# Investment Survey – September 2007 – FDR Tax Regime

## 1 Returns for last quarter

Index returns for the quarter (with one year results in brackets) were:

| ٠ | NZ Shares                          | 1.5%  | (21.1%) |
|---|------------------------------------|-------|---------|
| ٠ | Australian shares in A\$           | 5.9%  | (32.4%) |
| ٠ | Global Shares:                     |       |         |
|   | <ul> <li>local currency</li> </ul> | -0.1% | (16.1%) |
|   | unhedged                           | 4.8%  | (5.1%)  |
|   | <ul> <li>hedged</li> </ul>         | 0.7%  | (19.6%) |
| ٠ | NZ Property                        | -5.6% | (12.5%) |
| ٠ | NZ Bonds                           | 3.5%  | (4.0%)  |
| ٠ | Global Bonds                       | 3.5%  | (6.8%)  |
| ٠ | Cash                               | 2.1%  | (8.2%)  |
| ٠ | NZ\$ against US\$                  | -2.2% | (15.7%) |

## 2 Comment on Balanced Fund results

The gross quarterly average at 2.8% was a good result, as was the 12 month result of 11.1%. Looking at the 12 month results, the range of outcomes was surprising, with Arcus returning 14.9% and BT achieving just 7.2%. Despite doing well in bonds and cash, BT did very poorly in the global share sector.

There was some sorting out of tax issues prior to the introduction of the new PIE regime and this has boosted some managers' results. TAM was a beneficiary of this, and for the 12 month net result, was top at 9.7%.

AMPCI had a good 12 months and ranked second over the period. Tyndall's numbers have improved courtesy of improving results from their global shares manager Capital International. This just goes to show how the returns in this sector have such a major influence over a fund's results, not to mention the impact of a fund's currency position. All the other managers had, with the exception of BT, similar 12 month results.

## 3 FDR tax regime

There has been a lot of interest and discussion about the new Fair Dividend Rate (FDR) tax regime, so we thought we would explore further the impact of the regime on both global shares and bonds over the last 7 years.

**Global shares** Under the previous tax regime all the gain or loss was subject to tax. But now under the FDR regime, just 5% of the value of the investment is subject to tax. A question exists around the tax basis for hedging and whether a fund can be established to include this also under the FDR regime. At this stage we have chosen to assume that any hedging losses or gains are taxed under the current CV basis. We also assume hedging of 150%.

The first table shows the gross and net returns under the two different tax regimes for periods to September 2007, hedged and unhedged, and also shows the volatility of the results.

In the second table we show the same results but for the annual results.

| Returns                                      | Gro   | oss  | Hedg   | ged Net   |
|--|---|--|--|---|
| per annum                                    | Unhedged                                      | Hedged                                       | FDR  | CV  |
| 1 year                                       | 5.1%  | 19.6%  | 17.7%  | 12.9%   |
| 3 years                                      | 14.3%   | 20.8%  | 18.8%  | 13.6%   |
| 5 years                                      | 9.0%  | 21.2%  | 19.3%  | 13.9%   |
| 7 years                                      | -3.5%   | 6.8%   | 5.1%   | 4.7%  |
| Volatility                                   |   |  |  |   |
| 3 years                                      | 12.5%   | 7.4%   | 7.4%   | 4.9%  |
| 5 years                                      | 12.7%   | 9.4%   | 9.4%   | 6.3%  |
| 7 years                                      | 14.5%   | 13.1%  | 13.1%  | 8.8%  |
|  |   |  |  |   |
| <u> </u>                                     | -   |  |  |   |
| Returns                                      | Gro   | OSS  |  | ged Net   |
| Returns                                      | Gro<br>Unhedged                               | oss<br>Hedged                                | Hedą<br>FDR                                      | ged Net<br>CV                                   |
| Returns<br>Sep 2001                          | -   |  |  |   |
|  | Unhedged                                      | Hedged                                       | FDR  | CV  |
| Sep 2001                                     | Unhedged                                      | Hedged -26.0%                                | FDR<br>-27.3%                                    | CV<br>-18.0%                                    |
| Sep 2001<br>Sep 2002                         | Unhedged<br>-27.9%<br>-29.6%                  | Hedged<br>-26.0%<br>-18.2%                   | <i>FDR</i><br>-27.3%<br>-19.5%                   | <u>CV</u><br>-18.0%<br>-12.2%                   |
| Sep 2001<br>Sep 2002<br>Sep 2003             | Unhedged<br>-27.9%<br>-29.6%<br>-0.5%         | Hedged<br>-26.0%<br>-18.2%<br>24.5%          | <i>FDR</i><br>-27.3%<br>-19.5%<br>22.5%          | <u>CV</u><br>-18.0%<br>-12.2%<br>16.1%          |
| Sep 2001<br>Sep 2002<br>Sep 2003<br>Sep 2004 | Unhedged<br>-27.9%<br>-29.6%<br>-0.5%<br>3.4% | Hedged<br>-26.0%<br>-18.2%<br>24.5%<br>19.3% | <i>FDR</i><br>-27.3%<br>-19.5%<br>22.5%<br>17.4% | <u>CV</u><br>-18.0%<br>-12.2%<br>16.1%<br>12.7% |

Commenting on the results we note:

- As expected, the gross results are highly variable and, accentuated by the current high level of the NZ\$, the better returns are from hedged global shares.
- For the 7 year period, the FDR regime delivers an additional annual return of only 0.4, 5.1% cf 4.7%, on average. A surprisingly low result, but heavily influenced by 2 initial bad years results.
- Looking at the annual results we see that the FDR regime has a higher volatility level. We see that while the regime delivers higher positive results, when the market is negative the net FDR result is substantially worse than the net CV result.
- The negative net FDR result is lower than the gross result due to the fact that tax is paid irrespective of the return achieved.

