S&P Dow Jones Indices

A Division of S&P Global

Managed Account Reporting and Benchmarking

IMAP Independent Thought Conference

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Sep 2024

S&P Dow Jones Indices – For Financial Professionals Only

S&P Dow Jones Indices

A Division of S&P Global

We provide iconic and innovative index solutions backed by unparalleled expertise across the asset-class spectrum.

S&P DJI index family includes:

- Dow Jones
- Cambridge Associates
- iBoxx
- iTraxx
- S&P Custom Indices
- S&P Kensho
- Exchange co-branded

  (e.g. S&P/ASX, S&P/NZ, S&P/JPX)

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Performance Disclosure/Back-Tested Data

The S&P/ASX 200 Index was launched on April 3rd 2000. The S&P/ASX 200 VIX Index was launched on September 21st 2010. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance, and is based on the index methodology in effect on the index launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Complete index methodology details are available at spglobal.com/spdji. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the index and calculates the index levels and performance shown or discussed but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US $100,000 investment for a 12-month period (or US $10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US $1,650), the net return would be 8.35% (or US $8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US $5,375, and a cumulative net return of 27.2% (or US $27,200).

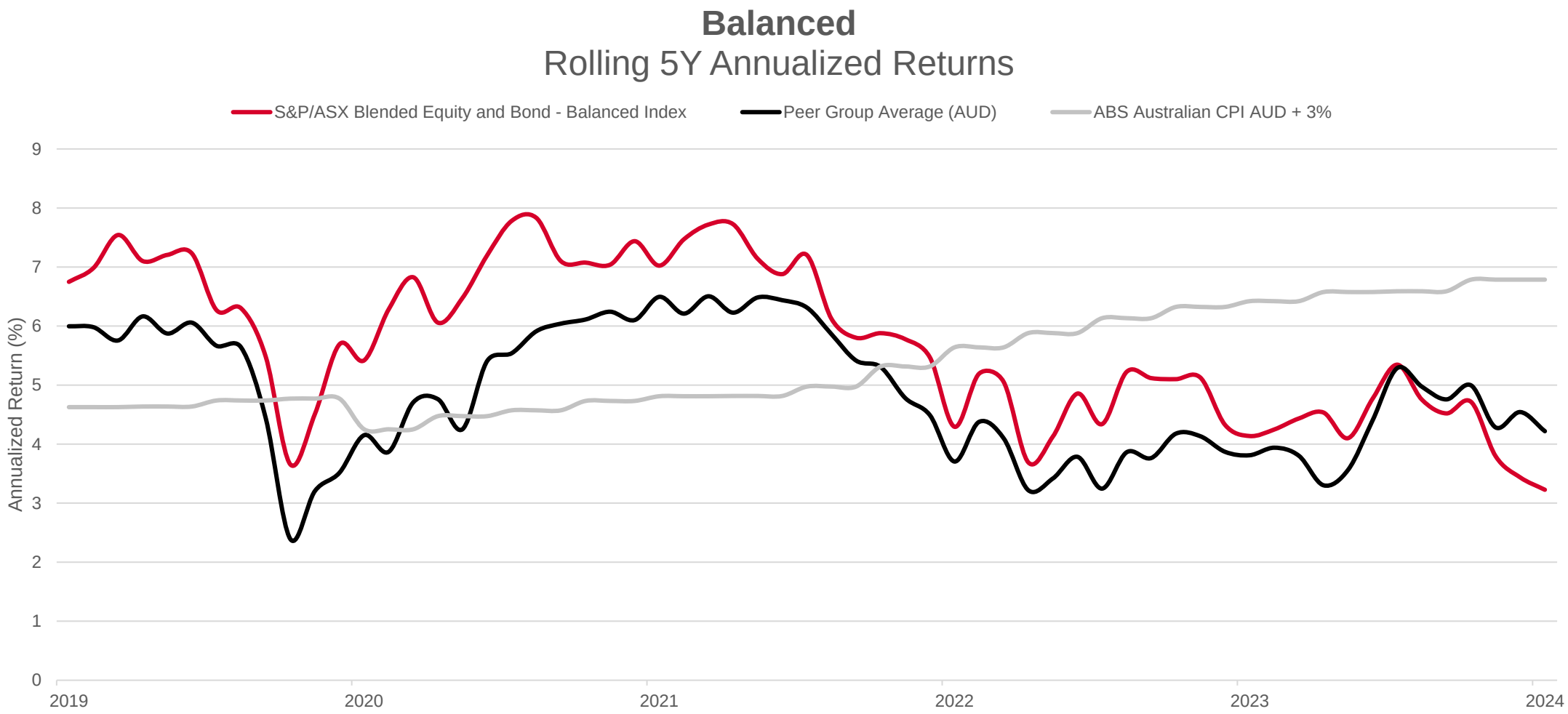
Why should we examine the benchmark?

