

Punting on performance

Yesterday's winners: not the best bet?

Funds seeking the best investment manager often cannot help being influenced by a candidate's track record. **CON MICHALAKIS** describes a model which adds to the mounting body of evidence that past performance may not be a reliable guide to future investment returns.

Players in the investment world, including managers, consultants and trustees, find it difficult to ignore past performance in the search for and selection of an investment manager.

The temptation to hire and fire managers purely on their past performance, relative to a survey median or average, is compelling. But is past performance a reliable indicator of future performance? This paper attempts to suggest an answer to this question by modelling returns on balanced pooled superannuation trusts.

Table 1 sets out the differing asset allocations of two types of balanced funds – “high growth” and “mainly growth”. Over a long period, funds with a higher growth component could be expected to outperform the median.

Another difference among balanced

funds is the degree of tactical asset allocation. Funds tend either to be very active in tactical asset allocation or to remain near their strategic benchmark.

DATA

The data consist of monthly returns, net of fees and taxes, taken from the Watson Wyatt Investment Survey. The return series starts at 1 July 1990 and ends 30 June 1996. The universe has been defined as investment managers who have a six-year record of investment performance.

The returns are broken down into two three-year periods:

▼ Time A: 1 July 1990 to 30 June 1993; and

▼ Time B: 1 July 1993 to 30 June 1996.

Investment managers (11 in total) without a history of returns over the six years were excluded from the survey. Of the 30 managers left in the study, more

Table 1: Growth components of funds

Asset class	High growth	Mainly growth
Australian equities	45%	40%
Overseas equities	20%	15%
Property	15%	10%
Total growth	80%	65%
Fixed interest	15%	25%
Cash	5%	10%
Total income	20%	35%
Total assets	100%	100%

than 70% have as one of their investment objectives to exceed the average or median manager return.

MANAGER EXCESS RETURNS

We have defined excess returns to be the monthly manager returns in excess of the median universe. That is, excess return equals manager return minus median return.

The excess returns for each manager are annualised over Times A and B.

SKILL RATIO

The skill ratio (or information ratio) measures how skillful a manager has been in achieving returns, irrespective of the level of risk.

The ratio is defined as:

$$\text{skill ratio} = \frac{\text{excess return}}{\text{tracking error}}$$

$$\text{tracking error} = \text{standard deviation of excess return}$$

EQUATION FOR TESTING PERFORMANCE AND SKILL

The following regression tests whether investment manager past performance is any guide to future performance.

$$\text{Time(B)} = a + b \cdot \text{Time(A)} + e$$

where:

Time(B) = excess return of manager in Time B

Time(A) = excess return of manager in Time A

a = intercept

b = slope coefficient

e = error

If past performance were any guide to future performance, then the t-statistic on the slope coefficient would be statistically significant (ie, greater than 2).

The regression is also applied to the skill ratio where Time(B) and Time(A) are the skill ratios for each manager in Time B and Time A respectively.

PREDICTABILITY OF FUTURE PERFORMANCE

The results of the regression on the relationship between past and future performance are:

	Value	T-test
Intercept	0.06	0.32
Slope	0.02	0.19
R-square	0.001	

From the t-test, there is no relationship between past and future performance defined by excess returns over the median manager and the R-square is near zero.

The relationship of past returns to future returns over Times A and B is shown in Figure 1.

PREDICTABILITY OF FUTURE SKILL

As in the case of excess returns, if past skill were any guide to future returns, then the slope coefficient in the regression equation would be statistically significant.

The results of the regression are:

	Value	T-test
Intercept	0.06	0.32
Slope	0.02	0.19
R-square	0.001	

From the t-test, there is no relationship between past and future performance defined by the skill ratio.

Figure 2 plots the relationship between past skill ratio and future skill ratio over Times A and B.

CONCLUSION

We conclude that there is no relationship between past and future performance over this time period and that past performance does not matter in selecting future investment managers. This sobering fact extends to the predictability of investment manager skill. It should be noted that the results are time-dependent on the two three-year windows.

Continued page 31

Figure 1: Excess returns

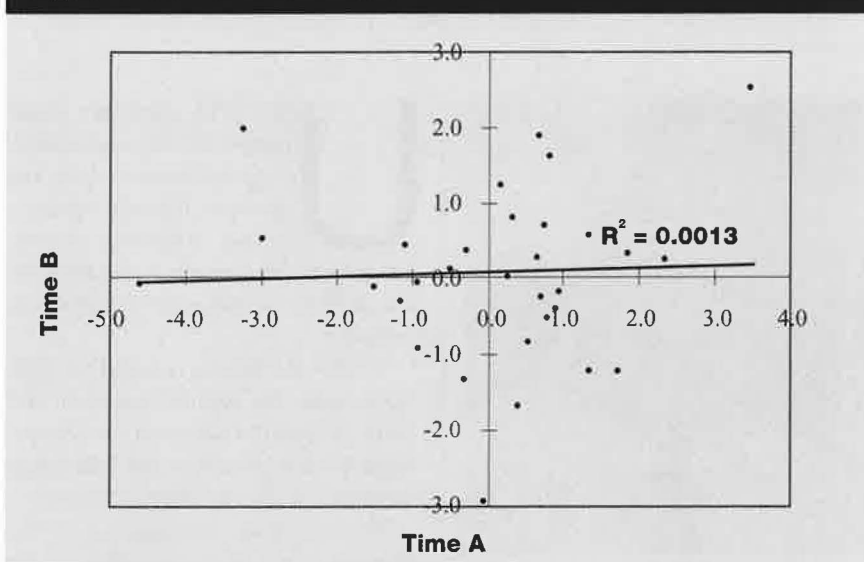


Figure 2: Skill ratio