At the bottom of page 2 we show the 12 month rolling returns and the cumulative return over the 7 year period.

In summary the FDR regime is expected to produce higher returns albeit with more volatility.

**Global bonds** This is the asset class which is attracting most attention as to what tax basis applies under the new regime. The tables below are in the same form as for global shares. The hedging under the FDR regime is again at the 150% level.

| Returns    | Gro      | SS     | Hedged Net |      |  |  |  |  |
|------------|----------|--------|------------|------|--|--|--|--|
| per annum  | Unhedged | Hedged | FDR        | CV   |  |  |  |  |
| 1 year     | -6.1%    | 6.8%   | 5.0%       | 4.5% |  |  |  |  |
| 3 years    | 0.8%     | 7.7%   | 5.9%       | 5.1% |  |  |  |  |
| 5 years    | -2.8%    | 7.6%   | 5.9%       | 5.1% |  |  |  |  |
| 7 years    | -1.7%    | 8.6%   | 6.8%       | 5.7% |  |  |  |  |
| Volatility |          |        |            |      |  |  |  |  |
| 3 years    | 11.4%    | 2.4%   | 2.4%       | 1.6% |  |  |  |  |
| 5 years    | 9.9%     | 2.7%   | 2.7%       | 1.8% |  |  |  |  |
| 7 years    | 10.1%    | 2.8%   | 2.8%       | 1.9% |  |  |  |  |

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| Returns  | Gro      | SS     | Hed  | ged  |
|----------|----------|--------|------|------|
|          | Unhedged | Hedged | FDR  | CV   |
| Sep 2001 | 6.3%     | 11.3%  | 9.5% | 7.4% |
| Sep 2002 | -4.2%    | 10.7%  | 8.9% | 7.0% |
| Sep 2003 | -9.7%    | 7.8%   | 6.0% | 5.1% |
| Sep 2004 | -6.0%    | 7.4%   | 5.6% | 4.9% |
| Sep 2005 | 0.4%     | 10.4%  | 8.6% | 6.9% |
| Sep 2006 | 8.6%     | 5.9%   | 4.2% | 3.9% |
| Sep 2007 | -6.1%    | 6.8%   | 5.0% | 4.5% |

We comment on the results as follows:

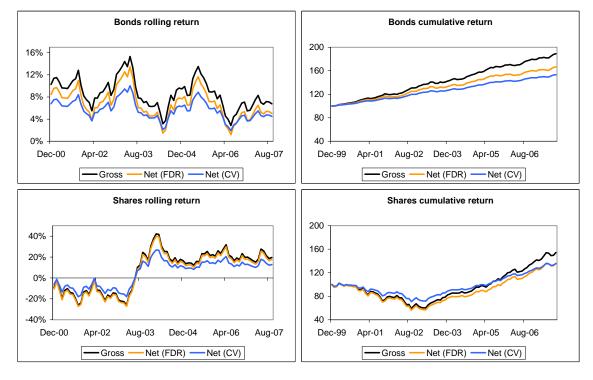
- With one exception, September 2006, the hedged bond results for each year exceed those for the unhedged bonds.
- For the 7 year period the additional average annual excess return for hedged bonds taxed under the FDR regime is 1.1%, 6.8% cf 5.7%.
- The FDR regime always produces the better annual return.
- The volatility under the FDR regime is around 50% above that for the CV regime.

What tax regime is most efficient for a tax paying fund to have their bonds managed under? On the basis of the historical results the answer seems quite clear, they should go for the FDR regime. As noted above, while the volatility is higher, it is not particularly so and a look back at the results for the last 7 years does not produce any one year result where an investor would have been clearly better off under the CV regime. This would of course have been the case if we had had a year with a sharp increase in interest rates and a large negative return.

But what is the tax regime applying to global bond funds? Currently our understanding is the following:

- Some funds are being taxed under the CV regime in total.
- Other funds are invested in AUT's which are subject to the FDR regime but then the A\$ hedge is subject to the CV regime.

Currently the latter funds have an advantage of around 40 bps net p.a. But should a scheme be more concerned about the volatility issue, and should they forgo the excess return for the more stable and certain outcome?



