PROFESSIONAL STANDARD PS 101

INVESTMENT PERFORMANCE MEASUREMENT AND PRESENTATION

March 2020

INDEX

1. Introduction

1.1. Application

1.1.1. This Professional Standard applies to advice or information provided by a Member that is likely, directly or indirectly, to be relied upon by a person or entity in the calculation of investment returns ('investment performance').

1.1.2. The purpose of this Standard is to specify requirements for Members providing advice concerning the measurement and presentation of investment performance across all practice areas. It is acknowledged that investment performance is used for a range of purposes in several different practice areas, so requirements may vary depending on the use and/or practice area.

1.1.3. The previous version of PS 101 was issued in 1997. A number of market developments have necessitated a review, including the development and use of the Global Investment Performance Standards (GIPS), new disclosure standards for financial products and the wide range of uses for performance measurement.

1.1.4. There are some global, regional and asset class specific performance calculation standards or regulatory requirements that prescribe how the investment performance of an investment product must be calculated and presented. This standard provides high-level principles to supplement those standards and legal requirements. This version of the Professional Standard incorporates additional conformance changes to align with the Institute's new Code (effective 31 March 2020).

1.1.5. There are a number of common issues that apply to inputs into the calculation of investment performance in all practice areas; further detail on a number of these issues is provided in specific standards of the Financial Services Council (FSC). Members must be aware of these standards and must disclose in their advice to their clients whether there is any significant departure from these standards. These standards are:

- FSC Standard No 6 – Product Performance: Calculation of Returns
- FSC Standard No 8 – Scheme Pricing
- FSC Standard No 9 – Valuation of Scheme Assets & Liabilities

1.1.6. The FSC provides further guidance on investment performance in a series of guidance notes that explain how the Standards are typically applied. These guidance notes are:

- FSC Guidance Note No 1 - Global Investment Performance Standards
- FSC Guidance Note No 25 – Product Performance: Calculation of After-Tax Returns
- FSC Guidance Note No 26 – Asset Valuation for Infrequently Valued Assets
- FSC Guidance Note No 31 – Provisioning for Deferred Tax Assets

1.2. About this standard

1.2.1. This Professional Standard:

(a) has been prepared in accordance with the Institute's Policy for Developing Documents to Guide and Regulate Professional Practice;

(b) is to be applied in the context of the Code;

(c) binds Members when they perform work that the Standard covers; and

(d) defines the Institute's requirements for all work the Standard covers.

1.2.2. If a Member believes that this Professional Standard is ambiguous or wishes to seek clarification of it, then they may consult the Institute's Professional Standards Committee for an interpretation.

1.2.3. If a Member finds that they cannot carry out their work in a way that complies with this Professional Standard then they must either:

(a) decline to carry out the work; or

(b) end their agreement to do so.

1.2.4. If a Member does not comply with this Professional Standard, then that may constitute Misconduct under the Institute's Disciplinary Scheme.

1.2.5. This Professional Standard does not constitute legal advice. Any interpretation or commentary within this Professional Standard regarding specific legislative or regulatory requirements reflect the expectations of the Institute but does not guarantee compliance under applicable legislation or regulations. Accordingly, Members should seek clarification from the relevant regulator and/or seek independent legal advice in the event they are unsure or require specific guidance regarding their legal or regulatory obligations.

1.3. Other relevant documents

1.3.1. This Professional Standard must be applied in the context of the relevant law, and relevant accounting and auditing standards.

1.3.2. A reference to legislation or a legislative provision in this Professional Standard includes any statutory modification, or substitution of that legislation or legislative provision and any subordinate legislation issued under that legislation or legislative provision. Similarly, a reference to a Professional Standard includes any modification or replacement of that Professional Standard.

1.3.3. Apart from the Code, from legislation or from regulatory standards, no other document, advice or consultation (including Practice Guidelines of the Institute) can be taken to modify or interpret the requirements of this Professional Standard.

