Capital Research

# Comment on:

# "A Measure of the Efficacy of the Australian Imputation Tax System"

by John Handley and Krishan Maheswaran

# Neville Hathaway



**July 2010**

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## Brief

*Capital Research* has been engaged by United Energy, CitiPower and Powercor, Jemena and SP Ausnet *(the Parties*) to comment on the paper "A Measure of the Efficacy of the Australian Imputation Tax System" by John Handley and Krishan Maheswaran as published in The Economic Record, Vol. 84, No. 264, March, 2008, 82–94 (*the Paper*). I have been asked to respond as to it suitability for the Australian Energy Regulator (AER) to rely on it for the purposes of making decisions about the value of theta and gamma.

I have been asked by *the Parties* as well to explicitly conduct my own analysis as to how reliable are the ATO data for the purposes of making upper bound estimates for gamma and theta and have done so in a separate report. The ATO tax data used and described in that Report is also referenced in some instances in this Report.

I have been provided with a copy of Expert witnesses in proceedings in the Federal Court of Australia and this report has been prepared in accordance with those guidelines. As required by the guidelines I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance that I regard as relevant have, to my knowledge, been withheld.

My qualifications and experience in relation to this opinion are as set out in the attached CV[1] which sets out details of my formal qualifications and experience. In relation to the current matter, I note that I have conducted research, lectured, presented public seminars and appeared in court cases in matters involved in cost of capital and imputation tax over a period of approximately 25 years. I have been retained by major companies and the Australian Tax Office in relation to imputation issues. I am involved in ongoing research into cost of capital and valuation issues including on the valuation of the franking credits attached to franked dividends paid by companies resident in Australia.

## Documents

The principal document I have used is the published paper "A Measure of the Efficacy of the Australian Imputation Tax System" by John Handley and Krishan Maheswaran, published in The Economic Record, Vol. 84, No. 264, March, 2008, 82–94.

For my own analysis of tax statistics I have relied extensively of ATO publications and data. These are available on their website http://www.ato.gov.au for the years 2000 – 2008. Issues from previous years I have collected by purchasing CDs and printed copies. The most recent data available on their website (2008) also includes historical time series back, for some items, to 1988.

[1] A copy of my CV forms Appendix 1 to this report.

## Statement of Conclusions

- This paper should not be used for application to corporate and regulatory issues within Australia.
- The results are contrived as they are based on analyses of data that the authors themselves have created by their assumptions.
- They ignore significant changes in the taxation regime associated with franking credits and miss important data.
- This paper does not address the access of investors to company tax via credits. It focuses solely on the credits of distributed dividends and does so via contrived tax statistics. Notwithstanding that tax statistics can only give an upper bound for theta, the problems with the estimates within this paper make it most unsuitable for practical use.

## Executive Summary

- This paper purports to establish estimates for the utilisation of distributed franking credits, known as theta. The estimated numbers range between 67% (1990-2000) and 81% (2001-2004).
- Some of these results are of dubious quality because:
    - The authors create their dividend income data for non-resident investors. They use dividend withholding tax (DWT) data to estimate both franked and unfranked dividends but DWT is not collected on franked dividends, only on unfranked dividends.
    - They average data over periods of quite different tax regimes: the period 2001-2004 encompasses the "old" imputation tax system and the new "simplified" imputation tax system (STS) which was introduced on 1 July 2002 and had extensive transition arrangements.
    - Apparently not appreciating the impact of the abolishment of the Inter Corporate Dividend Rebate on investors behaviour, they "smoothed the reported amounts for 2000 and 2001" to overcome "a material spike" in the data.
    - There is double counting of dividends and credits. They combine final recipients (Individuals and Funds) with pass-through investors (Trusts and Partnerships) ignoring the fact that many of these pass-through investors return their dividends and credits to the very companies that issued them.
    - They ignore the super funds within Life Offices which are final claimants of credits but reporting as companies.
    - They present a series of excess credits for Personal taxpayers but offer no justification at all for this series. It is not published by the ATO so it must have been estimated by the authors.
    - They compare $64 unfranked dividends to $64 franked dividends in the hands of various investors and get different after-tax returns. This is hardly surprising because one already has $36 company tax paid and the other has zero company tax paid. They claim the perverse result that the only class of non-resident investors that can utilise the franking credits are those that get no credit for any tax paid in Australia on their unfranked dividends.

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July 2010

## 1. Introduction

I have studied *the Paper* extensively and reproduced all the results I possibly can that are presented in *the Paper*.

Having followed the ATO statistics of for some 15 years, I was initially taken aback that I had potentially missed some valuable tax data for foreign investors in Australia. However, on careful reading of the Handley & Maheswaran (HM) paper, it becomes clear that they created their dividend and franking data for non-resident investors. They then proceed to analyse the data series they have created and make claims about the utilisation of franking credits by non-resident investors. I describe below how they created their data and I reproduce their process, which is well described in *the Paper*.

My initial concern that I had missed some important data was quickly resolved when I considered the fact that whereas HM used Dividend Withholding Tax (DWT) data for the period 1988-2001 to estimate the receipt by non-resident investors of *both* unfranked and franked dividends, Australia does not levy DWT on franked dividend payments, just on unfranked dividends. The rationale for this is that as company tax has already been paid, as evidenced by the franking credit attached to the dividend, no further withholding tax is due on the franked dividend. The following is a statement by The Treasury, Australian Government on the Treatment of income of non-resident taxpayers[2]

> Franked dividends attract no withholding tax.
>
> Withholding tax on unfranked dividends is 30 per cent. This reduces generally to 15 per cent in the case of double tax agreements (United States and United Kingdom resident companies may receive a rate of zero or 5 per cent on unfranked dividends received in some cases).

Similar statements can be found on the ATO website. Whilst it is reasonable to attempt to use DWT to estimate unfranked dividends paid to non-residents, it is totally inappropriate to do so for franked dividends because it is not levied on those dividends. Even with unfranked dividends the estimation is difficult as the mix of foreign investors with different rates of withholding tax can change over the years. Knowing the amount of DWT levied does not allow one to gross up to the unfranked dividends upon which the DWT was levied unless one also knows the corresponding mix of DWT rates applied to those investors. Notwithstanding that difficulty with unfranked dividends, I was left to wonder how HM purported to have franked dividend data for non-resident investors upon which no DWT is ever levied. I reproduced their process and discovered they had created their data by assumption. Along the way, they perform a smoothing of the ATO data for the years 2000 and 2001, as they erroneously assume an error in the ATO data represented by a spike. It was in fact a real event in the market place and should not have been treated as an error in the data. It arose from the market place reaction to the Australian Treasurer's announcement in 1999 of the abolition of the Inter-Corporate Dividend Rebate. In the following Section 2 I describe in detail how HM created their data series.

Having created their franking credit data for non-residents, HM proceed to analyse it as part of their analysis of ATO data of franking credits. They add their data to franking credits flowing to Individuals, Funds, Partnerships and Trusts and create a total flow series. In doing this they perpetrate another misstep in that they ignore that fact that many of the

[2] http://comparativetaxation.treasury.gov.au/content/report/html/12_Chapter_10-03.asp

Partnership and Trust credits are actually paid out to companies so they are just recycled and are not redeemed. I describe this in more detail in Section 3.