## ABOUT MELVILLE JESSUP WEAVER

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   Perrin's expertise

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|           |             | 3 Mo | nths | 1 Y    | ear  | 3 Ye   | ars  | 5 Ye   | ars  |        |        | 3 Ye    | ears    |            |          |
|-----------|-------------|------|------|--------|------|--------|------|--------|------|--------|--------|---------|---------|------------|----------|
|           |             |      |      |        |      |        |      |        |      | Excess | Return | Trackin | g Error | Informatio | on Ratio |
| Manager   | Туре        | %    | Rank | % p.a. | Rank   | % p.a.  | Rank    | % p.a.     | Rank     |
| NZ        |             |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| TAM       |             | 1.5  |      | 20.4   |      | 17.6   |      | 20.0   |      | 1.5    |        | 1.5     |         | 1.0        |          |
| Indexed   |             |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| Arcus     |             | 0.8  |      | 21.4   |      | 15.5   |      | 16.6   |      | -0.6   |        | 2.1     |         | -0.3       |          |
| AMPCI     |             | 1.4  |      | 21.4   |      | 15.6   |      | 17.8   |      | -0.5   |        | 0.3     |         | -1.7       |          |
| SMS       | NZ Top 10   | 1.5  |      | 21.3   |      | 10.3   |      | 13.7   |      | -5.8   |        | 6.0     |         | -1.0       |          |
| SMS       | NZ Top 50   | 1.4  |      | 15.6   |      | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| SMS       | NZ Mid Cap  | -3.0 |      | 17.0   |      | 17.4   |      | 14.9   |      | 1.3    |        | 8.0     |         | 0.2        |          |
| SMS       | Aus Mid Cap | 7.2  |      | 33.3   |      | 28.8   |      | n.a    |      | 12.6   |        | 10.0    |         | 1.3        |          |
| SMS       | Aus Top 20  | 12.1 |      | 36.0   |      | 28.7   |      | 19.4   |      | 12.6   |        | 11.2    |         | 1.1        |          |
| Trans-Tas | sman        |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| AB        | High Growth | 5.7  | (1)  | 20.5   | (8)  | 19.9   | (3)  | 21.5   | (2)  | 3.8    | (3)    | 3.4     | (7)     | 1.1        | (5)      |
| AMPCI     | Active      | 2.1  | (8)  | 23.5   | (2)  | 18.5   | (6)  | 19.8   | (7)  | 2.3    | (6)    | 1.6     | (1)     | 1.4        | (2)      |
| Arcus     | Multi       | 4.3  | (3)  | 22.2   | (4)  | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| BAM       |             | 5.3  | (2)  | 25.5   | (1)  | 19.0   | (5)  | 20.8   | (3)  | 2.9    | (5)    | 2.7     | (4)     | 1.1        | (6)      |
| BTFM      |             | 2.8  | (7)  | 22.1   | (5)  | 19.9   | (2)  | 20.5   | (6)  | 3.8    | (2)    | 2.9     | (5)     | 1.3        | (4)      |
| ING       |             | 2.9  | (5)  | 20.6   | (7)  | 20.3   | (1)  | 22.7   | (1)  | 4.2    | (1)    | 3.2     | (6)     | 1.3        | (3)      |
| MGI       |             | 4.2  | (4)  | 22.6   | (3)  | 19.3   | (4)  | 20.7   | (5)  | 3.2    | (4)    | 2.2     | (3)     | 1.5        | (1)      |
| TYN       |             | 2.9  | (6)  | 21.6   | (6)  | 17.0   | (7)  | 20.8   | (4)  | 0.9    | (7)    | 1.9     | (2)     | 0.5        | (7)      |
| Average   |             | 3.8  |      | 22.6   |      | 19.9   |      | 21.5   |      | 3.8    |        | 2.8     |         | 1.3        |          |
| Non core  |             |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| AMPCI     | Strategic   | 1.7  |      | 21.6   |      | 21.5   |      | 22.2   |      | 5.4    |        | 10.8    |         | 0.5        |          |
| FIS       | -           | -3.9 |      | 16.1   |      | 29.3   |      | 26.1   |      | 13.2   |        | 12.9    |         | 1.0        |          |
| ING       |             | 2.5  |      | 13.4   |      | 23.0   |      | n.a    |      | 6.9    |        | 7.7     |         | 0.9        |          |
| JBW       |             | 4.3  |      | 25.1   |      | 25.4   |      | 25.5   |      | 9.3    |        | 4.9     |         | 1.9        |          |
| MAM       |             | -0.8 |      | 19.0   |      | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| MNT       |             | 3.9  |      | n.a    |      | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| TYN       | Aggressive  | 6.0  |      | 29.7   |      | 31.2   |      | 38.3   |      | 15.1   |        | 10.4    |         | 1.5        |          |
| WCM       |             | -1.6 |      | 8.2    |      | 14.5   |      | n.a    |      | -1.6   |        | 8.7     |         | -0.2       |          |
| Indices   |             |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| NZSX50    | (incl IC's) | 1.5  |      | 21.1   |      | 16.1   |      | 17.8   |      |        |        |         |         |            |          |
| ASX200    |             | 5.9  |      | 32.4   |      | 26.6   |      | 22.2   |      |        |        |         |         |            |          |
| Cash + 5  | 6% pa       | 3.4  |      | 13.2   |      | 12.6   |      | 11.9   |      |        |        |         |         |            |          |

## Table 2 – Alternative Assets

|         |            |       | 3 Months | 1 Year | 3 Years | 5 Years | 3 Years    |
|---------|------------|-------|----------|--------|---------|---------|------------|
| Manager | Туре       | FX %  | %        | % p.a. | % p.a.  | % p.a.  | Volatility |
| BTFM    | Multi      | 0.0   | 0.4      | 14.2   | n.a     | n.a     | n.a        |
| FID     |            | n.a   | 1.2      | 7.8    | 15.6    | n.a     | 5.9        |
| ING     | Topaz      | 100.0 | 0.5      | 14.3   | 12.1    | 12.4    | 3.5        |
| ING     | Topaz +    | 100.0 | -1.1     | 20.5   | 16.6    | 18.2    | 7.1        |
| ING     | Onyx       | 100.0 | 0.1      | 9.3    | 9.4     | 9.6     | 2.3        |
| RUS     | Multi      | 100.0 | 4.3      | 3.8    | 12.3    | n.a     | 11.2       |
| MGH     |            | 0.0   | 7.1      | 11.6   | n.a     | n.a     | n.a        |
| MGI     | A\$ hedged | 100.0 | -0.6     | 8.7    | 11.0    | 12.2    | 2.6        |
| TAM     | Commodity  | 100.0 | 9.8      | 16.3   | 11.7    | 20.3    | 14.7       |
| TYN     | Multi      | 100.0 | 1.7      | 15.7   | 14.5    | 12.3    | 4.1        |
| WEL     | Commodity  | 0.0   | 7.0      | 3.6    | 14.9    | n.a     | 15.6       |
| Average |            |       | 2.7      | 11.4   | 13.1    | 14.2    | 7.4        |
| Index   |            |       |          |        |         |         |            |
| HFR FoF | Hedged NZ  | D     | 1.0      | 16.9   | 13.8    | 13.0    |            |