1.3.4. If there is a conflict between this Professional Standard and any legislation, then the legislation takes precedence. In this context, legislation includes regulations, prudential standards, subordinate standards, rules issued by government authorities and standards issued by professional bodies which have the force of law.

2. Commencement date

The commencement date of this Professional Standard is 31 March 2020.

3. Definitions and interpretation

In this Professional Standard:

'Asset-weighted Investment Return' is a measure of the rate of return for a portfolio that sets the present value of all cash flows and terminal values equal to the initial investment.

'Code' means the Code of Conduct of the Institute.

'Disciplinary Scheme' means the document of that name prepared by the Institute setting out the rules and procedures governing professional discipline of a Member, as amended by Council from time to time.

'Internal Rate of Return' is equivalent to the Asset-weighted Investment Return defined above.

'Material' means important or essential in the opinion of the Member. For this purpose, 'Material' does not have the same meaning as that used in Australian accounting standards. 'Materially' has a meaning consistent with 'Material'.

'Time-weighted Investment Return' is the compound annual rate of return over a selected period of time where equal weight is given to each part of the period regardless of cashflows over the period.

Other capitalised terms used in this Professional Standard have the same meaning as set out in the Code.

4. Key inputs into investment performance calculation

4.1 Asset valuations

For consistency, asset valuations must be at fair value according to the appropriate accounting standard (which will generally involve using values in accordance with audited financial statements prepared by the entity). If the Member believes it is inappropriate to use asset valuations at fair value, the Member must disclose the reasons for not doing so as well as the method of calculation used for the asset valuations.

For listed markets, fair value will generally mean the Member must use asset valuations at the last sale price although in thinly traded securities where there may be no true market it may be necessary to receive a third party valuation. For unlisted assets, a third party valuation will generally be required and must be done as often as practicable but at least once per year. In particular, when significant events occur that substantially impact the value of the assets, a valuation must be undertaken as soon as practicable.

Where an accounting standard permits some exercise of discretion in terms of the valuation used, the manner in which the discretion has been exercised must be noted for the assets concerned. The Member must consider whether any exercise of discretion is consistent with practice in similar funds with which comparison is likely to be made, and comment on any perceived lack of consistency.

If a comparison is being made of funds in different accounting jurisdictions, the Member must record any differences in the definition of fair value and must disclose in their advice to their client the base currency that has been used for performance measurement.

4.2 Accrued income and unrealised capital gains

Fair value will incorporate accrued income and unrealised capital gains unless this will mislead the user, in which case the departure from standard practice must be disclosed. Any changes in accrued income and unrealised capital gains between any two points in time must be recognised as investment income. The Member must disclose whether it is appropriate to recognise any impairment in value, and any reversal of an impairment. Where it is not possible to make a reasonable estimate of accrued income, this must be disclosed.

4.3 Tax

For situations where a Time-weighted Investment Return is being calculated, the tax treatment that has been used in the performance measurement must be disclosed in the Member's report to their client (e.g. whether it is gross of tax or net of tax, and how GST has been treated).

For situations where an Asset-weighted Investment Return is being calculated, the amounts of tax paid or accrued must be included in the cash flow for net of tax results. Where gross of tax returns are calculated for a tax-paying entity for the purpose of comparing gross of tax performance, the method of calculating gross-of-tax performance from the actual net-of-tax performance of the portfolio must be disclosed in the Member's report to their client.

4.4 Expenses

For situations where a Time-weighted Investment Return is being calculated, the treatment of expenses that has been used in the performance measurement must be disclosed in the Member's report to their client (eg. whether it is gross or net of different types of expenses such as administration, investment, regulatory recoveries).

For situations where an Asset-weighted Investment Return is being calculated, expenses paid or accrued must be included in the cash flow for net-of-expenses results. Where gross-of-expenses returns are calculated for an entity for the purpose of comparing gross performance, the method of calculating gross-of-expenses performance from the actual net-of-expenses performance of the portfolio must be disclosed.

