

## Investment Survey – December 2007

### 1. Returns for last quarter

Index returns for the quarter and the year were:

Asset Class	Quarter	Year
NZ Shares	-5.1%	1.4%
Australian shares in A\$	-2.7%	16.1%
Global Shares:		
• local currency	-2.9%	5.2%
• unhedged	-4.1%	0.4%
• hedged	-2.0%	8.8%
NZ Property	-3.9%	-4.3%
NZ Bonds	0.5%	3.9%
Global Bonds	3.1%	8.5%
Cash	2.2%	8.5%
NZ\$ against US\$	1.8%	9.1%

### 2. Comment on results

December was a tough quarter for fund managers. Significant falls in shares and property (especially for the month of November) meant that the average return for balanced funds was -1.7% for the quarter. This meant the results for the 2007 year were weak, with an average return of just 4.8%.

The top result for the quarter was from TAM (-0.4%) and the worst from Arcus (-2.8%). It should be noted that TAM have the most conservative allocation to growth assets (57.1%) while Arcus have the most aggressive allocation (73.2%).

This survey now reports on 7 balanced funds, with AllianceBernstein's EFG fund winding up at the end of September 2007.

### 3. Importance of the benchmark

The importance of asset allocation benchmark selection in terms of the returns received is examined below.

#### 3.1 Introduction

In our June 2005 survey we included an article examining the role that the benchmark plays in determining returns for balanced funds. The article was based on a major paper published in the Financial Analysts Journal (July/August 1986) entitled "Determinants of Portfolio Performance" by Brinson, Hood and Beebower. Our analysis and findings, based on five NZ fund managers, were largely consistent with that paper.

In light of the changing investment environment we thought it would be timely to review our analysis. We have followed a similar structure, to produce the results for four fund managers covering the ten year period to September 2007.

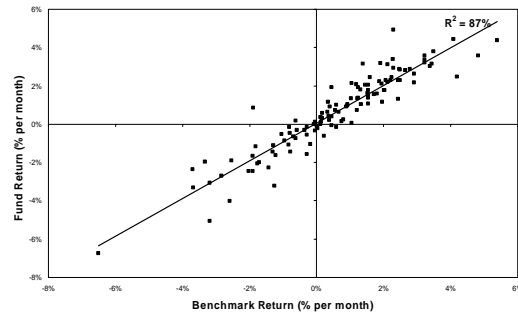
#### 3.2 Methodology and Results

We calculated estimates of the four "sectors" of return used in the Brinson, Hood and Beebower paper, given as sectors I, II, III and IV, where:

I	Benchmark	Benchmark weights x Index returns
II	TAA	Actual weights x Index returns
III	SS	Benchmark weights x Actual returns
IV	Actual	Actual weights x Actual returns

It follows that the difference between the sector IV and sector I returns is value added.

The chart below plots the benchmark return against actual return, gross of tax and fees, for Fund Manager 1. The actual results closely track the benchmark results.



The extent to which the variation in actual performance is explained by the benchmark can be expressed by the "r-squared" statistic, in this case 87%. Thus 87% of the performance variation is due to the benchmark. The table below shows the results for all four Fund Managers.

Manager	Benchmark %
FM1	87.2
FM2	95.5
FM3	79.2
FM4	90.5
Average	88.1

#### 3.3 Other factors

The key performance effects shown in the following tables emphasise the value of the significant factors of tactical asset allocation and stock selection.

Manager	Benchmark %	Tactical Asset Allocation %	Security Selection %	Other %
FM1	87.2	0.2	12.3	0.3
FM2	95.5	1.2	3.5	-0.2
FM3	79.2	2.2	19.8	-1.3
FM4	90.5	1.2	8.2	0.1
Average	88.1	1.2	10.9	-0.2

The "Security Selection" effect is determined as the performance that was due to the manager investing away from the selected index and with the benchmark asset allocation. The "Tactical Asset Allocation" effect is the performance assuming the manager achieved a return for each asset class as per the index but allowing for the actual investment position away from the benchmark asset allocation. The "Other" effect represents interaction effects and the consequences of estimates within the analysis.