## Notes:

- 1. Excess return is defined as gross return less benchmark return, i.e. value added.
- 2. Tracking error is the standard deviation of value added.
- 3. Information Ratio is value added divided by tracking error, i.e. risk adjusted performance.
- 4. The numbers shown are in some cases gross equivalents of the net returns achieved by the manager. Accordingly, for a gross investor the returns realised may be different to those shown above.
- 5. Relative outperformance may be due to the nature of the fund rather than to superior performance
- 6. The ING property return shown is for the ING Property Securities Fund.
- 7. The index share funds are benchmarked against the standard share index and not against their own index.

|           |                  | 3 Moi | nths | 1 Y    | ear  | 3 Ye   | ars  | 5 Ye   | ars  |        |      | ars      |      |            |           |
|-----------|------------------|-------|------|--------|------|--------|------|--------|------|--------|------|----------|------|------------|-----------|
|           |                  |       |      |        |      |        |      |        |      | Excess |      | Tracking |      | Informatio |           |
| Manager   |                  | %     | Rank | % p.a.   | Rank | % p.a.     | Rank      |
|           | No of managers   |       |      |        |      |        |      |        |      |        |      |          |      |            | ļ         |
| AB        | 1                | 4.8   | (7)  | 6.9    | (6)  | 17.3   | (1)  | n.a    |      | 3.0    | (1)  | 2.7      | (9)  | 1.1        | (2)       |
| AMPCI     | 13               | 4.7   | (9)  | 6.8    | (7)  | 16.3   | (3)  | 10.8   | (2)  | 2.0    | (3)  | 1.8      | (4)  | 1.1        | (1)       |
| Arcus     | 5                | 7.2   | (2)  | 10.9   | (2)  | n.a    |      | n.a    |      | n.a    |      | n.a      |      | n.a        |           |
| BNP       | 1                | 4.7   | (8)  | 3.0    | (12) | 15.2   | (5)  | 9.3    | (4)  | 0.9    | (5)  | 2.3      | (6)  | 0.4        | (6)       |
| BTFM      | 1                | 0.6   | (13) | -1.3   | (13) | 11.2   | (10) | 6.6    | (9)  | -3.1   | (10) | 2.6      | (8)  | -1.2       | (10)      |
| ING       | 3                | 4.9   | (6)  | 5.4    | (9)  | 15.0   | (7)  | 9.0    | (6)  | 0.8    | (7)  | 1.4      | (2)  | 0.5        | (5)       |
| INT       | 9                | 3.8   | (12) | 3.9    | (11) | 14.2   | (9)  | 8.6    | (8)  | -0.1   | (9)  | 1.6      | (3)  | 0.0        | (9)       |
| Jana      | 4                | 5.9   | (5)  | 7.4    | (4)  | n.a    |      | n.a    |      | n.a    |      | n.a      |      | n.a        |           |
| MLC       | 7                | 6.0   | (4)  | 8.1    | (3)  | 16.0   | (4)  | 10.3   | (3)  | 1.7    | (4)  | 2.5      | (7)  | 0.7        | (4)       |
| RUS       | 12               | 4.4   | (11) | 4.0    | (10) | 14.4   | (8)  | 8.8    | (7)  | 0.1    | (8)  | 1.0      | (1)  | 0.1        | (8)       |
| RUS       | 4                | 4.5   | (10) | 5.4    | (8)  | n.a    |      | n.a    |      | n.a    |      | n.a      |      | n.a        |           |
| TYN       | 1                | 6.6   | (3)  | 7.0    | (5)  | 15.1   | (6)  | 9.2    | (5)  | 0.9    | (6)  | 2.2      | (5)  | 0.4        | (7)       |
| WEL       | 1                | 11.1  | (1)  | 12.2   | (1)  | 17.1   | (2)  | 11.0   | (1)  | 2.8    | (2)  | 3.5      | (10) | 0.8        | (3)       |
| Average   |                  | 5.3   |      | 6.1    |      | 15.2   |      | 9.3    |      | 0.9    |      | 2.2      |      | 0.4        |           |
| Value     |                  | 0.0   |      |        |      |        |      | 0.0    |      |        |      |          |      |            |           |
| AB        | 1                | 2.4   | (5)  | 6.6    | (3)  | 18.8   | (1)  | 13.9   | (1)  | 4.6    | (1)  | 3.2      | (5)  | 1.4        | (1)       |
| DFA       | 1                | -0.1  | (6)  | 3.5    | (6)  | 17.0   | (2)  | 12.7   | (2)  | 2.7    | (2)  | 2.9      | (4)  | 0.9        | (2)       |
| GMO       | 1                | 3.5   | (3)  | 4.1    | (5)  | 14.4   | (5)  | 9.8    | (5)  | 0.2    | (5)  | 1.7      | (1)  | 0.1        | (5)       |
| TAM       | 4                | 4.6   | (2)  | 7.3    | (2)  | 15.9   | (4)  | 10.1   | (4)  | 1.6    | (4)  | 2.0      | (2)  | 0.8        | (3)       |
| TEM       | 1                | 3.4   | (4)  | 5.8    | (4)  | 16.1   | (3)  | 11.8   | (3)  | 1.9    | (3)  | 2.8      | (3)  | 0.7        | (4)       |
| WEL       | 1                | 8.1   | (1)  | 7.7    | (1)  | n.a    | (0)  | n.a    | (0)  | n.a    | (0)  | n.a      | (0)  | n.a        | (.,       |
| Average   |                  | 3.6   | (1/  | 5.8    |      | 16.5   |      | 11.7   |      | 2.2    |      | 2.5      |      | 0.8        |           |
| Growth    |                  | 0.0   |      | 0.0    |      | 10.0   |      |        |      |        |      | 2.0      |      | 0.0        |           |
| AB        | 1                | 7.8   | (2)  | 7.2    | (3)  | 15.7   | (1)  | 10.3   | (1)  | 1.4    | (1)  | 13.9     | (4)  | 0.1        | (1)       |
| BNP       | 1                | 5.5   | (4)  | 6.8    | (4)  | 15.2   | (2)  | n.a    | (1)  | 0.9    | (2)  | 12.5     | (3)  | 0.1        | (2)       |
| GMO       | 1                | 7.0   | (3)  | 7.3    | (2)  | 14.4   | (3)  | n.a    |      | 0.0    | (3)  | 2.3      | (1)  | 0.1        | (2)       |
| WEL       | 1                | 13.2  | (0)  | 13.1   | (1)  | 13.1   | (4)  | 10.1   | (2)  | -1.1   | (4)  | 6.3      | (2)  | -0.2       | (4)       |
| Average   |                  | 8.4   |      | 8.6    |      | 14.6   |      | 10.2   |      | 0.3    |      | 8.7      | (4)  | 0.0        | <u>\_</u> |
| Indexed   |                  | 0.4   |      | 0.0    |      | 14.0   |      | 10.2   |      | 0.0    |      | 0.7      |      | 0.0        |           |
| Arcus     |                  | 4.5   |      | 3.4    |      | 12.3   |      | 7.2    |      | -2.0   |      | 0.9      |      | -2.3       |           |
| AMPCI     |                  | 4.7   |      | 3.6    |      | 12.5   |      | 7.1    |      | -1.8   |      | 1.0      |      | -1.8       |           |
| VAN       |                  | 4.4   |      | 4.1    |      | 13.7   |      | 8.5    |      | -0.6   |      | 0.3      |      | -2.1       |           |
| Other     |                  |       |      | 7.1    |      | 10.1   |      | 0.0    |      | 0.0    |      | 0.0      |      | 2.1        |           |
| AMPCI     | Emerging         | 2.8   |      | 9.7    |      | 20.0   |      | 13.1   |      | -16.2  |      | 11.5     |      | -1.4       |           |
| AMPCI     | S Responsible    | 3.5   |      | 6.2    |      | 15.7   |      | 7.3    |      | 1.5    |      | 2.3      |      | 0.7        |           |
| Jana      | High Alpha       | 5.9   |      | 7.7    |      | n.a    |      | n.a    |      | n.a    |      | n.a      |      | n.a        |           |
| LMI       | Emerging         | 17.5  |      | 37.7   |      | 36.8   |      | 27.5   |      | 0.6    |      | 3.1      |      | 0.2        |           |
| NZAM      | Multi            | 3.7   |      | 4.6    |      | 13.8   |      | 11.7   |      | -0.5   |      | 4.7      |      | -0.1       |           |
| Indices   |                  | 5.7   |      | 0      |      | 10.0   |      | 11.7   |      | -0.5   |      | 7./      |      | -0.1       |           |
| MSCI 0% ł | nedaed           | 4.8   |      | 5.1    |      | 14.3   |      | 9.0    |      |        |      |          |      |            |           |
| MSCI 1009 |                  | 4.0   |      | 19.6   |      | 20.8   |      | 21.2   |      |        |      |          |      |            |           |
|           | rging 0% hedged  | 16.0  |      | 35.9   |      | 36.2   |      | 21.2   |      |        |      |          |      |            |           |
|           | rging 070 neugeu | 10.0  |      | 50.9   |      | 30.2   |      | 20.1   |      | 1      |      |          |      |            |           |

