



## PROFESSIONAL STANDARD 101 INVESTMENT PERFORMANCE MEASUREMENT AND PRESENTATION

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## **APPLICATION**

This standard applies to advice or information provided by a member of the Institute of Actuaries of Australia which is likely, directly or indirectly to be relied upon by a person or entity in assessing the performance of an investment or an investment manager or in making investment decisions. Members who are not qualified actuaries are reminded that any advice they give must not be in a form that appears to be actuarial advice (as defined in the Code of Conduct and Guidance Note thereon) or could be construed to be actuarial advice by the client.

## **LEGISLATION**

The member must consider relevant legislation, and regulations in relation to giving advice on investment performance including, in particular the Corporations Law, the Life Insurance Act, 1995 and the Superannuation Industry (Supervision) Act 1993.

## **FIRST ISSUED**

August 1996

## **LATEST REVISION**

August 1997

### **1. THE PURPOSE AND LIMITATIONS OF INVESTMENT PERFORMANCE MEASUREMENT**

#### **1.1 The Purpose**

##### **STANDARD**

The method used in the calculation and examination of the relevant investment performance(s) and the resulting presentation must depend on the purpose of the assessment.

The periods over which the investment performance is calculated must be appropriate to the purpose of the measurement.

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## COMMENTARY

There exist a number of possible reasons to measure investment performance. These include:

- to inform investors and the public in an accurate and appropriate manner;
- to compare the investment performance of a group of funds and/or investment managers;
- to enable an investment manager to publicise its performance;
- to report a fund's performance to its trustees and members;
- to assess the performance of a fund and its investment managers;
- to assess the implications of the performance for the funding of benefits;
- to assist with the declaration of an interim or final crediting rate.

The period if the calculation could be three yearly for superannuation funding calculations, yearly for crediting of interest rates, or a shorter period if close tracking to an index is to be monitored. On the other hand, for the comparison of the investment performance of one manager with another, or assessing the success or otherwise of an investment strategy, longer periods are normally required with annual rates of return for at least ten years (or since inception) being desirable.

The extent of differences in investment performance between managers will often **not** be statistically significant and caution must be used in claiming superior abilities for one manager over another based purely on performance rankings.

Depending on the purpose of the measurement and/or the objectives of the client, an adjustment for risk may be required. However, there is no standard definition of risk appropriate to all circumstances. Different methods of risk adjustment are available and the member will need to choose methods appropriate to each situation.

## 1.2 The Limitations

### STANDARD

A member must consider whether a "health warning" concerning the limitations of using investment performance analysis should accompany an investment performance report. Generally, a health warning is encouraged where the recipients of the reports have not been previously provided with any advice from the member regarding the context in which such reports are to be considered with respect to investment decisions.

### COMMENTARY

Where a health warning is necessary, the following points should be considered:

- past performance may not be a reliable guide to future performance in either absolute or comparative terms.
- investment performance is usually associated with risks that have been assumed in generating that performance but there is no universally agreed upon method of adjusting for risks;
- investment performance measures may have low statistical significance for comparative and other purposes;
- the quantitative analysis of investment performance provides a starting point and not a conclusion for the discussion of investment performance. Qualitative information must also be considered in the analysis of investment performance.

## 1.3 Relationship to Other Industry Standards

### STANDARD

Members must be aware of standards and conventional approaches within the investment industry to performance measurement and analysis and where the approach by the member differs from industry standards, the member must be able to demonstrate why the approach taken is more appropriate for the particular performance measurement assignment.

## **2. PRINCIPLES**

### **2.1 The basic calculation**

#### **STANDARD**

The member must consider whether a time weighted rate of return or a money weighted rate of return is more appropriate given the purpose of the calculation.

The time-weighted rate of return can be approximated by the linking of at least monthly money-weighted rates of return.

The member must consider the extent of any assumptions for approximations in calculating time-weighted or money-weighted rates of return, and must disclose these assumptions where their effect is significant.

#### **COMMENTARY**

For comparative purposes, investment performance should normally be calculated using a time weighted rate of return, including both income and capital gain/loss components.

### **2.2 Term for the measurement**

#### **STANDARD**

The term used for the calculation of the investment performance must match the purpose of the calculation.