The results show FM1 and FM3 are very active managers within the asset sectors, but the related issue of whether or not they add value requires the further analysis of Section 3.4 below. With its large passive share holdings for a significant period, FM2 has a low security selection effect

### 3.4 Value added

The total performance results and the overall value added results are shown below.

	Actual	Index	Value added
Manager	% p.a.	% p.a.	% p.a.
FM1	7.9	7.3	0.6
FM2	7.3	7.3	0.1
FM3	8.7	7.7	1.0
FM4	10.0	8.4	1.6
Average	8.5	7.6	0.8

All four managers beat the benchmark over the period considered. Interestingly, the manager with the greatest value added was also the one with the highest benchmark return. Below we break down the value added into the different components.

	Tactical Asset Allocation	Security Selection	Other	Total
Manager	% p.a.	% p.a.	% p.a.	% p.a.
FM1	-0.1	0.6	0.1	0.6
FM2	0.1	-0.1	0.0	0.1
FM3	0.6	0.4	0.0	1.0
FM4	0.4	1.2	0.0	1.6
Average	0.3	0.5	0.0	0.8

It can be seen that the majority of FM4's value added came from security selection. By contrast, FM3 added more value from tactical asset allocation, i.e. investing away from the benchmark.

The "other" category represents interaction effects and the estimate nature of the analysis.

To assess how actively each manager was investing away from the benchmark, we calculated the average absolute deviation from the benchmark over the period. The results are shown below.

Manager	Deviation
	%
FM1	2.6
FM2	2.7
FM3	4.0
FM4	2.5
Average	2.9

The table shows that FM3 with the greatest deviation has, on average, been more active than the other managers. In practice, FM3 has been more inclined to let actual asset allocation deviate from benchmark.

### 3.5 Conclusions

We draw the following conclusions from the analysis:

- Benchmark asset allocation is confirmed as the main driver of actual performance outcomes.
- Security selection decisions play a much greater part in performance than tactical asset allocation decisions. But for some managers, value has been added through tactical asset allocation decisions.
- On average each manager in our small sample of balanced fund managers did add some tactical asset allocation value.
- An automatic rebalancing tactical asset allocation approach would seem to be a valid option.
- An asset consultant who assists decision making on strategic asset allocation needs to determine the "better" fund manager in each asset class if significant value is to be added to the decision making process.

## ABOUT MELVILLE JESSUP WEAVER

Melville Jessup Weaver is a New Zealand firm of consulting actuaries. The areas in which we provide advice include superannuation, employee benefits, administration, retirement consulting, life insurance, general insurance, health insurance, accident insurance, asset consulting and information technology. The firm is an alliance partner of Towers Perrin, a global professional services firm that helps organisations around the world optimise performance through effective people, risk and financial management. Towers Perrin has offices in 25 countries and the business covers HR services, Reinsurance and Tillinghast.

## Asset consulting services:

- Establish investment objectives.
- Determine long-term investment strategies.
- Determine the optimum investment manager configuration.
- Provide quantitative and qualitative analysis of investment performance.
- Asset/Liability modelling.
- Performance monitoring against investment objectives and competitors.
- Manager selection exercises utilising Towers Perrin's expertise.