They present a series of "excess credits" attributable to personal taxpayers which means that personal taxpayers are not utilising all their credits. This data is not explained, it just appears in their tabulated data. It is not a series published by the ATO so it must have been estimated by the authors. However, it is also a little misleading to assert that the credits declared by individuals have not been fully utilised. The act of declaring them on a personal tax form fully extinguished those credits. Whether or not a personal taxpayer managed to get 100% benefit for the credit received is a matter of their personal tax affairs relative to their declared income. It is possible their income tax liability was not sufficient to fully utilise all the declared credits in the year they were received. However, for individuals there was no possibility to carry forward the credits so they were fully utilised, if not fully compensated for their face value. I examine this issue in Section 3.

In addition to creating their own data, HM also miss data that is important. They do not include data of credits redeemed by the complying superannuation businesses of Life Offices and designated organisations like charities that can get a refund for their credits. They acknowledge they miss this data but erroneously assert it will be offset by not including the taxes paid by government enterprises. This is a misunderstanding on their part. State owned enterprises do not pay company tax. They operate under a National Tax Equivalent Regime. The National Tax Equivalent Regime is an intergovernmental arrangement that *notionally* applies federal income tax laws to state and territory government businesses with the aim of establishing a level playing field for business. The ATO administers the National Tax Equivalent Regime for the state and territory governments and is paid a fee for so doing. The States and Territories collect the income taxation equivalent liabilities from each entity, as determined by the Commissioner of Taxation. These taxation data are in state and territory financial statements, not in ATO company data. There will be no offset in the ATO data for not including Life Offices and Charities. I examine the data that HM miss in Section 4 below.

Finally in Section 6 I examine a proposition put forward by HM that the one group of non-resident investors, their Type III non-resident investor, that can utilise the Australian company franking credits is the very group that pays tax in their home country but gets no tax credit for any tax paid in Australia. Paradoxically, they get no credit at home for any DWT levied in Australia on their unfranked dividends yet they are meant to be the one group that can utilise the franking credits on their franked dividends. I demonstrate that this perverse result is an artefact of comparing a numerical example based on a $64 unfranked dividend with a $64 franked dividend. This is a comparison in which one investor has been deemed to have already paid Australian company tax of $36 (the owner of the franked dividend) and the other has been deemed to have not paid company tax (the owner of the unfranked dividend). With this disparity it is not surprising that a perverse result is derived. I redo the comparison on an even footing and demonstrate the simple and obvious outcome: where Australia charges less for the DWT than it does for company tax a non-resident investor who gets no credit for any tax paid in Australia will be better off paying no company tax on its Australian dividends and then paying DWT on their way out of the country. This has nothing to do with their taxes at home – whatever income they repatriate they will pay their home taxation on that income. The more they take home from Australia, the better off they will be.

## 2. HM Data Construction Process

HM have extensively constructed the data they analyse for the dividend and franking credit income of non-resident investors. Their process, described in detail in their paper, is as follows.

They break the non-resident investors into three groups, depending on their rate of dividend withholding tax (DWT) and their assumed home income tax rate. These groups are:

1. Type I non-resident investor is tax exempt in its home country.
2. Type II non-resident investor is (tax) domiciled in a country with which Australia has a double tax agreement (DTA) and Australian dividend withholding tax (DWT) is fully creditable against any home country personal tax liabilities.
3. Type III non-resident investor is domiciled in a country with which Australia does not have a DTA and Australian DWT is not creditable against any home country personal tax liabilities. (page 84, col 2, para 2).

They estimate or assume the following about these three groups, based on 2003 ABS data:

**Table 1: HM Classes of non-resident investors**

| Type | DWT rate | Home tax rate | Population proportion | Description |
|---|---|---|---|---|
| I | 0% | 0% | 10% | Pays no tax. |
| II | 15% | 15% | 60% | Pays tax and gets a credit for tax paid in Australia. |
| III | 30% | 15% | 30% | Pay tax and gets no credit for tax paid in Australia. |
| Weighted average | 12% | | | |

Their weighted average DWT of 12% is then applied for the whole historical time period of DWT collections to create a series of unfranked dividends paid to non-resident investors (HM Table 3 – they show Total and Franked dividends but not Unfranked dividends). Their series of unfranked dividends is created by grossing up the annual collections of DWT by 12% for each year. For example, their DWT collection of $226 million in 2001 is grossed up to $1.883 billion by the calculation $1,883 million = ($226/0.12) million.

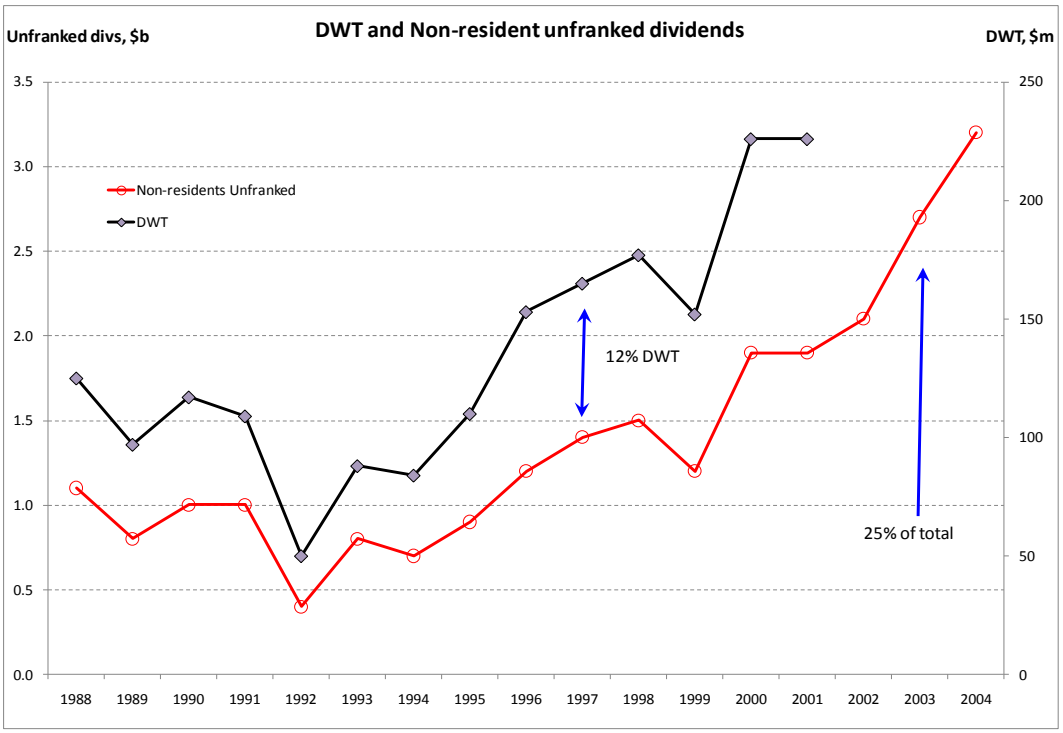
Clearly this is only reasonable as a proxy for unfranked dividends received by non-residents if the following two conditions always hold:

1. The average of 12% is a reliable estimate of the average of all foreigners' DWT rate, and
2. The same rate applies every year.