“. . up to 94% of wealth managers claim to deliver first-quartile performance by choosing different criteria to suit their needs”

- Research by Asset Risk Consultants (ARC)

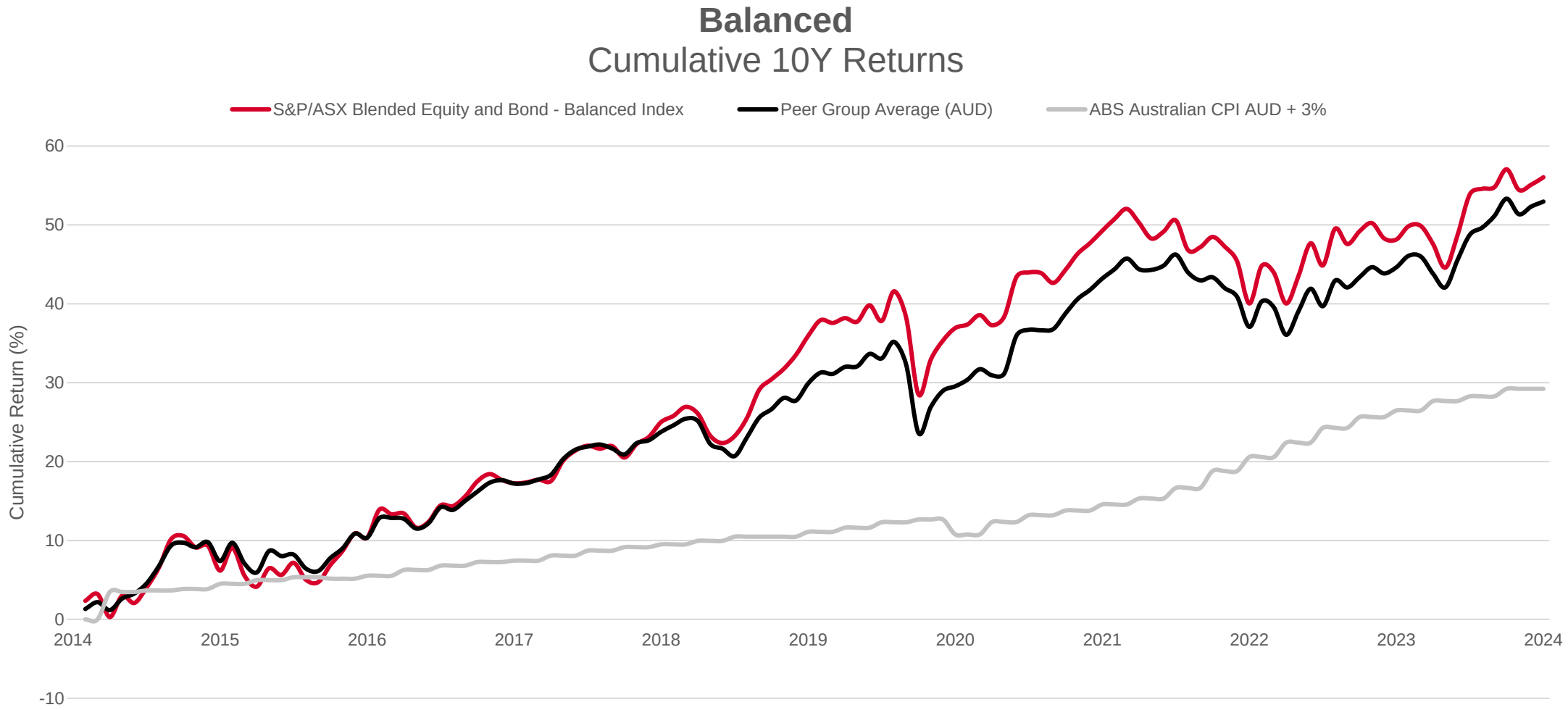
Source: Financial Times [Beware of wealth managers quoting data | Financial Times (ft.com)], O’Neill, M; 17 August 2023