Table 1 – NZ and Australian Share Funds

Manager	3 Months		1 Year		3 Years		5 Years		3 Years		
	%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank	Excess Return % p.a.	Tracking Error % p.a.	Information Ratio % p.a.
<b>NZ</b>											
MAM	-2.5	(1)	2.8	(1)	n.a		n.a		n.a	n.a	n.a
TAM	-5.1	(2)	-0.1	(2)	12.5	(1)	18.4	(1)	1.3	1.5	0.9
<b>Indexed</b>											
AMPCI	-5.1		1.6		11.0		16.5		-0.2	0.3	-0.6
SMS NZ Top 10	-8.7		-1.1		5.1		11.8		-6.1	6.5	-0.9
SMS NZ Top 50	-7.3		-4.9		9.7		n.a		-1.5	6.3	-0.2
SMS NZ Mid Cap	-2.6		-0.9		13.1		14.8		1.9	7.9	0.2
SMS Aus Mid Cap	-2.0		15.5		21.5		n.a		10.3	10.2	1.0
SMS Aus Top 20	-0.3		27.2		24.4		19.6		13.2	12.7	1.0
<b>Australasian</b>											
AB High Growth	-4.4	(5)	3.7	(5)	14.6	(2)	20.7	(2)	3.4	3.3	1.0
AMPCI Active	-5.3	(7)	2.9	(6)	13.4	(7)	18.3	(7)	2.2	1.8	1.3
Arcus	-5.1	(6)	4.0	(4)	13.7	(6)	n.a		2.5	2.7	0.9
BAM	-4.3	(4)	7.3	(1)	14.0	(4)	19.7	(5)	2.9	2.7	1.1
BTFM	-2.5	(1)	5.7	(2)	15.1	(1)	20.0	(4)	3.9	3.0	1.3
ING	-4.2	(2)	1.7	(8)	14.5	(3)	21.1	(1)	3.3	3.2	1.1
MGI	-4.3	(3)	4.5	(3)	14.0	(5)	20.3	(3)	2.8	2.1	1.3
TYN	-5.3	(8)	2.8	(7)	11.7	(8)	19.0	(6)	0.5	1.8	0.3
Average	-4.4		4.1		13.9		19.9		2.7	2.6	1.0
<b>Non core</b>											
AMPCI Strategic	-5.1		1.4		16.3		20.8		5.1	11.2	0.5
FIS	-3.3		-1.0		23.3		25.1		12.1	13.1	0.9
ING	-2.6		-0.9		17.5		n.a		6.3	7.9	0.8
JBW	-4.2		9.0		19.6		24.5		8.4	6.8	1.2
MAM Aggressive	8.0		n.a		n.a		n.a		n.a	n.a	n.a
MNT	-1.8		n.a		n.a		n.a		n.a	n.a	n.a
TYN Aggressive	-3.1		10.5		25.5		40.9		14.3	10.4	1.4
WCM	-3.7		-6.2		9.5		19.8		-1.7	8.8	-0.2
<b>Indices</b>											
NZSX50 (incl IC's)	-5.1		1.4		11.2		16.6				
ASX200	-2.7		16.1		21.0		21.0				
Cash + 5% pa	3.4		13.5		12.8		12.0				

Table 2 – Alternative Assets

Manager	FX %	3 Months %	1 Year % p.a.	3 Years % p.a.	5 Years % p.a.	3 Years Volatility
BTFM	0.0	2.7	12.0	n.a	n.a	n.a
ING Topaz	0.0	1.1	10.1	10.4	12.3	3.7
ING Topaz +	0.0	0.1	12.3	13.1	17.9	7.5
ING Onyx	0.0	2.0	9.9	9.4	9.7	2.2
MGH	100.0	-3.5	0.8	9.6	12.0	11.5
MGI	0.0	-2.4	8.2	n.a	n.a	n.a
RUS	0.0	-0.8	4.0	9.0	11.3	2.9
TAM Commodity	100.0	n.a	n.a	n.a	n.a	n.a
TYN JPMAAM	0.0	2.9	14.0	13.9	13.0	4.1
TYN Options	0.0	4.2	8.9	15.6	n.a	5.9
WEL Commodity	100.0	1.9	7.1	18.8	n.a	15.5
Average		1.0	8.4	12.5	12.7	6.7
<b>Index</b>						
HFR FoF Hedged NZD		2.8	13.5	12.6	13.1	

**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.

Table 3 – Global Share Funds (unhedged)