DWT is only charged in Australia on unfranked dividends. A non-resident investor receiving franked dividends is taken to have paid the full company tax rate (as a franked dividend indicates) with no further tax to be paid to the ATO. The DWT data ceases after 2001 (under the Simplified Imputation Tax System, which came into operation at that time, the DWT is now included in the PAYG collection) so HM assume "that non-residents receive 25 per cent of the total

dividends paid to individuals, funds, trusts, partnerships and non-residents each year" (HM page 88, col 1, para 1) in order to create their 2002-2004 data. Figure 1 describes the creation of their unfranked data series for non-resident investors.

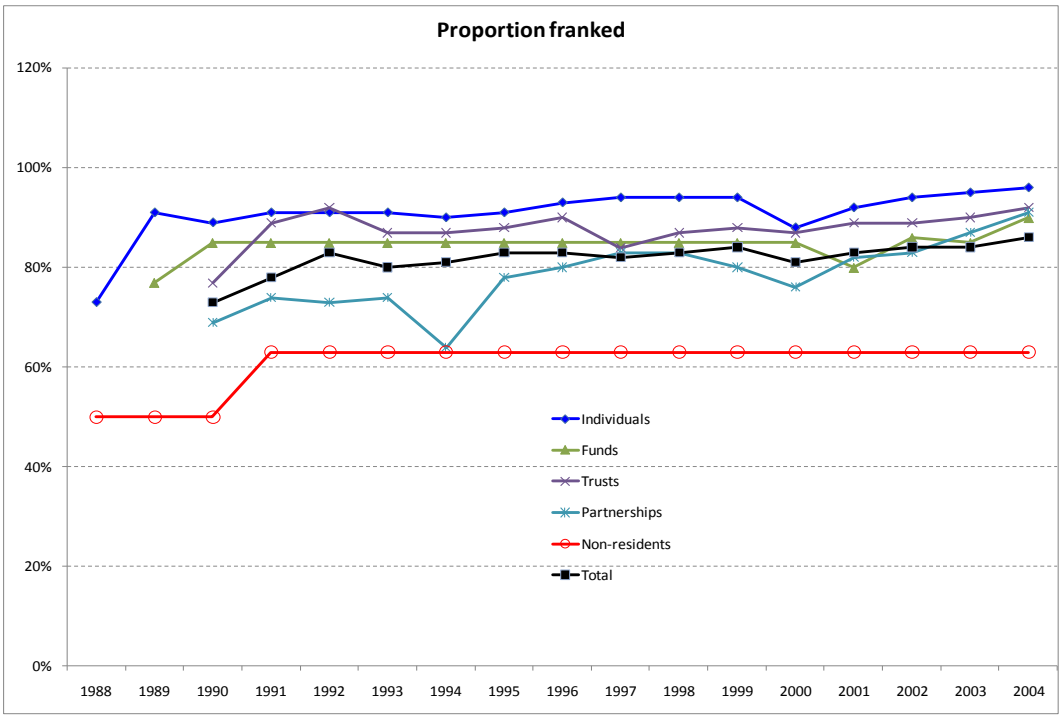
**Figure 1: Creating the HM Unfranked data series**




In creating this series, they have also "smoothed the reported amounts for 2000 and 2001" (HM note to Table 3, page 89). I comment on this below.

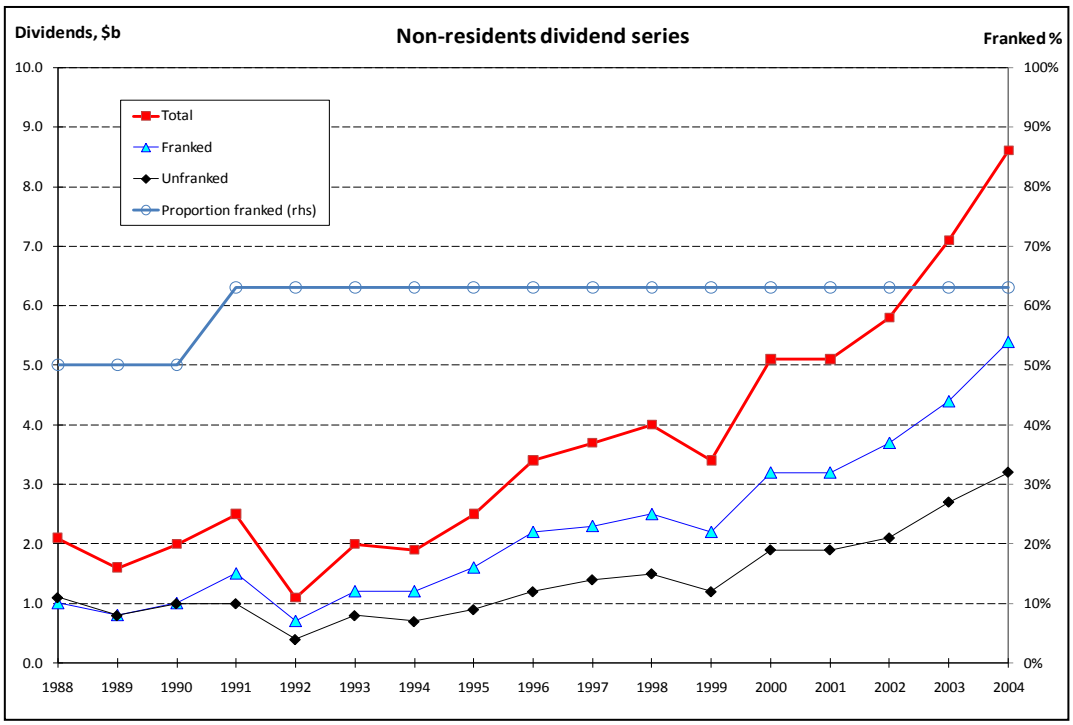
Their next step is to create a series of franked dividends for non-resident investors. This is done by assuming a given proportion of franked dividends out of total dividends - they assume a given proportion of franking for non-residents of 50% pa for three years followed by 63% pa thereafter- (HM page 88 col 1 para 1). This is a crucial input into their created data series but receives scant justification. Figure 2 shows their data for the franked dividends received as a proportion of the total dividends received for each class of investor.

**Figure 2: Creating the HM Franked data series**




HM take their assumed proportion franked and apply it to the unfranked dividend series in order to create a franked and hence total series. Having constructed a series of unfranked dividends and assuming a given proportion of franked dividends, the franked dividends are just the complement of the unfranked series. For example, in 2001 if $1.88 billion is unfranked dividends and these represent 37% of the total (the complement of the assumed 63% franked) then the assumed total must be $5.09 billion and the 63% franked must be $3.21 billion. This created franked dividend series is plotted in Figure 3.

