to this answer.

Comments on Finance's Q_and_A_6 (Link)

Finance's answer to this question again raises considerable concern about the validity of assumptions and the wide variability of the discount rates that are used. **It is extraordinary that the application of a discount rate can vary from 6% to 7.2% depending upon whom the Actuary is and that this variation can amount to an approximate differential cost/error of $25B.**

In order to quantify this matter further, Figure 8 below provides a snapshot of the 10 year bond rate over the period shown. Given that the average of the 10 year bond rate over the last 38 years was 9.37%, and that the log R-squared value is approximately 8% in nominal terms (together with the Future Fund Actuary's use of 7.2% discount rate); it seems quite unreasonable for Finance or the AGA to have a considerably lower discount rate when you are dealing with 40 year odd liability estimates.

As a practitioner of economic history, one thing is certain, history will repeat and with global monetary policy already tightening in other regions, you can bet that the Reserve Bank of Australia will move quickly to apply and sustain similar policies to arrest inflation, thereby forcing the long term bond rate higher.

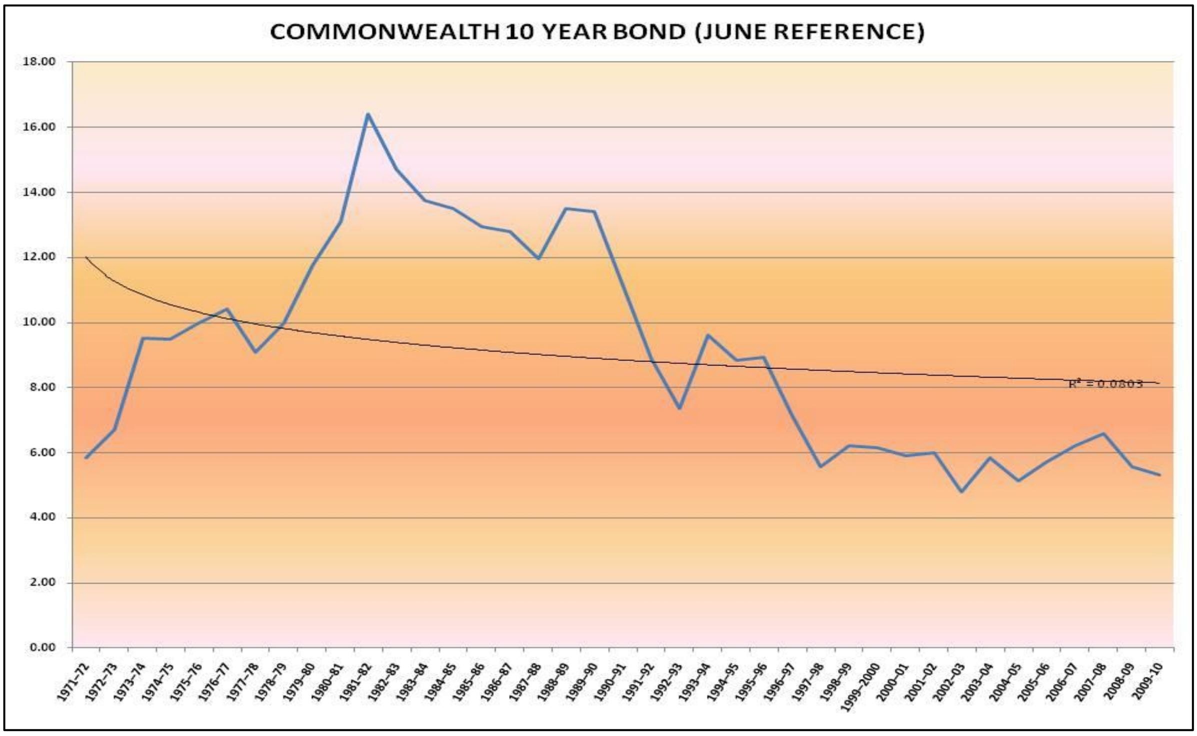

Figure 8

As an adjunct to the foregoing, the Future Fund Actuary stated his 2008 report that that the Discount Rate used in the Long Term Cost Reports for the *Parliamentary Contributory Superannuation Scheme*, *Governors-General Scheme* and the *Federal Magistrates Statutory Death and Invalidity Benefits Scheme* was 6.4%.

The question now screams out:

How is it that schemes such as the ones cited above, which presumably are more expensive in liability terms (i.e. due to their income based indexation), have a more favourable discount rate applied to them than the discount rates that were used (supposedly) in the Long Term Cost Reports for schemes such as the DFRDB and CSS, which are currently only indexed to CPI?

Comments on Finance's Q_and_A_7 (Link)

Given the political imperative on all sides of Government is to balance the budget and where in the recent past we have had substantial surpluses, it stands to reason that the discount rate for the Finance / AGA estimate should be at least the same as the Future Fund 'Target Asset Level' (TAL) because it would better reflect the opportunity cost of those funds NOT being invested (either in the market via a sovereign wealth fund (i.e. the Future Fund) or through capacity improvements within the domestic economy).