# Table 4 – Property

|           |                | 3 Mo | nths | 1 Y    | ear  | 3 Ye   | ars  | 5 Ye   | ars  |        |        | 3 Ye    | ars     |            |          |
|-----------|----------------|------|------|--------|------|--------|------|--------|------|--------|--------|---------|---------|------------|----------|
|           |                |      |      |        |      |        |      |        |      | Excess | Return | Trackin | g Error | Informatio | on Ratio |
| Manager   |                | %    | Rank | % p.a. | Rank   | % p.a.  | Rank    | % p.a.     | Rank     |
| NZ Listed |                |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| AB        |                | -5.1 | (6)  | 14.5   | (5)  | 19.7   | (3)  | 17.9   | (3)  | 2.0    | (3)    | 1.9     | (1)     | 1.1        | (3)      |
| BAM       | Infrastructure | -4.5 | (5)  | 17.6   | (2)  | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| BTFM      |                | -3.7 | (4)  | 17.1   | (3)  | 21.4   | (2)  | 19.0   | (2)  | 3.6    | (2)    | 3.0     | (3)     | 1.2        | (2)      |
| ING       |                | -3.6 | (3)  | 14.9   | (4)  | 22.8   | (1)  | 20.3   | (1)  | 5.1    | (1)    | 2.8     | (2)     | 1.8        | (1)      |
| JBW       | Trans-Tasman   | 4.8  | (1)  | 27.2   | (1)  | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| WCM       | Trans-Tasman   | -1.2 | (2)  | 13.6   | (6)  | 18.1   | (4)  | n.a    |      | 0.4    | (4)    | 5.0     | (4)     | 0.1        | (4)      |
| Average   |                | -2.2 |      | 17.5   |      | 20.5   |      | 19.1   |      | 2.8    |        | 3.1     |         | 1.0        |          |
| NZ Direct |                |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| AMPCI     |                | 6.8  | (1)  | 35.1   | (1)  | 23.7   | (1)  | 19.4   | (1)  | 0.5    | (1)    | 3.3     | (1)     | 0.2        | (1)      |
| TAM       |                | 3.7  | (2)  | 13.5   | (2)  | 20.7   | (2)  | 19.4   | (2)  | -2.5   | (2)    | 7.3     | (2)     | -0.3       | (2)      |
| Average   |                | 5.2  |      | 24.3   |      | 22.2   |      | 19.4   |      | -1.0   |        | 5.3     |         | -0.1       |          |
| Global    |                |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| AMPCI     |                | -1.1 | (4)  | 14.7   | (1)  | 27.8   | (1)  | n.a    |      | 2.8    | (1)    | 2.1     | (1)     | 1.4        | (1)      |
| ING       |                | -0.2 | (3)  | 5.2    | (4)  | 24.4   | (2)  | n.a    |      | -0.5   | (2)    | 3.8     | (3)     | -0.1       | (2)      |
| RUS       | Multi          | 1.5  | (2)  | 14.2   | (2)  | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| TYN       |                | 2.4  | (1)  | 11.0   | (3)  | 22.6   | (3)  | n.a    |      | -0.5   | (3)    | 2.2     | (2)     | -0.2       | (3)      |
| Average   |                | 0.6  |      | 11.3   |      | 24.9   |      | n.a    |      | 0.6    |        | 2.7     |         | 0.3        |          |
| Indices   |                |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| NZSE Pr   | operty         | -5.6 |      | 12.5   |      | 17.7   |      | 16.1   |      |        |        |         |         |            |          |
|           | bal Property   | -2.1 |      | 11.1   |      | 24.9   |      | n.a    |      |        |        |         |         |            |          |