Why benchmark selection matters



Source: S&P Dow Jones Indices LLC, Morningstar. Data from June 30, 2014 to June 30, 2024 in $AUD Total Return. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. The S&P/ASX Blended Equity and Bond - Balanced Index is designed to measure the performance of a hypothetical allocation that takes a long position in the S&P/ASX 200 with a 50% weight and a long position in the S&P/ASX Australian Fixed Interest Index with a 50% weight. The Peer group is the Morningstar Australia Fund Multisector Balanced. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Why benchmark selection matters



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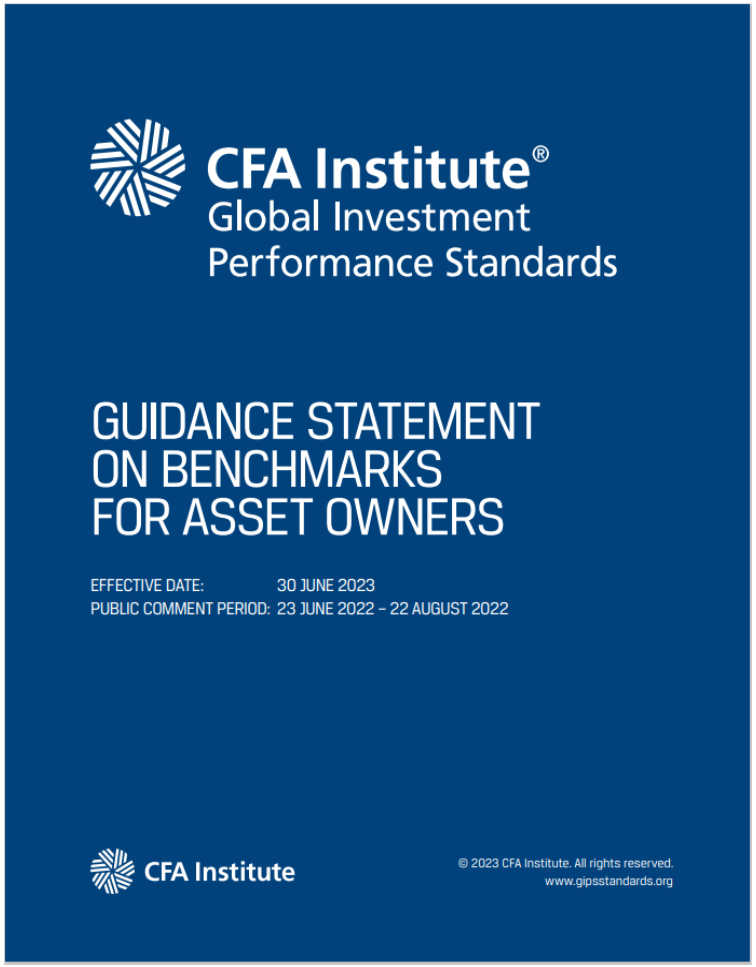
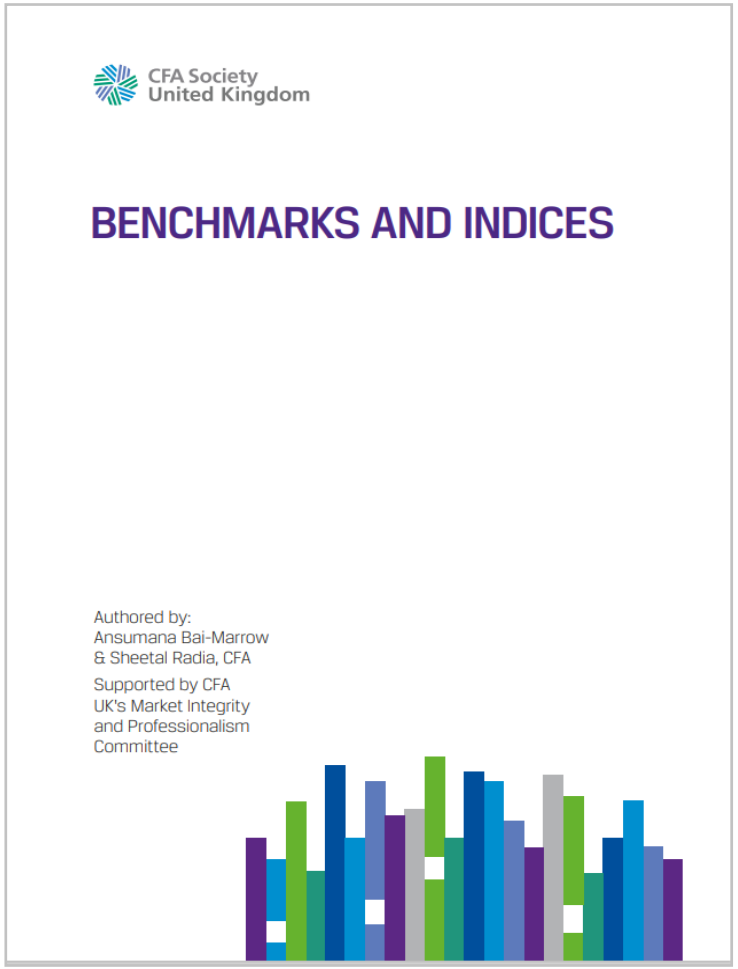
Global Investment Performance Standards (GIPS®)