In addition to the foregoing, and as stated earlier, it is nonsense to not show the estimate as a net liability/surplus after asset forecast deductions and offsets. Surely this is what Policy Makers want to see and consider when they are confronted by constituents petitioning with pitchforks to have their indexation fixed.

Comments on Finance's Q_and_A_8 (Link)

Policy makers should be quivering in their boots and asking some very stern questions when they are confronted by estimates that can by as much as $25Billion.

Ironically, when inflation does return and the long term bond rate rises back above its long term average the liability estimates will undoubtedly drop substantially. What will Finance's answer be then to Policy Makers who will be trying to grapple with liability adjustment errors in the future?

Comments on Finance's Q_and_A_9 (Link)

No specific or further comments to this answer.

Comments on Finance's Q_and_A_10 (Link)

No specific or further comments to this answer.

Comments on Finance's Q_and_A_11 (Link)

In addition to comments that have already been made, the reader will find further comments at Q&A 17 below that clearly show that the assumption of "increased take up rates" is not well supported.

Comments on Finance's Q_and_A_12 (Link)

No specific or further comments to this answer.

Comments on Finance's Q_and_A_13 (Link)

No specific or further comments to this answer.

Comments on Finance's Q_and_A_14 (Link)

No specific or further comments to this answer.

Comments on Finance's Q_and_A_15 (Link)

No specific or further comments to this answer.

Comments on Finance's Q_and_A_16 (Link)

It is now often quoted that there has been mortality improvement and that the estimates have been adjusted accordingly. Given our experience to date with some assumptions, it would be prudent to test the "mortality improvement" assumption against hard data for DFRDB to see if it is valid with respect to the overall liability. [31]

[31] The author was not able to extract (similar to the DFRDB) comparative and detailed demographic data from the annual reports of the CSS, PSS and MSBS. An FOI request has been submitted but is yet to be satisfied.

On investigation and to illustrate, Figure 9 shows the trend in recipients accessing DFRDB benefits[32].

Unfortunately as you can see, **the projection of the number of retirement pay recipients is starting to exhibit diminishing returns as the projection for Reversionary recipients continues to rise.**

Given that the DFRB scheme started in 1948 and members were unable to contribute until age 20, the age demographic of these early primary members is well into 80 years of age now.[33]

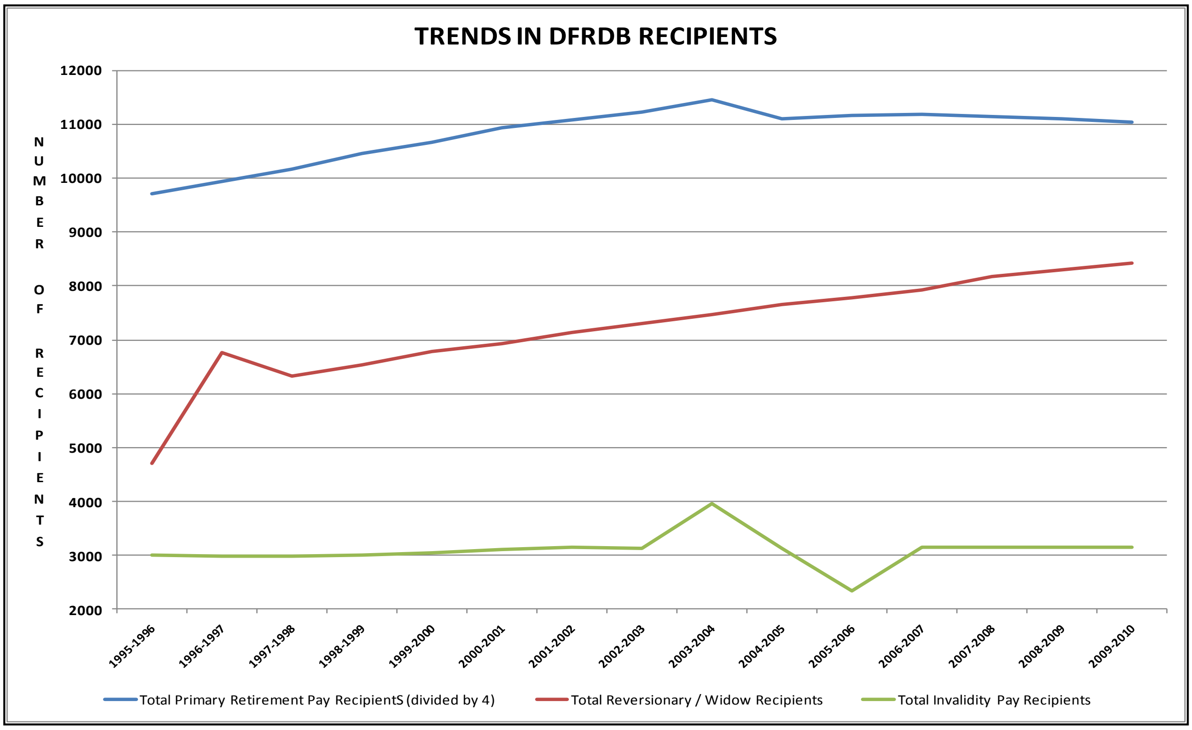

Figure 9

What Figure 9 is effectively indicating is that a transition is now in effect (from 2004) where primary members are being replaced by reversionary recipients (or not at all) and that the resultant benefit is only equal to 5/8s of the original benefit (i.e. only 62.5% of the primary benefit for DFRDB).