**Figure 3: Creating the HM Franked and Total series**

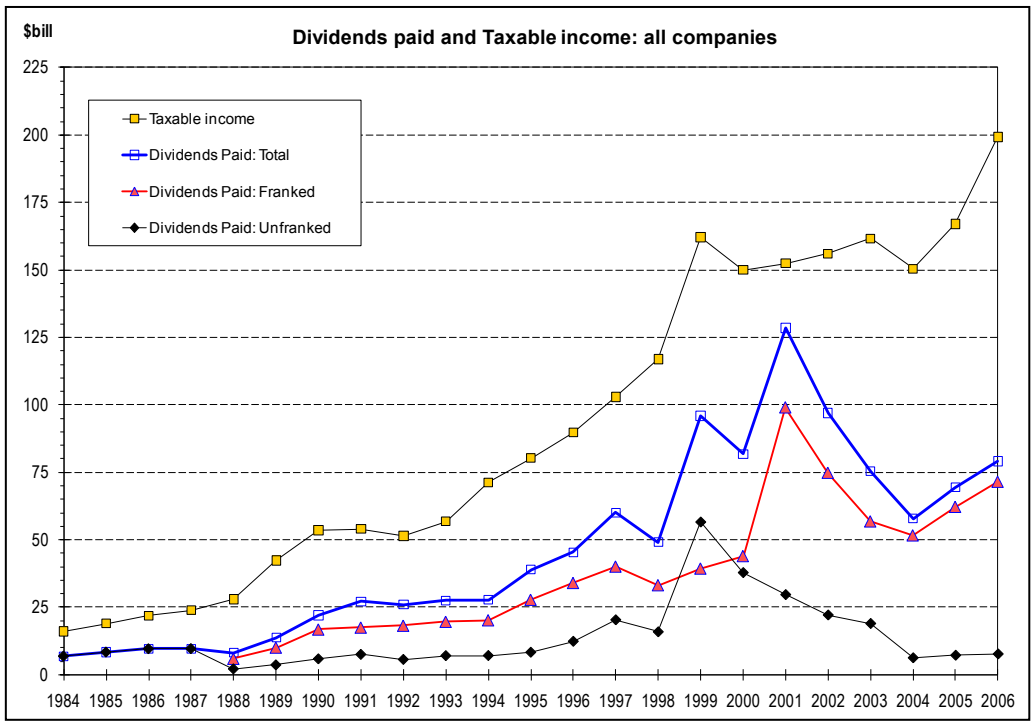



The smoothing they have applied to the data will create a particularly egregious error in the period 1999-2001 when the dividend payments by companies were excessively unfranked dividends in the lead-up to the abolishment of the Inter Corporate Dividend Rebate (ICDR). To appreciate this point, we need to examine the statistics of dividends paid. To understand the overall pattern of flows, one must appreciate the changes in the system reflected in the ATO statistics. Under the previous imputation system, Australian resident companies upon receipt of a franked dividend only reported the non-credit or cash part of the dividend in their income, added the credit received to their FAB and received an inter-corporate dividend rebate (ICDR). This avoided the imposition of multiple corporate tax payments on the original corporate income as it passed through a chain of companies. Under the new system, the recipient company adds the franking credit and the cash dividend to their assessable income, pays corporate tax on the total and receives a credit for the tax already paid (the franking credit) by the issuing company. The issuing company debits its FAB upon issuing a franked dividend and the receiving company credits its FAB by the franking amount received. The inter-corporate dividend rebate was accordingly abolished. This was foreshadowed in 1999 but only implemented from 1 July 2002.

Near the same time, a regime for consolidated reporting for corporate groups was introduced. This means that for taxation purposes, only the head company need report to the ATO. Whilst the official start date for this was 1 July 2002, there were some transition arrangements that materially affect the data. The ICDR was available within consolidating groups until 30 June 2003 but even that was extended for groups with late reporting income years (for example, National Australia Bank's financial year ends September 30th).

The following is my plot (Figure 4) of this data from the latest ATO statistics as at 2008 (ie ATO statistics for years up to 2006).

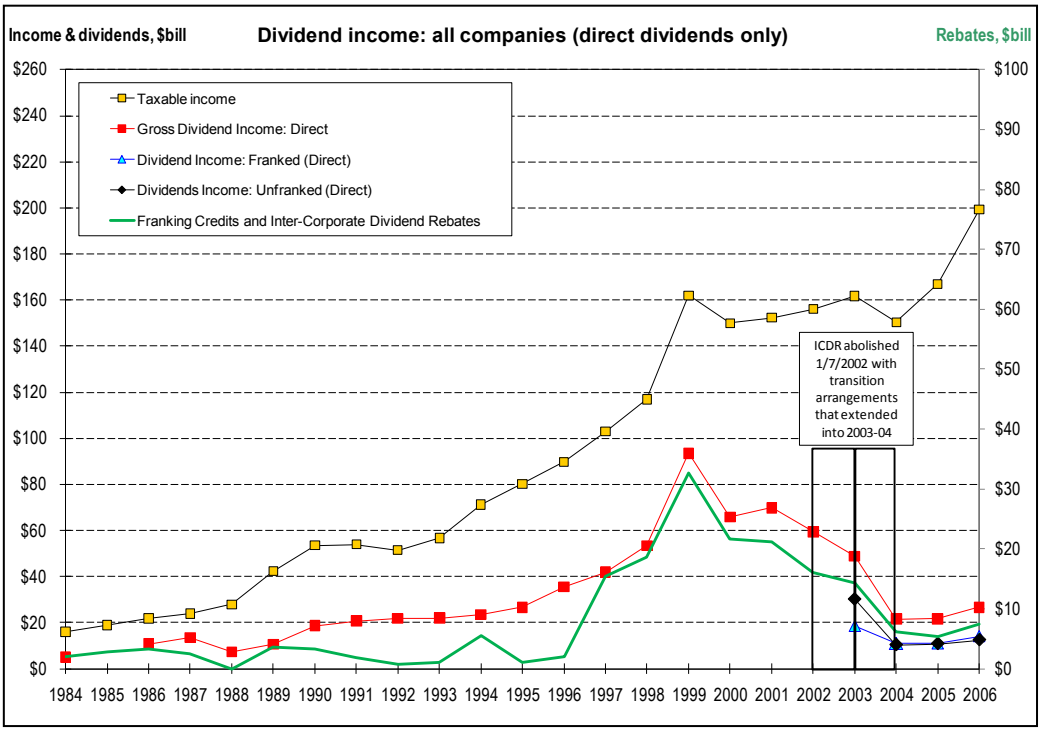
**Figure 4: Dividends paid by all Australian companies**




There are two obvious features here: the spike in unfranked dividends following the announcement of the abolition of the ICDR and the overall decline in total dividends, both franked and unfranked, after 2002. The spike is due to companies re-arranging their affairs ahead of the formal commencement date for the consolidation regime and the abolition of the ICDR. The apparent decline in the overall level of dividends just reflects the substantial reduction in double counting of dividends within consolidated groups. Previously they all reported separately which meant the same dividend flow was being counted multiple times. This problem has only abated. It is not eliminated because there is still multiple counting of dividends where a company pays a dividend to an unrelated party which in turn pays that income out as a dividend. The overall effect on reported dividends has been substantial, as the following plot (Figure 5) shows.

The data constructed by HM do not show any evidence of these big swings in franked and unfranked dividends because they eliminated it through first smoothing the "material spike" in 2000 and 2001 data and then applying over the whole period very smooth factors of 12% average DWT and the assumed franked proportion of dividends of 50% or 63%.

**Figure 5: Dividend income for all Australian companies**




In summary, the HM data series of franked and unfranked dividend income attributed to non-residents is just a series of DWT with two very smooth (almost constant) factors applied to it. They are not series of dividend and franking payments. They never could be a series for franking credits paid to non-resident investors because DWT is not collected from franked dividends paid to non-residents. These dividends are exempt from this tax. Hence the franked dividend series for non-residents analysed by HM is just a contrived series they have created by their assumptions which build on the DWT series.