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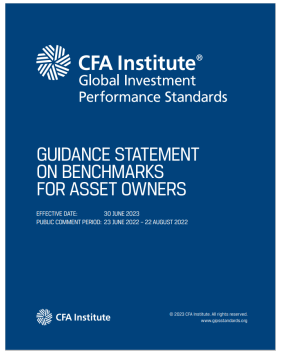
Benchmark selection – what is an appropriate and valid benchmark



A 'valid benchmark' is one that is:

- **specified in advance** - Selected prior to the evaluation period
- **relevant** - Reflects the mandate, objective, or strategy of the total fund or composite.
- **measurable** - Is quantifiable.
- **unambiguous** - Investable universe constituents can be clearly identified and priced.
- **representative** - Based on knowledge of investable universe.
- **accountable** - Held accountable for any deviations from the benchmark.
- **Investable** - Possible to forgo active management and simply hold the benchmark
- **complete** - Provides a broad representation of the pertinent segment of the market

Source: www.gipsstandards.org © 2023 CFA Institute; guidance-statement-benchmarks-asset-owners.pdf (gipsstandards.org); p.4-5

Types of Benchmarks

- Market
- Target Return
- Peer Group
- Custom

-

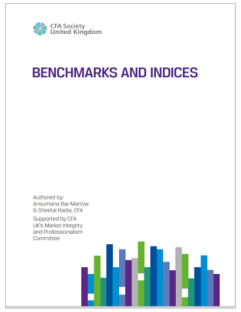
IMAP Managed Accounts Awards 2024 - Balanced Portfolio benchmarks of submissions

- RBA + 3%
- RBA + 4%
- CPI + 4.5%
- CPI + 3.5%
- CPI + 5%
- Bank Bill + 2.4%
- FE Multi Asset Balanced
- Morningstar AUS Growth Target Allocation
- Morningstar AUS Balanced Target Allocation
- “Balanced Composite ETF Indices”

Source: www.gipsstandards.org © 2023 CFA Institute; guidance-statement-benchmarks-asset-owners.pdf (gipsstandards.org); p. 6-8 ; IMAP Managed Account Awards submissions

