

Practical Tools to Address Investment Challenges

To address the issue of managing portfolios to both meet long-term objectives and weather short-term risks, FCLTGlobal, with input from its members, has developed **practical tools** for managing multi-horizon risks. We have provided illustrative examples to these tools, but they are not intended to be prescriptive or exhaustive.



OBJECTIVE AND STRATEGY SETTING

Investment purpose statements

Succinct and clear description of the reason that the fund exists and the outcome necessary to fulfill that purpose

 Our investments finance a monthly pension benefit, defined nominally but with the discretion for occasional cost-ofliving adjustments, on a lifetime basis for all teachers, first responders, and civil servants in our state that have achieved retirement status. In order to fulfill this purpose, we need to generate a return equal to at least our nominal actuarial rate of 7% over rolling 10-year periods.

Investment beliefs

Strongly held and clearly articulated, but disputable, views that provide a foundation for a long-term investment strategy

- Returns over the long term are a product of fundamental economic drivers.
- Market prices deviate significantly from fundamental or intrinsic value in the short run.
- Market returns show short-term momentum but longer-term tendency for reversion to the mean.
- A focus on the long-term risk of loss of principal, rather than on short-term volatility, adds return.

Strategic advantages

Each institution has specific strategic advantages and disadvantages that affect its ability meet investment objectives

- We can benefit from the ability to hold an investment over time and never be a forced seller.
- Our alumni body/ location/ history/ staff composition provides us a particular advantage in this asset class/region.
- Our asset size enables us to invest in small funds/requires us to invest in large opportunities.
- Our public profile limits/enhances our ability to take long-term risk.
- Our tax status is an advantage/disadvantage in certain asset classes.
- Being a growing/mature fund with high net inflows/outflows permits us to/limits us from making significant illiquid allocations.

Investment parameters

Eliminating or weighting investment positions based on the top-down preferences of the fund sponsor, beneficiaries, or other key constituents

- Allocate > 15% of total assets to securities issued by firms headquartered in the local state or province.
- Exclude any securities issued by firms that derive > 20% of revenue from tobacco products.
- Overweight allocations toward firms in the top quartile for carbon efficiency by industry.

Risk appetite statement

Documentation of the amount of risk necessary to achieve the long-term desired outcome and the amount of loss that is acceptable in interim measurement periods

- We have a 1% chance that the reference portfolio return over one year will be less than -25%.
- We expect the active risk to be 4% on average and no more than 8%.

Strategic asset allocation

A target asset-class mix that the board and management believe to be sufficient for meeting the fund's long-term goals. There may be ranges for shorter-term deviations around the long-term target asset-class mix

• Clearly defined, long-term allocation policies together with ranges around the expected long-run allocation.

Portfolio rebalancing

A policy that adjusts asset allocation toward targets with cash flows, periodically, or after large market movements to prevent the portfolio from falling outside preset boundaries

 Cash inflows will be added to underweight asset classes and cash outflows will be taken from overweight asset classes to continually rebalance the portfolio toward the policy targets. If the actual asset allocation moves +/-10% from the policy targets, the staff will rebalance the policy to the targets within 10 days without requiring a further decision of the board.

Set-asides

Dividing the portfolio into two, based on time frames: shortterm funds earmarked (set aside) for upcoming outflows and held in liquid assets, and the remaining funds invested with a long-term time horizon

 Funds equivalent to the next 12 months' projected outflows will be invested in cash equivalents. The balance of the portfolio will not hold cash equivalents and will be invested with an expected time frame of 10 years.

Lock-ups

A contractual term committing to a capital allocation for a minimum period of time with a penalty for early termination

 The fund will make multi-year commitments to private equity and infrastructure, and it recognizes that, once made, those allocations will not be changed based on market conditions.

Parameters for review

Preselected interim performance or risk parameters, positive and negative, inside which decision-makers expect to maintain their position, and outside which they expect to reevaluate their position

 The board and management expect to maintain asset allocation targets as set in the Investment Policy Statement for the coming five years unless a particular asset class outperforms or underperforms its expected return by 5%.

Decision tracking

The practice of monitoring and reporting on the performance of the current strategic asset allocation relative to prior strategic asset allocations, and the actual asset allocation relative to the strategic asset allocation

 Staff will monitor and report on the performance of actual asset allocation relative to strategic asset allocation on a rolling 10-year basis and will monitor the added value of changes from the prior strategic asset allocations.

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RISK ANTICIPATION

Interactive scenarios

An interactive process of identifying plausible but lessexpected future scenarios and simulating responses to understand any potential impact on investment beliefs and asset allocation

- Persistently low interest rates
- Three-degree temperature change and corresponding rise of sea levels
- Significant increases in longevity

Purpose-risk analysis

A computation of the probable range of how a fund is tracking to fulfill its purpose, the level of loss from which it could not recover to continue fulfilling its purpose, and ways to mitigate that level of loss

- Our fund could withstand a drawdown of 50% before compromising our mission.
- The expected worst-case scenario from our asset allocation is a loss of 30%.

Clarification of risk preferences

An exercise to evaluate the individual risk preferences of key decision-makers, such as board members and executives, to identify differences within the group and anticipate the implications for risk taking

- Poll decision-makers individually on key assumptions incorporated into investment beliefs, and then discuss during a board meeting
- Conduct interactive scenario planning and note different
 perspectives
- Use behavioral tests to measure individual differences and compare
- Identify comfort with multi-horizon risk as an objective for board composition/executive hiring

RISK AND PERFORMANCE MEASUREMENT

Long-term performance reporting

Organizing performance reporting tables to begin with measurements of long-term periods, and if short-term data is required, putting it last

 For performance reporting, show the since-inception and longest-period performance results on the left-hand side of the page, giving lower priority to recent short-term results, such as the most recent quarter's performance.

Outcome-focused performance reporting

Displaying performance against long-term desired expected return outcomes rather than simply against benchmarks over interim periods

• Our long-term goal is to achieve returns of the consumer price index (CPI) + 5%. Over the past 10 years we have outperformed this target by 75 basis points.

Drawdown versus shortfall risk

Drawdown refers to a loss relative to the original investment or peak or interim valuation. Final shortfall is the end-of-period gap between value and the expected return outcome. There is a trade-off between experiencing a drawdown and having a shortfall, or not achieving the intended outcome.

• Recognize that trade-offs exist between the likelihoods of achieving expected return, having a final shortfall, and experiencing interim drawdown.

Internally consistent targets

An internally consistent set of targets for expected return, final shortfall, and interim drawdown

• Our expected return is 8%; this asset allocation has a 5% chance of a drawdown of 25% or more of the portfolio's current value.