# Table 5 – Bond and Cash Funds

5.1 New Zealand Bonds

|               | 3 Mo | onths | 1 Year 3 Years 5 Years |      |        |      |        |      |        |        | 3 Ye    | ars     |            |          |
|---------------|------|-------|------------------------|------|--------|------|--------|------|--------|--------|---------|---------|------------|----------|
|               |      |       |                        |      |        |      |        |      | Excess | Return | Trackin | g Error | Informatio | on Ratio |
| Manager Type  | %    | Rank  | % p.a.                 | Rank | % p.a. | Rank | % p.a. | Rank | % p.a. | Rank   | % p.a.  | Rank    | % p.a.     | Rank     |
| AB            | 3.0  | (4)   | 3.7                    | (7)  | 5.6    | (6)  | 5.8    | (5)  | 0.1    | (6)    | 0.8     | (2)     | 0.1        | (6)      |
| AMPCI         | 3.1  | (2)   | 4.2                    | (4)  | 6.0    | (5)  | 6.1    | (3)  | 0.4    | (5)    | 1.0     | (5)     | 0.4        | (5)      |
| Arcus Multi   | 1.7  | (7)   | 3.7                    | (6)  | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| BTFM          | 3.1  | (1)   | 4.0                    | (5)  | 6.0    | (4)  | 5.7    | (6)  | 0.5    | (4)    | 0.7     | (1)     | 0.7        | (3)      |
| ING           | 3.1  | (3)   | 4.7                    | (1)  | 7.2    | (1)  | 7.0    | (1)  | 1.7    | (1)    | 1.0     | (4)     | 1.7        | (1)      |
| TAM           | 2.9  | (5)   | 4.7                    | (2)  | 6.1    | (3)  | 6.0    | (4)  | 0.6    | (3)    | 0.9     | (3)     | 0.7        | (4)      |
| TYN           | 2.7  | (6)   | 4.5                    | (3)  | 6.4    | (2)  | 6.4    | (2)  | 0.8    | (2)    | 1.0     | (6)     | 0.8        | (2)      |
| Average       | 2.8  |       | 4.2                    |      | 6.2    |      | 6.2    |      | 0.7    |        | 0.9     |         | 0.8        |          |
| Index         |      |       |                        |      |        |      |        |      |        |        |         |         |            |          |
| NZ Govt Stock | 3.5  |       | 4.0                    |      | 5.5    |      | 5.6    |      |        |        |         |         |            |          |
| NZ All Swaps  | 2.4  |       | n.a                    |      | n.a    |      | n.a    |      |        |        |         |         |            |          |

# 5.2 Global Bonds (hedged)

|           |                  | 3 Mo | nths | 1 Y    | ear  | 3 Ye   | ars  | 5 Ye   | ars  |        |        | 3 Ye    | ars     |            |          |
|-----------|------------------|------|------|--------|------|--------|------|--------|------|--------|--------|---------|---------|------------|----------|
|           |                  |      |      |        |      |        |      |        |      | Excess | Return | Trackin | g Error | Informatio | on Ratio |
| Manager   | Type/Manager     | %    | Rank | % p.a. | Rank   | % p.a.  | Rank    | % p.a.     | Rank     |
| AB        |                  | 3.6  | (2)  | 7.2    | (2)  | 7.7    | (4)  | 7.2    | (8)  | 0.3    | (4)    | 0.5     | (2)     | 0.6        | (3)      |
| AMPCI     | Multi            | 2.1  | (10) | 6.0    | (9)  | 7.2    | (9)  | 7.6    | (7)  | -0.2   | (9)    | 1.3     | (5)     | -0.1       | (9)      |
| Arcus     | Multi            | 3.4  | (4)  | 6.4    | (7)  | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| BLK       |                  | 3.2  | (5)  | 6.5    | (5)  | 7.8    | (3)  | 8.2    | (2)  | 0.4    | (2)    | 0.5     | (1)     | 0.8        | (2)      |
| BTFM      | Principle Global | 3.4  | (3)  | 6.2    | (8)  | 7.5    | (7)  | 8.1    | (4)  | 0.1    | (6)    | 1.7     | (9)     | 0.0        | (6)      |
| DFA       |                  | 2.5  | (9)  | 8.1    | (1)  | 7.5    | (6)  | n.a    |      | -0.1   | (8)    | 1.6     | (8)     | -0.1       | (8)      |
| ING       |                  | 3.8  | (1)  | 7.0    | (3)  | 8.5    | (1)  | 7.9    | (6)  | 1.1    | (1)    | 0.8     | (3)     | 1.4        | (1)      |
| RUS       | Multi            | 2.7  | (8)  | 6.4    | (6)  | 8.1    | (2)  | 8.3    | (1)  | 0.4    | (3)    | 1.4     | (7)     | 0.3        | (5)      |
| TAM       | PIMCO            | 3.2  | (6)  | 5.7    | (10) | 7.3    | (8)  | 8.2    | (3)  | -0.1   | (7)    | 1.3     | (6)     | -0.1       | (7)      |
| TYN       | FFTW             | 3.0  | (7)  | 6.7    | (4)  | 7.7    | (5)  | 8.1    | (5)  | 0.3    | (5)    | 0.9     | (4)     | 0.3        | (4)      |
| Average   |                  | 3.1  |      | 6.6    |      | 7.7    |      | 8.0    |      | 0.2    |        | 1.1     |         | 0.4        |          |
| A\$ Hedge | ed               |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| INT       |                  | 3.2  | (1)  | n.a    |      | n.a    |      | n.a    |      | n.a    |        | n.a     |         | n.a        |          |
| MLC       |                  | 2.8  | (2)  | 5.0    | (1)  | 6.2    | (1)  | 7.5    | (1)  | n.a    |        | n.a     |         | n.a        |          |
| Index     |                  |      |      |        |      |        |      |        |      |        |        |         |         |            |          |
| Lehman    |                  | 3.5  |      | 6.8    |      | 7.4    |      | 7.7    |      |        |        |         |         |            |          |
| Citigroup | WGBI             | 4.0  |      | 6.8    |      | 7.7    |      | 7.6    |      |        |        |         |         |            |          |