4.5 Fees, taxes and expenses accrual

When a Time-weighted Investment Return is required to be calculated, fees (or taxes) must be deducted from investment returns for after-fee (or after-tax) results, based on accrual accounting (including the accrual of performance fees) unless accrual accounting information is not available, in which case the Member must clearly disclose this and use the accounting information that is available (eg. cash accounting). Any fees (or taxes) not included in the calculation of after-fee (or after-tax) return must also be disclosed and the Member must disclose that the investment returns may not be comparable.

The fees deducted from investment performance based on accrual accounting must include a reasonable accrual of performance fees unless it is clearly disclosed that these fees have not been deducted from investment performance.

4.6 Verification of data

Where investment performance data has been provided by a third party, the presentation of investment performance must disclose the source of the data used in the calculation.

Reasonableness checks must be conducted through comparison with measures such as relevant market indices. If such analysis suggests the data is incorrect, or if the Member suspects that there are problems with the data, the Member must investigate the source of the data and determine whether adjustments to the data are required.

The Member must disclose any Material shortcomings in relation to the veracity of the data in their presentation of the investment performance.

4.7 Period of performance measurement

The period over which investment performance is calculated must be appropriate to the purpose of measurement. While investment performance over periods of five years or more will often provide more reliable information on the relative investment skills of investment managers, investment performance over shorter periods may also provide some important information and is often required for reporting to fund members, trustees or regulators.

Members should note that, when comparing performance between investment managers, a focus on short term performance may lead to inappropriate conclusions. Caution is required when drawing conclusions from short term performance.

4.8 Arithmetic vs geometric average for returns over multiple periods

The presentation of historical investment performance over multiple periods must be done using a geometric average rather than an arithmetic average so that it reflects the same outcome if the average return had been achieved for each period.

4.9 Benchmarks

Benchmarks are an important mechanism for assessing the performance of investment managers. When selecting a benchmark, the following must be considered:

(a) The appropriateness of a benchmark as a meaningful comparator, considering the needs of potential users of the information or advice prepared by the Member

(b) the investment objectives of the portfolio;

(c) the relevant universe of investible securities;

(d) the time periods(s) over which benchmark comparison is reasonable;

(e) the frequency with which benchmark comparisons are to be made;

(f) risk measures related to the benchmark that are relevant for performance assessment.

The source of benchmark returns must be disclosed. Where the benchmark return is used as part of a performance-based fee calculation, any adjustments to the benchmark for that purpose must also be clearly disclosed in the Member's report to their client.

Any comparison with a benchmark must clearly disclose the manner in which taxes, transaction costs, management fees and custody fees, and any other charges, have been allowed for in the benchmark. The comparison must also clearly disclose whether the benefits of franking credits have been included in the benchmark. Where direct comparison between a benchmark and a portfolio return is not possible, the effect of differences in taxes, costs and charges on the comparison must be disclosed.

Benchmarks may be single or multi-sector (composite) in nature and will usually consist of recognised equity, bond, and other indices, but may also consist of tailored portfolios. Unless otherwise agreed by the client, accumulation indices must be used in preference to price indices for use in calculating benchmark returns.

4.10 Investment risk

Investment risk is a key factor that causes the investment performance of a portfolio to vary. There are a number of different measures to quantify risk exposure, including volatility, value at risk, cumulative value at risk, benchmark risk, as well as the risk of not meeting investment objectives. Other proxies for risk include the relative proportion of growth assets (e.g. shares and property), or the exposure to credit risk through fixed interest investments.

Stress testing and scenario analysis may be used to assess the risk associated with a portfolio. The economic conditions to be measured must consider movements in market indices, major currencies and other investment risks, as appropriate. For asset portfolios supporting future liabilities, the yield curve, a change in inflation expectations, or a widening or contraction of credit spreads must be considered among other market shocks, as appropriate.