## 3. Double Counting of Dividends & Excess Credits

HM combine data of Individuals, Funds, Partnerships and Trusts, and their Non-resident data. Notwithstanding the issues above with the non-resident data, one simply cannot combine these flows into totals and then estimate proportions based on these totals. The reason is quite simple. Many of the Partnership and Trust (P&T) flows are paid out to companies, the very group that issued them. To see why this is a problem, consider the following extract from HM Table 3.

**Table 2: - Franked dividends received by investor groups (HM Table 3, Panel 1)**

| | | | | | | | | | | | | | | | | | | Mean | | | Total * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Franked dividends $bn | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 1990–2000 | 2001–2004 | 1990–2004 | 1990–2004 |
| Individuals | 1.1 | 3 | 1.8 | 1.9 | 1.8 | 2.1 | 2.5 | 3.8 | 4.4 | 4.6 | 5.2 | 5.6 | 6.7 | 8.8 | 7.7 | 9.4 | 11 | 3.7 | 9.2 | 5.2 | 77.3 |
| Funds | | 0.4 | 0.7 | 0.6 | 0.7 | 0.7 | 0.9 | 1 | 1.7 | 1.8 | 2 | 2.1 | 2.2 | 2.8 | 2.5 | 2.7 | 3.7 | 1.3 | 2.9 | 1.7 | 26.1 |
| Trusts | | | 0.4 | 0.3 | 0.6 | 0.8 | 1 | 1.9 | 2.4 | 2.5 | 2.8 | 3.5 | 5 | 5.6 | 5.6 | 7.1 | 9.2 | 1.9 | 6.9 | 3.2 | 48.7 |
| Partnerships | | | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 1.4 |
| Non-residents | 1 | 0.8 | 1 | 1.5 | 0.7 | 1.2 | 1.2 | 1.6 | 2.2 | 2.3 | 2.5 | 2.2 | 3.2 | 3.2 | 3.7 | 4.4 | 5.4 | 1.8 | 4.2 | 2.4 | 36.3 |
| Total | | | 3.9 | 4.4 | 3.8 | 5 | 5.6 | 8.3 | 10.8 | 11.3 | 12.7 | 13.5 | 17.1 | 20.6 | 19.5 | 23.8 | 29.5 | 8.8 | 23.4 | 12.7 | 189.8 |

* The "Total 1990-2004" column has been added here and was not in the original HM Table 3.

The data here suggests that from 1988 to 2004 a total $50.1 billion of franked dividends were received by P&T ($48.7 billion for Trusts, $1.4 billion for Partnerships) out of a grand total of $189.8 billion franked dividends. Of the estimated grand total of franked dividends, Individuals received directly $73.3 billion, Funds $25.9 billion and Non-residents $36.3 billion.

Investors can also receive dividends and credits indirectly which means through a share in a partnership or trust or an investment fund which may also be a trust. If all the P&T dividends passed out to the other three groups (Individuals, Funds and Non-residents) then the total would be a correct estimate of combined direct and indirect dividends. However, the dividend income for P&T is *not* distributed in this way. Of total franking credit income of companies, between 25% and 35% is received indirectly. This was invisible under the previous imputation system but is now quite visible under the STS. The following are the relevant ATO data under the new STS.

**Table 3: Company indirect dividend and credit flows**

| Item | 2003-2006 | 2004-2006 | Tax Form Label * |
|---|---|---|---|
| Franking credits (direct) | $23.4 | $15.4 | 7.J |
| Franked dividends (direct) | $54.6 | $35.9 | |
| Total dividends (direct) | $118.0 | $69.2 | 6.H |
| Unfranked dividends (direct) | $63.4 | $33.3 | |
| Rebates | $32.9 | $25.8 | CS.C |
| Excess credits | $3.2 | $2.7 | CS.Z |
| Franking credits (indirect) | $12.7 | $11.0 | |
| Credits (indirect) of Total | 35% | 25% | |
| | | | |
| Dividends paid (franked) | $229.8 | $181.2 | 8.J |
| Credits distributed (total) | $98.5 | $77.6 | |
| Credits distributed (net) | $62.4 | $57.2 | |
| Net distributed of total | 63% | 74% | |

* "CS" means Calculation Statement, a panel on the Company Tax Form. Not all entries on the Tax Form have labels but are reported in the ATO statistics distributed annually by the ATO, usually 2 years in arrears, from where this data was sourced.

Because of the extensive transition arrangements for abolishing the ICDR, we expect the ICDR claims are still present in the 2002-03 tax year data (the shaded cell in Table 3) and may not have fully disappeared for the 2003-04 tax year. Figure 5 above suggests the rebate claim (reported in the Company Tax Form as Label C of the Calculation Statement) is still being driven by the spike in unfranked dividends in 2002-03 but after that, it is moving with the franked dividend income. This is what we would expect if the ICDR has washed out and the rebate claim was then essentially the tax paid as represented by the franking credit income. In this case, the effect of the late reporting companies on the transition period in 2003-04 might not be material.

So HM cannot just add data for P&T along with Individuals, Funds and Non-residents as it over-estimates the indirect income to these three groups. It assumes that all of the P&T income can be treated as indirect income when in practice much of it returns to companies so it is a circular flow.

Not reproduced here but published in *the Paper* as Table 4 is a set of data for excess credits attributed to individuals in the ATO data. However, these data never appear anywhere in the ATO data. The ATO data shows franked dividends received, franking credits received direct and franking credits received indirectly as a share of franking credits. For some years the ATO data did not even show this break down into direct and indirect credits. The indirect credits had to inferred by calculating the credits from their directly owned shares and subtracting that amount from the total franking credit claim. These total credits were included in the personal taxpayers' taxable income section of the ATO data. Also shown in the ATO data are the allowances for franking credits as a credit against personal tax liability. These two sets of data are identical. There is no reduction on the credits declared as income compared to the credits declared as offsetting allowances.

The "Excess Credits" reported by HM in their Table 4 are their estimates based on some unspecified calculation. If one peruses the Individual Tax Return forms published by the ATO over the relevant years, there is no Label nominated for declaring "Excess Credits". The declaration and claim process was that one entered all credits received as personal income and declared these same credits as offsetting items. If one's personal tax liability was reduced so much that not all the credits could be used then so be it. No refund was applied, any excess credits were lost. There is no ATO data in their published series describing any series of excess credits to persons. There is no justification supplied by HM for their estimation of this series. Their data just appears as "Table 4 reports our estimates of the aggregate utilisation rate of imputation credits, by various classes of equity investors in Australian resident companies over the 17 income years from 1988 to 2004 inclusive." HM page 88 para 2. This data remains a mystery to me.