## 5.3 Cash

|                        | 3 Mo | nths | 1 Y    | ear  | 3 Ye   | ars  | 5 Ye   | ears |        |        | 3 Ye    | ars     |             |          |
|------------------------|------|------|--------|------|--------|------|--------|------|--------|--------|---------|---------|-------------|----------|
|                        |      |      |        |      |        |      |        |      | Excess | Return | Trackin | g Error | Information | on Ratio |
| Manager                | %    | Rank | % p.a. | Rank   | % p.a.  | Rank    | % p.a.      | Rank     |
| AB                     | 2.0  | (8)  | 7.9    | (9)  | 7.5    | (9)  | 6.9    | (7)  | -0.1   | (9)    | 0.1     | (4)     | -1.0        | (9)      |
| AMPCI                  | 2.1  | (4)  | 8.1    | (7)  | 7.6    | (7)  | 7.0    | (6)  | 0.0    | (7)    | 0.1     | (2)     | -0.3        | (7)      |
| AMPCI Strategic Income | 2.0  | (9)  | 8.8    | (1)  | 8.4    | (2)  | 8.0    | (1)  | 0.8    | (2)    | 0.4     | (8)     | 2.1         | (2)      |
| Arcus                  | 2.1  | (3)  | 8.4    | (4)  | 7.7    | (5)  | 7.0    | (5)  | 0.1    | (5)    | 0.1     | (6)     | 0.8         | (5)      |
| BTFM                   | 2.2  | (2)  | 8.4    | (3)  | 7.9    | (3)  | 7.1    | (4)  | 0.3    | (3)    | 0.2     | (7)     | 1.5         | (4)      |
| ING                    | 2.3  | (1)  | 8.7    | (2)  | 8.8    | (1)  | 7.9    | (2)  | 1.2    | (1)    | 0.4     | (9)     | 2.8         | (1)      |
| MGI                    | 2.1  | (7)  | 8.0    | (8)  | 7.5    | (8)  | 6.8    | (9)  | -0.1   | (8)    | 0.1     | (3)     | -0.9        | (8)      |
| ТАМ                    | 2.1  | (5)  | 8.1    | (6)  | 7.6    | (6)  | 6.9    | (8)  | 0.0    | (6)    | 0.1     | (1)     | 0.0         | (6)      |
| TYN                    | 2.1  | (6)  | 8.3    | (5)  | 7.8    | (4)  | 7.1    | (3)  | 0.2    | (4)    | 0.1     | (5)     | 2.1         | (3)      |
| Average                | 2.1  |      | 8.3    |      | 7.9    |      | 7.2    |      | 0.3    |        | 0.2     |         | 0.8         |          |
| Index                  |      |      |        |      |        |      |        |      |        |        |         |         |             |          |
| 90 Day Bank Bill       | 2.1  |      | 8.2    |      | 7.6    |      | 6.9    |      |        |        |         |         |             |          |

6.1 Returns

|         | Gross |       |        |      |        |                  |        |      | Net  |      |        |      |        |      |        |      |  |
|---------|-------|-------|--------|------|--------|------------------|--------|------|------|------|--------|------|--------|------|--------|------|--|
|         | 3 Mc  | onths | 1 Y    | ear  | 3 Ye   | ears             | 5 Ye   | ears | 3 Mo | nths | 1 Y    | ear  | 3 Ye   | ears | 5 Ye   | ears |  |
| Manager | %     | Rank  | % p.a. | Rank | % p.a. | Rank             | % p.a. | Rank | %    | Rank | % p.a. | Rank | % p.a. | Rank | % p.a. | Rank |  |
| AB      | 2.7   | (5)   | 8.9    | (7)  | 12.9   | (7)              | 11.5   | (7)  | 2.1  | (7)  | 7.0    | (6)  | 8.9    | (7)  | 7.9    | (7)  |  |
| AMPCI   | 2.5   | (6)   | 14.6   | (2)  | 14.8   | (2)              | 13.5   | (4)  | 2.8  | (1)  | 9.3    | (2)  | 10.4   | (3)  | 9.2    | (4)  |  |
| Arcus   | 3.7   | (1)   | 14.9   | (1)  | 16.5   | (1)              | 16.4   | (1)  | 2.2  | (6)  | 7.3    | (5)  | 11.1   | (1)  | 10.4   | (1)  |  |
| BTFM    | 1.7   | (8)   | 7.2    | (8)  | 12.3   | (8)              | 11.9   | (6)  | 1.5  | (8)  | 4.9    | (8)  | 10.2   | (4)  | 10.3   | (2)  |  |
| ING     | 2.5   | (7)   | 9.5    | (6)  | 14.0   | (4)              | 13.5   | (2)  | 2.4  | (4)  | 6.6    | (7)  | 10.4   | (2)  | 9.6    | (3)  |  |
| MGI     | 3.0   | (4)   | 11.2   | (4)  | 13.8   | (6)              | n.a    |      | 2.2  | (5)  | 7.3    | (4)  | 9.5    | (5)  | n.a    |      |  |
| TAM     | 3.2   | (3)   | 11.1   | (5)  | 14.1   | (3)              | 12.9   | (5)  | 2.6  | (2)  | 9.7    | (1)  | 9.3    | (6)  | 8.2    | (6)  |  |
| TYN     | 3.2   | (2)   | 11.7   | (3)  | 14.0   | <mark>(5)</mark> | 13.5   | (3)  | 2.5  | (3)  | 7.7    | (3)  | 8.8    | (8)  | 9.0    | (5)  |  |
| Average | 2.8   |       | 11.1   |      | 14.0   |                  | 13.3   |      | 2.3  |      | 7.4    |      | 9.8    |      | 9.2    |      |  |