Where the Member assesses that it is appropriate, given the purpose of measurement and/or the objectives of the client, the measured performance must be adjusted for risk by utilising measures such as the information ratio or the Sharpe ratio.

Members must consider the risk of a portfolio in assessing investment performance and the relative risk of the portfolios when performing a comparison. If no adjustment for risk is made when using performance for comparative purposes, investment portfolios with a similar level of risk must be compared unless it is clearly disclosed that the portfolios have a different level of risk.

5. Approach to investment performance

5.1 Background

The calculation and presentation of the investment performance of a portfolio is an integral part of the global investment management industry and is also widely used in superannuation and insurance when analysing the performance of portfolios of investment in those segments. Both investment managers and their clients (existing and potential) require accurate investment performance measurement to provide quantitative input into the investment decision-making process. A similar approach applies to the investment, superannuation and insurance industries. This section outlines common issues when considering the investment performance of particular investment managers or portfolios and the related requirements for Members.

5.2 Uses of investment performance measurement

The main uses of investment performance measurement are the following:

(a) To compare performance of an investment product against an agreed benchmark and expected excess return;

(b) To calculate performance-based fees or carried interest;

(c) To compare the performance of different investments or investment managers;

(d) To determine risk measures for a certain asset class or portfolio of assets;

(e) To enable an analysis of the underlying factors affecting performance;

(f) To enable a consumer to assess the underlying investment skills of the investment manager or managers of the assets that support a particular investment product

(g) Specific factors that are relevant to these uses are set out below.

5.3 Comparison of investment skills of investment managers

The investment performance data used to assess the skills of different investment managers must be assessed on a time-weighted basis to neutralise the impact of the actions of individual investors except in situations where the manager controls the timing and amount of cash flows (e.g. private equity).

The investment performance of different investment managers must, to the greatest extent possible, be measured on the same basis. If it is not measured on the same basis, this must be clearly disclosed.

The investment performance data used to compare the investment management skills of investment managers may vary depending on circumstances, and may include net of investment fees only, net of investment fees and tax, net of tax only and gross of investment fees and tax. The performance used in comparison must be the actual performance of the portfolio, net of whatever fees or taxes are deducted from the portfolio, except that, in situations where different portfolios are subject to different types of taxes or expenses, an adjustment may be required such that the performance of each portfolio is disclosed on the

same basis. For example, this may require adding back some fees and taxes that have been deducted from the investment return of one or more portfolios, or deducting fees from a portfolio. Wherever the Member makes any adjustment to investment performance data for the purpose of ensuring comparison is on the same basis, the basis of the adjustment must be disclosed.

Deducting taxes is often problematic due to the uncertainty of the actual tax rate, as different tax rates may apply to different assets due to the timing of cash-flows and the split between income and capital gains. The Member must disclose what assumption have been made in relation to taxes.

5.4 Calculation of investment performance for attribution analysis

When analysing the investment performance achieved by an individual investment manager, this investment performance will often be compared with the performance of the benchmark return relevant to that investment. As the performance of the benchmark is independent of the cash flows of the investment manager, the investment performance achieved by the investment manager must be calculated on a time-weighted basis.

5.5 Internal Rate of Return (IRR)

Calculations of the IRR must use the date of contribution by fund investors to the fund for the relevant investment and use the date of distribution from the fund to investors, unless the information is not available in which case approximate dates may be used, or some other dates are deemed to be more appropriate for the purpose of the calculation. The IRR must be supplemented by other performance measurement metrics if the Member determines that the IRR alone provides misleading information for investors.

5.6 Calculation of performance-related fees

Performance-related fees and carried interest are often calculated as a percentage of the excess return multiplied by the average capital amount over a period. When the excess return is calculated on a time-weighted basis, the denominator in the calculation represents the capital-at-work that earns the excess return. The same asset values must be used for the calculation of portfolio returns and the calculation of performance-related fees.