#### **COMMENTARY**

It must be realised that concentration on short term results can often lead to inappropriate conclusions. In particular, for comparative situations the use of annual rates of return for each of the last ten years (either on a calendar or financial year basis), or since the fund's inception, is encouraged.

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## 2.3 Valuations

### STANDARD

Market values must be used for all investments with adjustments for effective exposure where appropriate (for example, by allowing for the cash backing futures and delta adjusted option exposure).

Investment income must be included on an accrual basis as opposed to cash basis accounting, except for particular investments where accurate estimates of future income may not be possible. Such exceptions should be disclosed.

The calculation of after tax returns must allow for any net unrealised capital gains tax liability. Guidance Note 150 may assist.

Where there is a possibility of ambiguity, the base currency used for the performance measurement must be disclosed.

If circumstances make the application of these standards inappropriate then the reasons for this, and the alternative methods adopted, must be disclosed.

### COMMENTARY

For listed securities, market values should be determined in an appropriate manner such as the last sale price, or higher bid or lower offer. Where a security is unlisted (such as a direct property), valuations should be done as frequently as is reasonable. Where valuations are done less frequently than yearly, this should be disclosed. For thinly traded securities where a true market is not present due to the lack of trading activity, a third party independent valuation of a security may be used to determine the market value.

It is also acceptable to use net realisable values, which are taken as market values less the costs of realisation, so long as all performance numbers are consistently calculated on this basis after net realisable values are first used.

For derivatives and hybrids, market values should be determined as accurately as possible with regard to the instrument's market price or theoretical price, as may be appropriate. Where the instrument is unlisted, a third party independent valuation of a security may be used to determine the market value.

## **2.4 Verification of Data and Calculation Methods**

### **STANDARD**

The presentation of investment performance information should be accompanied by a statement identifying the source of the data used in the calculation where the source has not been previously advised to the recipients. Where the performance measures have been calculated by the investment manager (or third party), the member must be satisfied with the method used.

The member must comment whether in his/her view there are any material shortcomings in relation to the veracity of the data or to the method of calculation.

## **2.5 Adjusting for Risk**

### **STANDARD**

Where a risk measure and/or a risk-adjusted performance measure are provided, the basis of their computation and their relevance for the analysis performed must be clearly stated in the notes attached to the performance report.

### **COMMENTARY**

Risk may be defined in a wide variety of ways. The types of risk which may be relevant in making comparisons of performance and which should be discussed with clients, if applicable, include:

- (i) total risk, usually measured by a measure of dispersion such as standard deviation;
- (ii) systematic or non-diversifiable risk;
- (iii) factor risk;
- (iv) downside risk, which may be measured by a statistical measure such as semi variance;
- (v) residual or diversifiable risk;

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- (vi) benchmark risk, usually measured by tracking error;
  - (vii) risk of failing to meet client objectives.

Irrespective of the risk definition adopted, it is important that when the risk-adjusted performance is presented for the first time, a statement of the risk profile used in achieving this performance is also conveyed.

However, it is also noted that there is no universal agreement on how risk should be measured and how risk adjusted performance measures should be computed. The actual method used will be affected by the purpose of the calculation.

Risk measures, such as the volatility of return, do not necessarily indicate the level of risk taken. The member should consider whether a qualitative statement in respect of risk should be made.

A particular element of risk involves gearing, leverage and shorting, including the use of derivatives. The member should consider the effect of such activities on the investment performance and whether appropriate disclosures are required.

## 2.6 The Use of Benchmarks

### STANDARD

Benchmarks (or normal portfolios) must reflect the investment objectives of the portfolio.

### COMMENTARY

Benchmarks are an important mechanism for setting the investment policy of clients and for making reasonable comparisons of the performance of investment managers. They should only be set after close consultation with the client (and, if necessary, the relevant investment manager) and should encompass a discussion of:

- (i) the investment objectives and/or the investment process;
- (ii) the relevant universe of investible securities;
- (iii) the time periods(s) over which benchmark comparison is reasonable;



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- (iv) the frequency with which benchmarks comparisons are to be made;
  - (v) risk measures related to the benchmarks which are relevant for performance assessment.

The source, re-balancing frequency and method of calculation of benchmark returns should be agreed between the investment manager, the consultant and the client, and should be clearly documented. Where the benchmark return is used as part of a performance based fee calculation, any adjustments to the benchmark for that purpose should also be clearly documented.