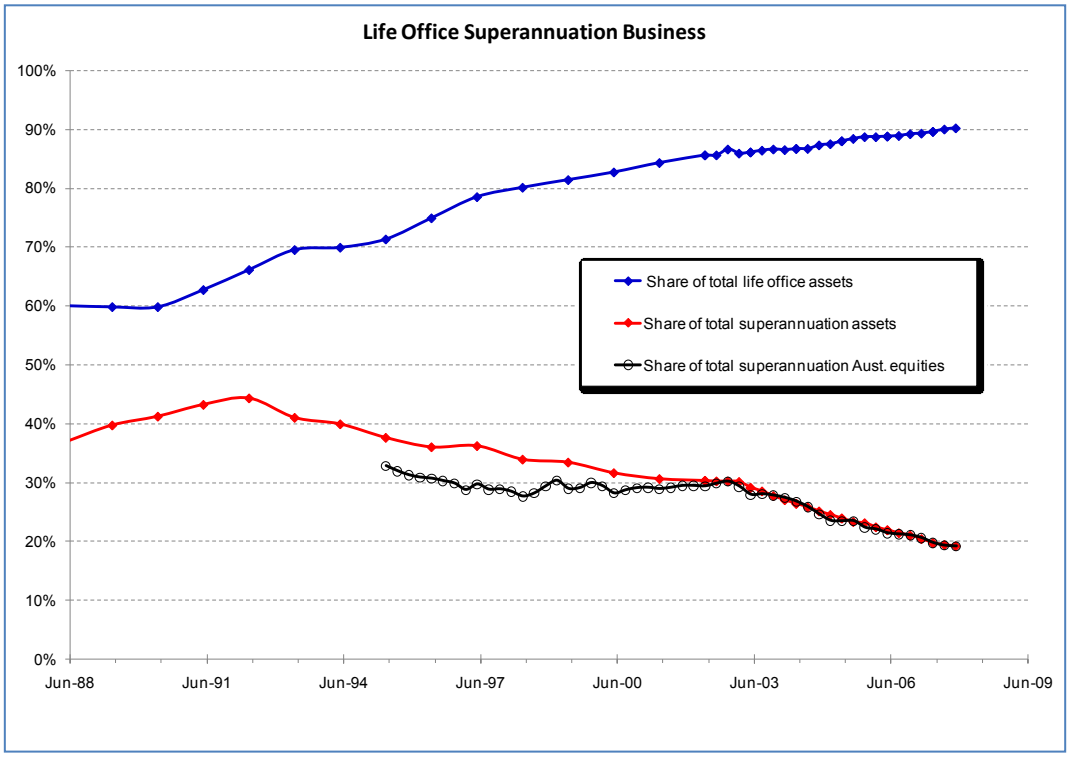
## 4. Ignoring the Life Offices and Others

HM ignore Life Office data and designated claimants, such as charities. "We note that, due to a lack of data, our estimates do not include superannuation funds operated by life assurance companies (for which imputation credits are valuable) but also our estimates do not include tax-exempt entities, such as State government and educational, religious and community service organisations (to whom imputation credits are of no value)" (page 88, col2, para2). Life Office data is included among company data. The comment by HM seems to imply that these two neglected sets may be (at least partially) offsetting. This will not be the case. The Life Office claim is much bigger than the tax exempts redeeming credits via a refund. While it is true that Life Offices data is not published separately by the ATO, much data is published about Life Offices by APRA and sensible estimates can be made. They have much the same asset allocation to Australian equities as do funds which are reported by the ATO so we would expect them to have much the same proportional claims on credits – see Figure 6. This plot indicates that the superannuation business of Life Offices has grown to be about 90% of all their businesses. However, their share of total Australian superannuation business has been steadily declining since 1992. With their superannuation assets they hold Australian equities in almost identical proportion to the whole industry holdings as their share of the total Australian superannuation business. Accordingly, it is reasonable to assume that Life Office superannuation businesses will have the same allocation as funds to franked and unfranked Australian shares. The data on funds can be used as source of Life Office estimates of redemption of franking credits.

In addition, data is published by the ATO with respect to tax-exempts that can claim the credits as cash. HM ignore this data as well.

With their comment, HM are under the misapprehension that State Government enterprises can claim the credits as tax exempts. This has never been the case as State Owned Enterprises do not pay company tax and any such claim would lead to a marvellous rort by State Governments against the Federal Government tax income. SOEs are taxed by their state government owners *as if* they paid company tax which was meant to, among other things, instil a commercial discipline upon them. There is no offset arising from with SOE data and Life Office and Charities data all being missed in the HM analysis.

**Figure 6: Life Office business**



## 5. Comparing Franked and Unfranked Dividends

In their paper, HM use a $64 unfranked dividend income to make comparisons with a $64 franked dividends. This is fraught with estimation risk because they are not comparing like with like. Their $64 franked dividend already has $36 company tax paid but the unfranked one does not.

This leads to the rather strange conclusion that only their Type III non-resident investors utilise the franking credits they receive (HM page 86, Table 2). HM estimate their utilisation as 53%. Recall from above that a Type III non-resident investor is one that pays tax in their home country and gets no tax credit for any tax paid in Australia – paradoxically they get no credit for any DWT levied in Australia on their unfranked dividends yet they are meant to be the one group that can utilise the franking credits on their franked dividends.

To me that this result is an artefact of assuming the same $64 starting point for both franked and unfranked dividends. Investment returns we observe are after company tax and before personal tax. If company tax is meant to just be a withholding of personal tax under an imputation tax system, then to ignore company tax payments amounts to ignoring a substantial and ultimately personal tax. This renders invalid after-personal tax comparisons when such a substantial amount of personal tax is ignored. To make valid comparisons we should have the two cases on equal bases. If I redo the HM Table 2 result for Type III investors using all their other assumptions, I get a quite different conclusion.

**Table 4: Type III Non-resident investors utilisation of credits (based on HM Table 2)**

| | Unfranked | Franked |
|---|---|---|
| Company profit | $100 | $100 |
| Company tax | $0 | $36 |
| Dividend | $100 | $64 |
| Franking credit | $0 | $36 |
| DWT | $30 | $0 |
| Net income | $70 | $64 |
| | | |
| Home Tax | $10.50 | $9.60 |
| After-personal tax income | $59.50 | $54.40 |
| | | |
| World-wide personal taxes | | |
| Australia | $30 | $36 |
| Home | $10.50 | $9.60 |
| Total | $40.50 | $45.60 |
| | | |
| Incremental saving in net DWT | | -$6.00 |
| Incremental after-tax return | | -$5.10 |
| Utilisation of the credit | | -16.67% |
| | | = -$6/$36 |

In this case, the imposition of the franking credit as payment for the DWT actually costs the investor $6.00 as they would rather pay $30 for the DWT than have $36 pre-paid for them via the franking credit.

The problem with using numbers for examples is that the answer is an artefact of the assumed input data. If instead we substitute algebra for the data in this HM table, we get the following intuitive result.

**Table 5: Type III Non-resident investors utilisation of credits - relationships**

| | Unfranked | Franked |
|---|---|---|
| Company profit | P | P |
| Company tax | 0 | P.Tc |
| Dividend | P | P(1-Tc) |
| Franking credit | 0 | P.Tc |
| DWT | P.Tdwt | 0 |
| Net income | P(1-Tdwt) | P(1-Tc) |
| | | |
| Home Tax | P(1-Tdwt)Tp | P(1-Tc)Tp |
| After-personal tax income | P(1-Tdwt)(1-Tp) | P(1-Tc)(1-Tp) |
| | | |
| World-wide personal taxes | | |
| Australia | P.Tdwt | P.Tc |
| Home | P(1-Tdwt)Tp | P.(1-Tc)Tp |
| Total | P(Tdwt+Tp-TdwtTp) | P(Tc+Tp-TcTp) |
| | | |
| Incremental saving in net DWT | | P(Tdwt-Tc) |
| Incremental after-tax return | | P(Tdwt-Tc)(1-Tp) |
| Utilisation rate | | (Tdwt-Tc)/Tc] |

Tc = company tax, Tdwt = dividend withholding tax, Tp = personal tax

This then becomes obvious: if a non-resident investor gets no credit for any taxes paid in Australia then they prefer their investments to pay the least amount of tax, whether that be DWT or company tax. The "utilisation" rate is just the extra tax saved or expended proportional to the full value of a credit. Their personal tax rate is irrelevant – whatever level of income they derive from Australia, they pay personal tax on that amount.