Manager	3 Months		1 Year		3 Years		5 Years		3 Years					
	%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank	Excess Return % p.a.	Tracking Error % p.a.	Information Ratio % p.a.			
<b>Unbiased</b>														
AB	-5.1	(13)	-0.4	(12)	13.5	(4)	n.a		2.6	(4)	2.7	(8)	1.0	(3)
AMPCI	-4.9	(10)	0.1	(11)	12.6	(7)	10.7	(2)	1.6	(7)	1.8	(4)	0.9	(5)
Arcus	-5.0	(11)	3.6	(2)	13.6	(3)	n.a		2.7	(3)	3.1	(11)	0.9	(4)
BNP	-2.0	(2)	1.4	(7)	12.3	(8)	9.7	(5)	1.4	(8)	2.8	(9)	0.5	(8)
BTFM	-6.7	(14)	-8.0	(14)	6.9	(13)	6.4	(10)	-4.1	(13)	3.0	(10)	-1.4	(12)
ING	-3.2	(5)	1.0	(8)	11.8	(9)	9.2	(6)	0.9	(9)	1.8	(3)	0.5	(7)
INT	-4.7	(9)	-1.4	(13)	10.2	(12)	8.0	(9)	-0.7	(12)	1.6	(2)	-0.4	(11)
Jana	-4.3	(7)	1.6	(6)	n.a		n.a		n.a		n.a		n.a	
MGI	-5.1	(12)	0.6	(10)	13.0	(5)	10.0	(3)	2.1	(5)	2.0	(5)	1.0	(2)
MLC	-3.6	(6)	2.4	(4)	12.7	(6)	9.9	(4)	1.7	(6)	2.6	(7)	0.7	(6)
RUS	-3.1	(4)	0.7	(9)	11.4	(11)	9.1	(7)	0.5	(11)	1.1	(1)	0.5	(9)
RUS	-2.4	(3)	2.8	(3)	13.7	(2)	n.a		2.7	(2)	n.a		n.a	
TYN	-4.5	(8)	2.3	(5)	11.6	(10)	9.0	(8)	0.7	(10)	2.2	(6)	0.3	(10)
WEL	1.7	(1)	12.9	(1)	15.4	(1)	12.1	(1)	4.5	(1)	4.0	(12)	1.1	(1)
Average	-3.8		1.4		12.2		9.4		1.3		2.4		0.5	
<b>Value</b>														
AB	-8.3	(6)	-5.2	(6)	13.3	(1)	11.9	(2)	2.4	(1)	3.6	(5)	0.7	(2)
DFA	-6.4	(5)	-5.0	(5)	11.8	(4)	12.3	(1)	0.9	(4)	3.0	(4)	0.3	(4)
GMO	-5.1	(4)	-1.9	(4)	10.6	(5)	9.6	(5)	-0.4	(5)	1.8	(2)	-0.2	(5)
TAM	-3.9	(3)	1.0	(2)	12.5	(3)	10.0	(4)	1.6	(3)	1.4	(1)	1.1	(1)
TEM	-3.3	(2)	-0.5	(3)	12.5	(2)	11.7	(3)	1.6	(2)	2.6	(3)	0.6	(3)
WEL	-1.2	(1)	6.1	(1)	n.a		n.a		n.a		n.a		n.a	
Average	-4.7		-0.9		12.1		11.1		1.2		2.5		0.5	
<b>Growth</b>														
AB	-1.4	(3)	4.5	(3)	13.6	(1)	10.5	(2)	2.7	(1)	14.2	(4)	0.2	(2)
BNP	-1.1	(2)	5.0	(2)	12.3	(2)	n.a		1.4	(2)	12.9	(3)	0.1	(4)
GMO	-3.2	(4)	3.7	(4)	11.7	(4)	n.a		0.7	(4)	2.3	(1)	0.3	(1)
WEL	1.0	(1)	15.4	(1)	11.8	(3)	10.7	(1)	0.9	(3)	6.7	(2)	0.1	(3)
Average	-1.2		7.2		12.3		10.6		1.4		9.0		0.2	
<b>Indexed</b>														
Arcus	-4.5		-1.0		9.3		7.1		-1.7		0.8		-2.0	
AMPCI	-4.2		-0.6		9.6		7.1		-1.3		0.9		-1.5	
VAN	-4.1		-0.4		10.4		8.3		-0.5		0.3		-1.5	
<b>Other</b>														
AMPCI Extended	-4.2		1.5		15.4		13.9		-17.2		11.2		-1.5	
AMPCI S Responsible	-3.6		1.5		11.7		8.5		0.7		2.1		0.3	
Jana High Alpha	-4.9		1.0		n.a		n.a		n.a		n.a		n.a	
LMI Emerging	-0.5		25.7		32.3		26.8		-0.3		3.6		-0.1	
NZAM	0.0		4.1		11.7		12.2		0.8		5.1		0.2	
<b>Indices</b>														
MSCI 0% hedged	-4.1		0.4		10.9		8.8							
MSCI 100% hedged	-2.0		8.8		16.5		19.1							
MSCI Emerging 0% hedged	0.7		25.0		32.6		26.0							