Benchmark comparison should clearly state the manner in which taxes, transactions costs, management fees and custody fees and any other charges have been allowed for. Where direct comparison between a benchmark and a portfolio return is not possible, the effect of differences in taxes, costs and charges should be clearly stated on an annual basis.

Benchmarks may be single or multi-sector (composite) in nature and will usually consist of recognised stock, bond, and other indices but may consist of tailored portfolios.

Unless otherwise agreed by the client, accumulation indices are preferred to price indices for use as benchmarks.

## 2.7 Attribution Analysis

### STANDARD

An attribution analysis should be accompanied by a disclosure statement which clearly indicates:

- i. the method of attribution analysis including the nature, possible extent, and location of interaction terms in the analysis, if not disclosed separately; and
- ii. the limitations of the attribution analysis in question, including
  - (a) the extent to which any conclusions may be drawn, and
  - (b) whether, and in what manner, risk has been allowed for in the calculations and subsequent analysis,

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where the recipients of the analysis have not been previously provided with such statements, or where the attribution methodology has changed since the last such disclosure.

### **COMMENTARY**

Attribution analysis is recognised as a useful method for partitioning the total value added to a portfolio return relative to an appropriate benchmark and thus providing an aid for decision makers who wish to evaluate the performance strategy in question.

There is no universally agreed method of carrying out attribution analysis. The method of attribution analysis should be chosen carefully to reflect the asset class(es) involved and the process for the selection of investments. The method of attribution analysis adopted should enable those using the analysis to understand the value added or lost relative to benchmarks at each key step in the investment process of the manager.

The accuracy and reliability of attribution analysis is generally improved by the use of frequent data. Ideally, daily valuation and transaction data should be used in carrying out the attribution analysis.

## **2.8 Simulated Past Performance**

### **STANDARD**

Simulations of past investment performance results should not be linked with actual results from a portfolio unless this information is specifically requested by a client. Where such results have been linked, a disclosure statement must clearly indicate:

- (i) that this has been the case;
- (ii) that there are problems inherent in such an approach; and
- (iii) the individual results for simulated and actual components of the total sample period.

The investment performance standards relevant to benchmarks, risk adjustment, attribution analysis, and other matters also apply to the presentation of simulated results.

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## COMMENTARY

Simulations of past performance results can be a legitimate method of analysing an investment product, process or strategy. Properly prepared simulation results can aid decision makers in assessing the possible risks and returns of an investment strategy. Full disclosure should be made of the method used to generate the simulation results.

### 2.9 Treatment of Tax and Expenses

#### STANDARD

Presentation of investment performance must clearly state

- (a) "before tax" or "after tax" to indicate whether or not tax has been allowed for in the calculation.

The calculation of after tax returns must adopt a consistent policy for the treatment of tax within each period. Where this treatment is changed, the effect of this change must be quantified.

- (b) how fees have been allowed for in one of the following ways:

"before fees" means after allowing for all normal transaction costs such as brokerage and stamp duty, but before allowing for any ongoing investment management and custody fees, buy/sell spreads or entry/exit fees;

"after ongoing fees" means after allowing for all normal transaction costs such as brokerage and stamp duty, any ongoing investment management and custody fees, but before allowing for any buy/sell spreads or entry/exit fees;

"after all fees" means after allowing for all normal transaction costs, investment management and custody fees, buy/sell spreads and entry/exit fees;

if expenses other than those mentioned above have been allowed for, the expenses allowed for should be described.

Where comparisons of investment performance are presented, taxes (including tax benefits such as imputation credits) and fees must be treated on a consistent basis across all funds, benchmarks and managers included in the comparison unless it is impractical to make the necessary adjustments. In cases where it is not practical to make these adjustments, this must be noted and the differences between the bases used to calculate the figures should be explained.

#### **COMMENTARY**

As the pre tax returns exclude any allowance for imputation credits, it is desirable that where a portfolio includes Australian equities, the value of any imputation credits generated be quantified separately, particularly if the value is substantially different to that associated with the benchmark.

### **2.10 Presentation of Investment Performance Results**

#### **STANDARD**

Presentation of investment performance results should be based on the principles of full disclosure and must not be done on a biased or selective basis. For funds managed by an investment manager, the presentation must fairly reflect the results achieved by that manager for all their funds with a similar investment profile or mandate.

### **END OF PROFESSIONAL STANDARD 101**