#### 6.2 Asset Allocation

(Shaded figures indicate an increased asset allocation since the previous quarter)

| Manager | NZ sl  | hares   | Oversea | s shares | Prop | erty   | Alt    | Growth | Fixed i | nterest | Cash | Income | Cu    | irrency  |
|---------|--------|---------|---------|----------|------|--------|--------|--------|---------|---------|------|--------|-------|----------|
|         | Active | Passive | Active  | Passive  | NZ   | Global | Assets | Assets | NZ      | O'seas  |      | Assets | Alloc | Outlook  |
| AB      | 5.7    | 7.4     | 17.6    | 21.0     | 7.4  | 0.0    | 0.0    | 59.1   | 17.3    | 12.3    | 11.3 | 40.9   | 20.9  | Negative |
| AMPCI   | 13.0   | 0.0     | 36.1    | 0.0      | 13.2 | 1.6    | 0.0    | 63.8   | 18.0    | 11.5    | 6.8  | 36.2   | 22.9  | Negative |
| Arcus   | 20.5   | 0.0     | 45.3    | 0.0      | 2.4  | 0.0    | 6.6    | 74.8   | 7.3     | 2.7     | 15.2 | 25.2   | 31.3  | Negative |
| BTFM    | 20.4   | 0.0     | 35.1    | 0.0      | 5.0  | 0.0    | 5.4    | 66.0   | 15.6    | 9.9     | 8.6  | 34.1   | 35.1  | Neutral  |
| ING     | 17.2   | 0.0     | 36.8    | 0.0      | 9.7  | 2.0    | 2.2    | 67.9   | 17.1    | 12.1    | 2.8  | 32.0   | 20.5  | Positive |
| MGI     | 14.9   | 0.0     | 33.4    | 0.0      | 4.9  | 5.2    | 2.0    | 60.4   | 13.8    | 20.8    | 5.0  | 39.6   | 16.7  | Neutral  |
| TAM     | 8.7    | 0.0     | 35.7    | 0.0      | 19.2 | 0.0    | 0.0    | 63.6   | 6.1     | 20.7    | 9.6  | 36.4   | 22.4  | Neutral  |
| TYN     | 15.1   | 0.0     | 34.6    | 0.0      | 0.0  | 5.0    | 7.6    | 62.3   | 18.8    | 13.9    | 5.0  | 37.7   | 17.3  | Neutral  |
| Average | 14.4   | 0.9     | 34.3    | 2.6      | 7.7  | 1.7    | 3.0    | 64.7   | 14.2    | 13.0    | 8.0  | 35.3   | 23.4  |          |

# Table 7 – Additional information

(Funds under management relate to the overall organization)

|                                   | Acronym | Total FUM<br>(\$m) | Manager                        | Acronym | Total FUM<br>(\$m) |
|-----------------------------------|---------|--------------------|--------------------------------|---------|--------------------|
| AllianceBernstein                 | AB      | 7,132.0            | Legg Mason, Inc.               | LMI     | n.a                |
| Arcus Investment Management       | Arcus   | 5,090.0            | Milford Asset Management       | MAM     | 244.0              |
| AMP Capital Investors             | AMPCI   | 12,253.0           | MLC                            | MLC     | n.a                |
| Brook Asset Management            | BAM     | 1,582.8            | MGH Asset Management Ltd       | MGH     | n.a                |
| BlackRock Investment Management   | BLK     | n.a                | Mercer Global Investments      | MGI     | 1,290.7            |
| BNP Paribas Investment Management | BNP     | n.a                | Mint Asset Management          | MNT     | n.a                |
| BT Funds Management               | BTFM    | 2,371.4            | New Zealand Assets Management  | NZAM    | 766.3              |
| Dimensional Fund Advisors         | DFA     | n.a                | Russell Investment Group       | RUS     | n.a                |
| Fidelity Life                     | FID     | 433.1              | SmartShares                    | SMS     | 387.6              |
| Fisher Funds Management           | FIS     | 1,082.7            | Tower Asset Management         | TAM     | 4,539.4            |
| GMO                               | GMO     | 18,452.0           | Templeton                      | TEM     | n.a                |
| ING                               | ING     | 7,930.0            | Tyndall Investment Management  | TYN     | 3,616.0            |
| Intech                            | INT     | n.a                | Vanguard Investments Australia | VAN     | n.a                |
| Jana                              | Jana    | n.a                | Walker Capital Management      | WCM     | 157.9              |
| Goldman Sachs JBWere              | JBW     | n.a                | Wellington Management Company  | WEL     | n.a                |

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