Where Australia charges less for the DWT than it does for company tax the Type III investor will be better off paying no company tax on its Australian dividends and then paying DWT on their way out of the country. As the current company tax rate is 30%, a 30% DWT will leave a Type III investor indifferent between the two forms of investment (ignoring the time value of money for any timing differences between the two forms of payment).

## 6. Summary

The principal numerical result published by HM is the following extract of utilisation rates for franking credits.

**Table 6: Mean Credit Utilisation (HM Table 4)**

| Utilisation rate | 1990–2000 | 2001–2004 | 1990–2004 |
|---|---|---|---|
| Individuals | 0.92 | 1 | 0.94 |
| Funds | 0.64 | 1 | 0.74 |
| Non-residents | 0.05 | 0.07 | 0.05 |
| Total | 0.67 | 0.81 | 0.71 |

I have shaded the cells with results I think are particularly contentious. The reasons for this caution are:

1. The non-resident data:

   The authors created these data from the DWT series but there is no formal connection between DWT and fully franked shares. The only connection presented between them was the assumed proportionate holding of franked shares by non-resident investors, either 50% or 63%. But assuming what proportion of franked dividends they are prepared to hold is tantamount to assuming both what value they place on them and what utilisation rate they will exhibit. In effect, the authors indirectly assume their main results.

2. The post 2000 data:

   The authors ignore substantial systematic changes to the tax system in this period. They average across these periods. They smooth the data in order to avoid what they consider to be problems with the data. They ignore the response of investors to the announced abolition of the ICDR and they ignore the consolidation of corporate groups and they ignore the transition arrangements between the two regimes. This part of their results is the most problematic of the set.

3. The double counting problem with data:

   The authors profess to wish to overcome any double counting issues with ATO data but then construct tables of data with Trusts and Partnerships included. Much of these amounts flow back to the issuing companies and are recounted there. They should never be treated as stand-alone data but instead as part of a circular flow. It has only been the introduction of the simplified imputation system that has illuminated the extent of this double counting of dividend and franking credit flows.

4. Missing data:

   Notwithstanding their acknowledgement of the issue, there is still the basic problem of missing data. The Life Offices are allowed to redeem franking credits as if they were superannuation funds. But they report as companies so their utilisation of credits is embedded in the company data and has to be separately estimated. Some tax-exempt groups can now redeem credits as refunds and these data are also ignored.

5. Non-resident utilisers of credits are only those that get no credit for any Australian tax:

   This strange result is an artefact of comparing a $64 franked dividend with a $64 unfranked dividend and then estimating after-tax returns. The obvious problem is that one dividend has company tax pre-paid and the other does not so the comparison is biased before performing the comparison.

6. Funds utilisation of credits:

   I find the estimated 64% utilisation rate by funds puzzling. It appears too low. I am on the Investment Committee of a superannuation fund in Australia. I know we utilise all our credits. That is consistent with the latter estimate of 1.00. However, looking at the period to 1990- 2000, if a typical fund had a 60% allocation to equities and 2/3 of this was domestic equities then 40% of their total assets (Australian equities) generated franking credits but the whole fund purportedly only utilised 64% of these credits. A fund paying 15% tax and receiving tax credits at about 39% (the average company tax rate over this period) had over half of the franking credits available to pay other tax liabilities. In these circumstances, it is hard to accept that funds cannot utilise nearly all their credits. In this simple example I have made the numbers conservative – a high estimate of growth assets and a high proportion of that being Australian equities. Typical industry numbers would exacerbate the problem. A greater amount of fixed income and rental income would be implied in practice against which the extra credits could be applied. Just 64% utilisation by funds would imply that funds were leaving a lot of missed value that could have been available to their members.

7. Individuals' utilisation of credits 1990-2000:

   This estimate very much depends on the estimate of excess credits. It is not data published by the ATO, rather it is data presented as their estimates. There is no justification presented for their estimates of unutilised credits so it is impossible to appraise their utilisation rate. ATO data has always shown the declared credit income as the same amount as the credits claimed so estimates of under utilisation of credits depends on estimates of individuals' net tax liability with and without the franking credits. I see no attempt to explain how these estimates were derived.

Neville Hathaway
Capital Research
July 2010

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# Appendix 1: Resume of Neville Hathaway

**Experience**

**INVESTMENT COMMITTEE, LEGALSUPER**
2009 –

I am an adviser to the investment committee of Legalsuper, which is an industry superannuation fund, managing approximately $1.4 billion of members' funds, derived mainly from the legal industry, including legal services. The role includes all the facets of allocating assets and choosing managers.

**HEAD OF INVESTMENTS, INTRINSIC VALUE INVESTMENTS LTD**
2005 –

I am head of the investment team at IVI, being a boutique international funds management company with approximately $330 million under management. My role includes liaising with all the major research houses and investment platforms. Also conduct all the trading of the listed securities (OPALS) and the FX hedging for the fund.

**PRINCIPAL, CAPITAL RESEARCH**
2003 –
Capital Research is a specialist consulting firm in corporate finance and investments. The business was started in 2003 by Neville Hathaway and builds on the extensive experience and skills of the principals in the areas of investments valuation, and acting as expert witnesses.

**Consultant, STRUCTURED INVESTMENT GROUP (SIG), INVESCO (AUSTRALIA)**
2002 – 2003

Developed a new investment product (an enhanced index product) for INVESCO Australia. This involved all aspects of original design, logical rationale for why it should work, specification of the product, collection of data and product testing.

**HEAD, STRUCTURED INVESTMENT GROUP (SIG), INVESCO (AUSTRALIA) previously COUNTY INVESTMENT MANAGEMENT,**
2001 – 2002

At that time, SIG managed about A$3.5 billion of INVESCO Australia's A$11 billion of FUM. Investments were made in three main areas; Passive Overlays (A$2.7 bill), Protection (A$400 mill) and Indexation (A$400 mill) plus some others. The business was principally focussed on risk management. My responsibilities included client and consultant relationship management, compliance oversight, interaction with rating agencies and development of the business, both for the domestic and the Asian markets.
The business was transferred from Sydney to Melbourne in May 2001 with a substantial restructure of the team at the same time as I was appointed the new Head. My immediate role was to interact with clients and asset consultants to ensure them of continuing commitment to the business. We were successful in retaining nearly all of the FUM over the transition period.

**HEAD, INVESTMENT SOLUTIONS GROUP, COUNTY INVESTMENT MANAGEMENT,**
1998- 2001

Responsible for product development, process improvement and client consulting. Major achievements of my team included designing a new investment process for the Active Australian Equities team (Top 100) and a new indexation process for the Fixed Interest team.

Assembled the management data and business cash flows for the sale of County to INVESCO.