Table 4 – Property

Manager	3 Months		1 Year		3 Years		5 Years		3 Years					
	%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank	Excess Return % p.a.	Tracking Error % p.a.	Information Ratio % p.a.			
<b>NZ Listed</b>														
AB	-3.0	(3)	-2.1	(4)	15.1	(3)	16.2	(3)	2.5	(3)	1.7	(1)	1.5	(2)
BAM Infrastructure	-2.7	(2)	3.1	(2)	n.a		n.a		n.a		n.a		n.a	
BTFM	-4.9	(5)	-2.6	(5)	15.9	(2)	16.9	(2)	3.2	(2)	2.8	(3)	1.1	(3)
ING	-3.7	(4)	-2.7	(6)	17.5	(1)	18.3	(1)	4.8	(1)	2.7	(2)	1.8	(1)
JBW Australasian	-8.8	(6)	3.7	(1)	n.a		n.a		n.a		n.a		n.a	
WCM Australasian	-1.2	(1)	1.1	(3)	14.3	(4)	n.a		1.7	(4)	6.8	(4)	0.2	(4)
Average	-4.0		0.1		15.7		17.2		3.0		3.5		1.2	
<b>NZ Direct</b>														
AMPCI	1.9	(2)	30.8	(1)	23.7	(1)	19.0	(2)	0.3	(1)	3.3	(1)	0.1	(1)
TAM	2.0	(1)	13.5	(2)	20.7	(2)	19.4	(1)	-2.7	(2)	7.3	(2)	-0.4	(2)
Average	1.9		22.1		22.2		19.2		-1.2		5.3		-0.1	
<b>Global</b>														
AMPCI	-10.1	(2)	-9.7	(3)	17.0	(1)	n.a		3.1	(1)	4.4	(3)	0.7	(1)
ING Ex Australia	-10.4	(3)	-15.2	(4)	14.0	(3)	n.a		0.1	(3)	3.0	(2)	0.0	(3)
RUS	-10.7	(4)	-9.5	(2)	n.a		n.a		n.a		n.a		n.a	
TYN	-8.1	(1)	-8.4	(1)	14.4	(2)	n.a		1.5	(2)	2.5	(1)	0.6	(2)
Average	-9.8		-10.7		15.1		n.a		1.6		3.3		0.5	
<b>Indices</b>														
NZSE Property	-3.9		-4.3		12.7		14.3							
UBS Global Property	-11.2		-13.4		13.8		n.a							

**Table 5 – Bond and Cash Funds****5.1 New Zealand Bonds**

Manager	3 Months		1 Year		3 Years		5 Years		3 Years					
	%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank	Excess Return		Tracking Error		Information Ratio	
									% p.a.	Rank	% p.a.	Rank	% p.a.	Rank
AB	0.4	(7)	3.7	(6)	5.1	(7)	5.5	(6)	0.1	(7)	0.8	(2)	0.1	(7)
AMPCI	0.8	(3)	4.4	(3)	5.5	(5)	5.9	(3)	0.5	(5)	1.0	(4)	0.5	(5)
Arcus	0.6	(5)	3.1	(7)	5.3	(6)	n.a		0.3	(6)	1.6	(7)	0.2	(6)
BTFM	1.0	(2)	4.3	(5)	5.6	(4)	5.6	(5)	0.6	(4)	0.7	(1)	0.9	(3)
ING	0.5	(6)	4.3	(4)	6.6	(1)	6.7	(1)	1.6	(1)	1.0	(5)	1.6	(1)
TAM	0.8	(4)	4.5	(2)	5.7	(3)	5.8	(4)	0.7	(3)	0.8	(3)	0.8	(4)
TYN	1.3	(1)	4.6	(1)	6.0	(2)	6.3	(2)	1.0	(2)	1.1	(6)	1.0	(2)
Average	0.8		4.1		5.7		6.0		0.7		1.0		0.7	
<b>Index</b>														
NZ Govt Stock	0.5		3.9		5.0		5.4							
NZ All Swaps	0.9		4.1		n.a		n.a							