5.7 Presentation of excess return

The basis used to compare returns for a portfolio and the corresponding benchmark returns must be appropriate for the purpose of the investment performance advice and consistent with common practice in the jurisdiction in which the Member is working.

Excess return is the difference between a portfolio's return and the benchmark's return. Excess return over a time period may be calculated arithmetically or geometrically. Arithmetic excess return is the excess value added expressed as the difference between the portfolio's return and benchmark return (i.e. the excess value added by the portfolio when compared with the benchmark). Geometric excess return is calculated as a ratio of the portfolio's return over the benchmark return (i.e. the excess value added relative to the amount expected if the investments were made in the benchmark portfolio).

In calculating time-weighted return differences, excess return must be calculated arithmetically, as the difference between the geometric compounded returns of the investment and the benchmark, unless common practice in the jurisdiction is different, when geometric excess return may be used, and this must then be disclosed in the Member's report to the client.

6. Superannuation

6.1 Background

Superannuation is provided to Australian workers either through a Defined Benefit fund, where a member's benefit is determined by a formula generally related to salary and years of service, or an Accumulation fund, where a member's benefit is the accumulation of contributions with investment earnings. While Defined Benefit funds were the dominant model for many years, following the introduction of compulsory superannuation in the early 1990s, Accumulation funds cover the vast majority of members, with most Defined Benefit funds having been closed to new members.

When a member of a superannuation fund ceases working, they typically transfer their superannuation savings to an account-based pension or life pension (for some defined benefit funds) from which they receive regular income.

6.2 Uses of performance measurement

The uses of investment performance measurement in superannuation include those covered in Section 5.2 but also include the following:

(a) The calculation of the investment performance of a superannuation fund to enable the Member to compare the actual investment performance experienced over the period with the investment performance assumed in the actuarial valuation;

(b) The calculation of the investment performance achieved by a superannuation fund member on their own personal superannuation account;

(c) The calculation of investment performance to comply with the requirements of superannuation legislation.

6.3 Investigation of the financial condition of defined benefit funds

For the investigation of the financial condition of defined benefit funds, the calculation of investment performance is used to compare the actual investment performance achieved by a fund during the valuation period with that assumed in the previous actuarial valuation. This is required to determine the extent to which the actual investment performance experienced in the valuation period has added to or subtracted from the surplus or deficit (if any) that has arisen during that period. The calculation of investment performance for this purpose must comply with Professional Standards 400 and 404.

A detailed calculation of the investment return contribution to the surplus or deficit arising over the valuation period would take into account the cash flows of the fund, with investment performance calculated on an asset-weighted basis as part of this process.

Where there is a significant difference between the Asset-weighted Investment Return and the Time-weighted Investment Return, both returns may be included in the valuation report, with the difference being used to help explain the experience of the fund over the valuation period. Otherwise it is usual for only the Time-weighted Investment Return to be included in the valuation report, for simplicity and consistency with other performance reporting.

6.4 Calculation of investment performance on a member's account

The investment performance disclosed by superannuation funds (or in unit linked policies offered by life companies) is calculated on a time-weighted basis to allow this performance to be compared across funds. The actual return achieved by a member on their own account can be significantly different as this return is affected by the cash flows within their account over time. Therefore, the calculation of the investment performance actually earned on a member's account over any period must be calculated on an asset-weighted basis taking into account the actual cash flows of the member.

6.5 Calculation of investment performance to meet disclosure requirements

The investment performance calculated to comply with the legislative requirements relating to the disclosure of investment returns on superannuation investment products must comply with the requirements of that legislation. Subject to any special provisions of the legislation, where the investment performance is to be used to compare the past investment performance of different investment products, the investment performance must be calculated on a time-weighted basis.