So, with all other things being equal, one would expect that Finance's estimate assumption for DFRDB should be more reflective of a decrease in liability terms because even if the mortality rate of the reversionary recipient is improved by several years the fact remains that the base of their pension is considerably less for further indexation increases.

Unfortunately, the author does not have enough comparative and contiguous data to test this assumption against other schemes.

[32] In order to better illustrate in Figure 9 the diminishing returns of primary recipients, the data for this specific projection has been reduced to 1/4 of the original data set from Table 1.

[33] It must be remembered that many of the original DFRB contributing members were required to cut across to the DFRDB scheme in 1972 so unlike most other schemes, the age demographic of the scheme is quite a bit older.

Comments on Finance's Q_and_A_17 (Link)

On review of the data presented in the table of this answer, there is yet another sign of a potential and significant error in the estimates.

The reason why? Because as per the data in Table 1, **the total number of DFRDB pensioners for 2009 is in fact 57,164 .... not 52,753 as quoted by Finance!** [34]

On investigation, Finance has only added primary and reversionary recipients together, negating the additional 4,432 pensioner recipients encompassing the invalidity, orphan and redundancy demographic.

This is yet another example of the utilisation of imprecise data and/or the lack of quality assurance by Finance and the Establishment, which once again brings into serious question the validity of any of the estimates generated.

If the author is able to find so many holes with just one scheme being the DFRDB, then God only knows the extent of the errors that prevail in the estimates of other schemes such as the CSS, PSS, MSBS etc.

Comments on Finance's Q_and_A_18 (Link)

No specific or further comments to this answer.

[34] The total of 57,164 is made up of 44,432 primary retirees, 8300 reversionary retirees, 3,154 Invalidity retirees, 289 Orphans and 989 redundancy retirees.

CONCLUSION

One thing is clear; it was direct Government policies of the past that have effectively broken the pension indexation of Military and Commonwealth Superannuation of today.

The manipulation of the CPI in 1989 (i.e. the inclusion of "quality adjustments") and the abandonment of centralised wage arbitration in the early 1990s has lead to the significant decline in the purchasing power and therefore the standard of living of those affected. Past Government actions could be easily construed as a direct "breach of employment contract" by the Commonwealth to its former employees.

The Parliament should seriously consider leveraging off its organic assets by reengineering the legislation of the Future Fund and COMSUPER/ARIA benefit payments to not only potentially save the Commonwealth considerable money, but to ameliorate the problem of indexation once and for all.

Finally, and to make a play on the Establishment's own words:

"Policy Makers should accept that the Department of Finance's estimates of Commonwealth Superannuation liabilities are sensitive to the assumptions and data used, and therefore, they (Policy Makers) should treat such estimates with extreme caution!"

About the Author

Peter Thornton is a retired member of the Defence Force and the Commonwealth who acts as an independent researcher and commentator on matters relating to Commonwealth and Military Superannuation. Peter's independence aims to support all affected retirees and to aid the representational activities of national peak bodies such as the Defence Force Welfare Association (plus alliance partners), the Superannuated Commonwealth Officers Association, member associations of the Australian Council of Public Sector Retiree Organisations, and the Returned Services League; many of which he is an ordinary member. Peter has graduate qualifications in Economics and Engineering with post-graduate qualifications in Management and is a long standing member of the Foundation for the Study of Cycles.

ANNEX_A

1.31 If these seven recommendations were all adopted the position of the retired Commonwealth Servant would in brief be as follows :

(1) He would have certainty of adjustment of the Commonwealth share of his pension; it would be carried out automatically and annually.

(2) The 1.4 factor applied to the Commonwealth portion provides
  (a) a share of productivity increases;
  (b) a greater share of productivity increases when inflation is high and adjustments are needed, and a lesser share when there is little inflation.

(3) He would receive updating on the full value of any non-contributory units held instead of on five-sevenths only as formerly.

(4) As a result of the adjustments, he receives a guarantee that the purchasing power of his full pension (i.e. the Fund share as well) is more than maintained.

(5) He would have a further share of productivity gains as a result of any benefits received on or after retirement from Fund surpluses which should increase with wider investment powers.

(6) Should unexpected inequities or small inconsistencies arise with the passage of time these could still be corrected by ad hoc adjustments additional to the guaranteed formula specified in the recommendations.

(7) As from 1 July 1973 pensioners who retired before 1 October 1971 should receive an increase in the Commonwealth share of their pensions of about 15% and those who retired more recently a proportionately lower increase.

1.32 It should be recognized that if these modifications are made to the Commonwealth Scheme which has always been a leader in the pension field it will, in this particular area, place the Commonwealth Servant in an even more privileged position than is presently the case.

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(Return to previous section above)