**5.2 Global Bonds (hedged)**

Manager	Manager	3 Months		1 Year		3 Years		5 Years		3 Years					
		%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank	Excess Return		Tracking Error		Information Ratio	
										% p.a.	Rank	% p.a.	Rank	% p.a.	Rank
AMPCI		1.3	(8)	5.4	(9)	6.8	(7)	7.6	(7)	-0.7	(7)	1.6	(6)	-0.4	(7)
Arcus		4.1	(1)	9.1	(2)	n.a		n.a		n.a		n.a		n.a	
BLK		2.2	(6)	7.2	(6)	7.5	(2)	8.1	(5)	0.0	(2)	0.6	(1)	-0.1	(2)
BTFM	Principle Global	1.1	(9)	5.9	(8)	6.6	(8)	7.7	(6)	-0.9	(8)	1.9	(8)	-0.5	(8)
DFA		2.3	(5)	8.7	(3)	7.4	(4)	n.a		-0.4	(6)	1.7	(7)	-0.2	(5)
ING		3.4	(2)	9.2	(1)	8.5	(1)	8.2	(2)	1.0	(1)	0.8	(3)	1.3	(1)
RUS		1.9	(7)	6.6	(7)	7.5	(3)	8.2	(3)	-0.3	(5)	1.5	(5)	-0.2	(6)
TAM	PIMCO	3.2	(3)	7.8	(5)	7.3	(6)	8.1	(4)	-0.3	(4)	1.3	(4)	-0.2	(4)
TYN	FFTW	3.2	(4)	8.2	(4)	7.4	(5)	8.2	(1)	-0.1	(3)	0.7	(2)	-0.2	(3)
Average		2.5		7.6		7.4		8.0		-0.2		1.3		0.0	
<b>A\$ Hedged</b>															
INT		1.4	(2)	4.0	(2)	n.a		n.a		n.a		n.a		n.a	
MLC		2.2	(1)	5.9	(1)	5.9	(1)	7.3	(1)	n.a		n.a		n.a	
<b>Index</b>															
Lehman		3.1		8.5		7.5		7.9							
Citigroup WGBI		3.3		8.9		7.8		7.8							

**5.3 Cash**

Manager	3 Months		1 Year		3 Years		5 Years		3 Years					
	%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank	Excess Return		Tracking Error		Information Ratio	
									% p.a.	Rank	% p.a.	Rank	% p.a.	Rank
AB	2.1	(6)	8.2	(7)	7.7	(9)	7.0	(9)	-0.1	(9)	0.1	(4)	-1.2	(9)
AMPCI	2.2	(3)	8.4	(3)	7.8	(7)	7.1	(5)	0.0	(7)	0.1	(2)	-0.4	(7)
AMPCI	1.4	(9)	7.8	(9)	8.2	(2)	8.0	(2)	0.4	(2)	0.5	(9)	0.7	(3)
Arcus	1.9	(7)	8.3	(5)	7.8	(6)	7.1	(6)	0.0	(6)	0.2	(6)	0.0	(6)
BTFM	1.8	(8)	8.2	(8)	8.0	(4)	7.2	(4)	0.2	(4)	0.4	(7)	0.5	(4)
ING	2.4	(1)	9.0	(1)	8.9	(1)	8.1	(1)	1.1	(1)	0.4	(8)	2.6	(1)
MGI	2.2	(5)	8.3	(6)	7.7	(8)	7.0	(8)	-0.1	(8)	0.1	(3)	-0.9	(8)
TAM	2.2	(4)	8.4	(4)	7.8	(5)	7.0	(7)	0.0	(5)	0.1	(1)	0.2	(5)
TYN	2.3	(2)	8.7	(2)	8.0	(3)	7.3	(3)	0.2	(3)	0.1	(5)	1.8	(2)
Average	2.1		8.4		8.0		7.3		0.2		0.2		0.4	
<b>Index</b>														
90 Day Bank Bill	2.2		8.5		7.8		7.0							