The investment performance must be calculated net of investment fees and costs (and taxes where appropriate), except where another performance measurement is considered more appropriate and this is clearly disclosed or where the relevant legal requirements specify the methodology that must be followed when calculating the disclosed investment performance (e.g. the calculation of net returns that are included in Product Dashboards). Where this is the case, the investment performance must be calculated in accordance with the legal requirements. If the Member determines that the methodology used in accordance with the legislation leads to disclosed investment performance that is misleading, the Member must disclose the methodology used and why the disclosed information may be misleading. This statement must be provided along with the disclosed investment performance except where there are restrictions on the amount of information that can be included in the relevant disclosure (eg. Product Dashboards), in which case it may be included in a separate report provided to the client.

Trustees also need to provide investment performance information to APRA. Reporting Standard SRS 702.0 – Investment Performance sets out how this information must be calculated.

7. Insurance

7.1 Background

Insurance companies typically manage their investment assets in conjunction with their liability profile. From this perspective the approach is generally to consider investment returns and asset manager performance from an asset and liability perspective.

In the case of superannuation products, unit linked investment policies and participating/discretionary investment policies issued by life insurance companies, investment performance impacts policyholders directly. Hence the considerations relating to investment performance measurement are the same as those set out in Section 6.4.

In the case of pure insurance business (i.e. business with no policyholder investment component), companies receive regular policy premiums for the risks which they underwrite. A portion of these premiums, the technical reserves, is held to support the claims expected to arise on these policies. These funds are typically invested in lower risk money market and capital markets instruments, while the capital backing shareholders' funds is typically invested in higher risk instruments.

Therefore, for pure insurance business it is important to measure the return generated on insurance assets and compare this with the movement in value of liabilities resulting from economic changes (i.e. changes in the risk-free rates).

7.2 Uses of investment performance measurement

The uses for investment performance measurement in insurance include those covered in Section 5.2 but applied to the assets of an insurance company.

7.3 Requirements for particular uses of performance measurement:

With the exception of superannuation products, unit linked investment policies and participating/discretionary investment policies in life insurance where investment performance impacts policyholders directly, investment performance for insurance companies only impacts shareholder returns. Shareholder investment performance is typically disclosed through management and financial reporting and not directly to policyholders. Shareholder investment performance must be calculated net of investment fees and costs (and taxes where appropriate), to align returns with those which are reported as shareholder investment returns, unless the investment performance is required to be shown pre-fees, in which case the level of fees must be disclosed.

For comparison of actual versus expected investment performance for shareholders' funds and technical reserves:

- The relevant considerations for the Member, and requirements on them, in the calculation of both actual and expected investment performance are as outlined in Section 5.
- Expected performance must be based on:
  - (a) Benchmark Returns, for assets backing the insurance liabilities the benchmark is generally the discount rate(s) used in the calculation of the insurance liabilities. This will allow direct comparison between interest rate sensitivity of assets versus the interest rate sensitivity of liabilities.
  - (b) Target Returns, for the assets backing the shareholders' funds – in assessing the performance of the asset manager, consideration must be given to the duration and credit exposure allowed within the mandate.

- For profit and loss reporting, investment performance must be measured in accordance with the requirements outlined in the relevant accounting standards and will be based on the fair value of each asset. The value of insurance liabilities will vary with changes in the risk-free yield curve. Calculation of this movement must be consistent with the calculation methodology used to measure asset performance over the same period.
- In cases where the term of liabilities is longer than that of the assets backing them, the risk-free yield curve will need to be extrapolated to discount long-tailed cash flows. This extrapolation must be consistent with the principles used for pricing instruments available in the market.

Actual performance will generally be based on Time-weighted Investment Returns but when there is a significant difference between the Asset-weighted Investment Return and the Time-weighted Investment Return, both returns may be included in the valuation report with the difference being used to help explain the experience of the fund over the valuation period. Otherwise it is usual for only the Time-weighted Investment Return to be included in the valuation report, for simplicity and consistency with other performance reporting.

The approach adopted by the Member, and the reason the approach has been taken, considering the application and purpose, must be disclosed.

END OF PROFESSIONAL STANDARD 101