Benchmarks from the CFA's perspective

Achieve an investment return in excess of the policy asset mix's return over a five-year time period.	Actionable and attainable by use of active management. Consistent with the trustees' willingness to bear risk and the fund's mission. Unambiguous. Specified in advance.	Good
Outperform the returns of the median fund in a peer group universe	Ambiguous and not actionable (median fund is unknown); possibly inconsistent with the trustees' willingness to bear risk or the fund's mission.	Poor
Attain U.S. consumer Price Index + 3 percent	Not actionable. No such investable alternative exists. Purely aspirational.	Bad



Investment objective	Comment	Assessment
Achieve an investment return in excess of the policy asset mix's return over a five-year time period	Actionable and attainable by use of active management. Consistent with the trustees' willingness to bear risk and the fund's mission. Unambiguous. Specified in advance.	Good
Generate active management performance in excess of an appropriate benchmark over a five-year time period.	Actionable and attainable by use of active management. Consistent with the trustees' willingness to bear risk and the fund's mission. Unambiguous. Specified in advance.	Good
Maintain a funded ratio (assets/ liabilities) in excess of 0.9 measured annually.	Appropriate for funds in which liabilities or expected fund outflows have been specified (e.g., defined-benefit plans, insurance companies). Actionable and attainable as long as the fund has access to source of contributions. Unambiguous. Specified in advance.	Good
Realise investment performance that allows annual spending or fund withdrawals to equal or grow relative to the prior year's spending.	Pertains primarily to endowments and foundations. Based on the idea that fund beneficiaries have an aversion to declines in benefits.	Good
Maintain projected investment risk consistent with investment policy specifications.	Acknowledges the existence of different types of investment risk and a policy to incur certain ones, in approved amounts. Actionable and attainable.	Good
Outperform the returns of the median fund in a peer group universe.	Ambiguous and not actionable (median fund is unknown); possibly inconsistent with the trustees' willingness to bear risk or the fund's mission.	Poor
Attain return (equal to or greater than) the actuarial rate of return.	Possibly achievable over a long time period but certainly not annually.	Poor
Attain return (equal to or greater than) S&P 500 Index + 3 percent.	Unlikely to be attainable; possibly inconsistent with the trustees' willingness to bear risk.	Poor
No negative investment performance years.	Achievable only with low-risk, low-return investments that are like;y to be inconsistent with the fund's mission and investment policy.	Bad
Attain U.S. Consumer Price Index + 3 percent.	Not actionable. No such investable alternative exists. Purely aspirational.	Bad
"Beat Harvard."	Not actionable (Harvard's investment policy and process is not known) and not necessarily consistent with the trustees' willingness to bear risk or the fund's mission. Purely aspirational.	Bad

- Source: Benchmarks in investment practice (cfauk.org) authored with the support of the CFA UK's Market Integrity and Professionalism Committee

ASIC Report 779

Do monitor for underperformance

Trustees, advisers and advice licensees monitor for investment option underperformance, including by **assessing performance against return objectives and performance benchmarks**

Do take action in relation to underperforming options

Trustees, advisers and advice licensees **act in relation to underperforming investment options** to minimise the risk that members invest in products that may not meet their needs

Do communicate with members

Trustees and advisers communicate with members about performance of investment options, including **specific and measurable return objectives** and actual performance against those objectives

Don't provide inappropriate advice about underperforming options

Advisers don't recommend underperforming options without explaining why they are appropriate for the member

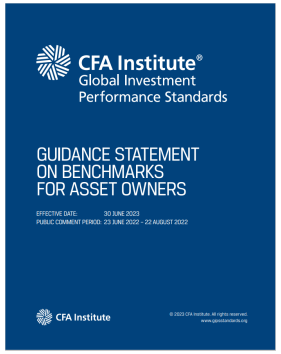
Don't over-rely on research house ratings

Trustees, advice licensees and advisers don't over-rely on research house ratings when choosing options for investment menus, approving options for use by advisers or providing personal advice

Source: ASIC Report 779 Superannuation choice products: What focus is there on performance ?

Q&A

Benchmark selection – what is an appropriate and valid benchmark



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Source: www.gipsstandards.org © 2023 CFA Institute; guidance-statement-benchmarks-asset-owners.pdf (gipsstandards.org); p.4-5