**Table 6 – Wholesale Balanced Funds****6.1 Returns**

Manager	Gross							
	3 Months		1 Year		3 Years		5 Years	
	%	Rank	% p.a.	Rank	% p.a.	Rank	% p.a.	Rank
AMPCI	-2.0	(5)	6.9	(1)	12.2	(3)	12.6	(4)
Arcus	-2.8	(7)	5.7	(4)	13.2	(1)	14.7	(1)
BTFM	-2.5	(6)	1.0	(7)	9.1	(7)	11.3	(6)
ING	-1.5	(3)	3.5	(6)	11.1	(6)	12.8	(2)
MGI	-1.6	(4)	4.2	(5)	11.4	(4)	n.a	
TAM	-0.4	(1)	6.7	(2)	12.3	(2)	12.5	(5)
TYN	-1.2	(2)	5.8	(3)	11.4	(5)	12.7	(3)
Average	-1.7		4.8		11.5		12.8	

**6.2 Asset Allocation**

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

Manager	NZ shares		Overseas shares		Property		Alt Assets	Growth Assets	Fixed interest		Cash	Income Assets	Currency	
	Active	Passive	Active	Passive	NZ	Global			NZ	O'seas			Alloc	Outlook
AMPCI	12.1	0.0	35.3	0.0	14.5	1.4	0.0	63.3	18.2	11.3	7.2	36.7	22.9	Negative
Arcus	20.2	0.0	44.3	0.0	2.2	0.0	6.5	73.2	5.2	5.2	16.4	26.8	31.4	Negative
BTFM	19.9	0.0	34.0	0.0	4.9	0.0	5.2	64.0	15.4	9.7	10.9	36.0	34.0	Neutral
ING	16.8	0.0	33.0	0.0	9.6	1.9	2.2	63.5	16.8	13.1	6.6	36.5	23.5	Neutral
MGI	13.6	0.0	31.2	0.0	4.2	6.6	9.5	65.2	5.9	23.9	5.0	34.8	15.6	Neutral
TAM	8.9	0.0	36.1	0.0	12.0	0.0	0.0	57.1	5.8	20.1	17.0	42.9	22.9	Negative
TYN	14.6	0.0	33.7	0.0	0.0	4.8	8.0	61.0	19.4	14.5	5.1	39.0	16.8	Neutral
Average	15.2	0.0	35.4	0.0	6.8	2.1	4.5	63.9	12.4	14.0	9.8	36.1	23.9	

**Table 7 – Additional information**

(Funds under management relate to the total organization)

	Acronym	Total FUM (\$m)	Manager	Acronym	Total FUM (\$m)
AllianceBernstein	AB	n.a	Milford Asset Management	MAM	237.0
Arcus Investment Management	Arcus	5,102.0	MLC	MLC	n.a
AMP Capital Investors	AMPCI	10,652.0	MGH Asset Management Ltd	MGH	n.a
Brook Asset Management	BAM	1,539.4	Mercer Global Investments	MGI	1,356.9
BlackRock Investment Management	BLK	n.a	Mint Asset Management	MNT	n.a
BNP Paribas Investment Management	BNP	n.a	New Zealand Assets Management	NZAM	777.9
BT Funds Management	BTFM	2,370.7	Russell Investment Group	RUS	n.a
Dimensional Fund Advisors	DFA	n.a	SmartShares	SMS	363.6
Fisher Funds Management	FIS	1,041.3	Tower Asset Management	TAM	4,216.6
GMO	GMO	n.a	Templeton	TEM	n.a
ING	ING	8,235.6	Tyndall Investment Management	TYN	3,516.0
Intech	INT	n.a	Vanguard Investments Australia	VAN	n.a
Jana	Jana	n.a	Walker Capital Management	WCM	137.3
Goldman Sachs JBWere	JBW	n.a	Wellington Management Company	WEL	n.a
Legg Mason, Inc.	LMI	n.a			

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