**ASSOCIATE PROFESSOR OF FINANCE, MELBOURNE BUSINESS SCHOOL, 1991 – 1997**

Taught in the MBA and executive programs. Taught subjects in funds management, corporate valuation and corporate finance. Delivered a number of courses to the Australian financial community: regular ones included Cost of Capital and Dividend Imputation, Small Firm Funds, Derivative Securities, others on a one-off basis, such as "Small Firm Effect" for Securities Institute of Australia. Upon leaving MBS for County in 1997, The University of Melbourne granted me a further rolling appointment as a Fellow (Assoc. Professor).

Other appointments included :
Associate Professor Of Finance, University Of California, Berkeley, USA 1988,
Senior Lecturer, Melbourne Business School, 1984-1991.
Lecturing and adviser to Securities Institute of Australia (FINSIA) masters programme.

**CONSULTANCIES**:
Through the professional relationships I have built up, we have received numerous requests for assistance. Some examples include:

Expert witness for the Buchanan Borehole Collieries vs NSW DPI in the Land and Environment Court, NSW.
Due diligence for the potential acquisition of a Melbourne-based fund manager and responsible entity.
Advised on EquipSuper Fund performance including full attribution analysis.
Review of ACT Super re its business structure and operations.
Expert witness (Norman O'Brien QC) re Administrative Appeal Tribunal of an insider trading case.
Expert witness for the Idemitsu-Pacific Coal case in Queensland Supreme Court. Valued damages due to break up of a joint venture (exploration and development rights).
Expert witness for an appeal to the ATO re the sale of Weight Watchers.
Advised boutique Melbourne Australian equity fund re its investment process.
Developed an imputation-based investment strategy for local investment fund.
Strategic business plan for the Anglican Superfund of Australia.
Advised on the value of a trust of aged care facilities prior to its listing on the ASX.
Valued the management rights for managing this trust.
Valued the Valley Power gas-peaker electricity plant in the La Trobe Valley for attempted purchase.
Valuation advice for purchasing Loy Yang B power station for a prospective buyer.
Valued embedded derivatives for Zinifex Ltd re its electricity supply contract.
Advised SAPEX Ltd on valuation of executive options.
Advised Affiance Group Ltd for the value of its employee options for ATO purposes.
Valued the executive options for Lion Selection Group for its prospectus issue.
Advised St George Bank in matter vs ATO as expert witness.
Advised Rio Tinto for its dispute with the ATO re its franking credits.
Expert witness for NSW Coal Compensation Board for several cases involving valuation compensation claims.
Advised Grand Hotel Group with its asset sale and counterparty compensation.
Advised AAPT re Telstra's ACCC submission on ULLC.

Advised Freehills (representing Channel Seven) re FOXTEL's special access undertaking as expert witness
Advised Prime Infrastructure for the Dalrymple Bay Coal Loader return determination by the Queensland Competition Authority.
Advised BHP re its valuation of plant closure.
Advised Hong Kong Electric Company for its regulated business required return.
Advised Lend Lease Corporation for its dispute with the ATO re its structured transaction of its Westpac share holdings.
Valuation of Optus Vision.
Valuation of Australia Post.
Cost of capital for each of the NSW GBEs (for NSW Treasury).
Advised ATO on changes to imputation tax laws.
Gas transmission access pricing; for AGL Ltd, re Sydney gas market.
Value of Commonwealth Bank imputation credits for sale of stock by the Federal Government.
Value of a large commodity project in South America (for RIO/CRA Ltd).
Valuation of some gold companies for Grant Samuel (Normandy Mining et al merger).
Valuation of the capital of ANZ Bank Ltd.
Advice on domestic versus foreign capital costs for BHP Ltd.
Valuation of a resource project for RIO/CRA Ltd.
Advised on negotiations for the Colonial/State Bank of New South Wales merger.
Valued a $multi-billion, multi-stage project for Comalco.
Costed the capital for the bid for the Victorian electricity distributor, United Energy Ltd for Westpac - bid by the French company EdF, subsequently by AGL Ltd.
The cost of capital (company-wide and divisional) for WMC Ltd.
Costed the capital for the sale of the State Bank of NSW - for CS First Boston.
Cost of capital for various listed companies: including WMC, CRA, FBG.
Advised the NSW Pricing Tribunal on price-setting for Government Business Enterprises.
Valued a company for the ATO with respect to potential litigation.
Valued the employee share option scheme for McIntosh Securities Ltd.
Analyse and made recommendations for a new ASX derivative product - Share Price Ratios. This appeared as an ASX publication: Hathaway Report on Share Ratios.
Report on Asset Allocation for Potter Warburg Private Clients Services.
Valuation of and recommendations about the 530+ million derivative securities involved in the Elders/Harlin restructure into Fosters Brewing Group.
Corporate valuations for potential takeover offers.

**PREVIOUS APPOINTMENTS:**

**FAY, RICHWHITE: 1993 - 1994: ASSOCIATE DIRECTOR**

Responsibilities: Undertook commissioned research and consulting upon request as both a team member and as a sole agent. Guided and assisted the investment banking staff of the Bank in developing and conducting their analyses for clients.
Developed a new risk management process for the Australian Loan Council in order to handle the States' involvement in infrastructure projects. The implementation involved extensive liaising with Treasury staff, both Federal and State.

Developed and advised on the introduction of Economic Rates of Return for Federal Government Business Enterprises (GBE's - eg Federal Airports Corporation). Liaised with the heads of the Federal GBE Policy Advisory Committee concerning the changes induced by placing economic rates of return targets on GBEs.
Analysed and costed the State of Victoria's commitment to the Portland and Point Henry aluminium smelters. My Report was used in both the Nicol's Committee of Inquiry and the Victorian Audit Commission Report.

**Member, University of Melbourne Investment Committee.**
This Committee acted as a fund manager for the many millions of dollars of endowment funds that the University of Melbourne has under investment (approx $500 million when I departed upon my resignation from MBS). It oversaw all aspects of these funds and made all investment decisions. There were five university appointees and five outside appointees to this committee, as well as support staff. The management of this fund is now out-sourced (to VFMC). The fund has now grown to over $1 billion.

**Member, ASX Committee on Australia's Competitive Position in World Resource Stocks.**
This group of people was assembled in order to design a large project to examine all aspects of how Australia's market position for resource stocks can be protected and enhanced within the world. It was envisaged that this project would be a very long one, taking many years and made up of a wide number of projects all with the strategic aim of furthering the market position of the ASX and Australia.

**Member, Advisory Panel to Companies & Securities Commission Advisory Committee**.
This committee reported to the Attorney General in regards to the regulation of derivative securities within Australia.

**Member, Advisory Panel to Finsia.**
This committee is responsible for the design and content of the Masters Program course M01, Applied Quantitative Methods in Finance. I also delivered the course as the principal leader.

## Education

| | | | |
|---|---|---|---|
| Ph.D | University of Melbourne, | 1980. | (Maths/economics) |
| M.Sc | University of Melbourne, | 1978. | (Applied Mathematics) |
| B.Sc (Hons) | La Trobe University, | 1974. | (Mathematics) |

(Took a two year break, 1974-1975, worked in London /travelled world. )

## Personal

Born November, 1951. Married, 1972, to Dianne. We have two adult children Mark and Jane. Pastimes include walking the dog, swimming, reading, gardening and home maintenance (including both off-springs' properties).