

**INVESTMENT POLICY STATEMENT
CITY OF ALEXANDRIA
SUPPLEMENTAL RETIREMENT PLAN**

CURRENT ADOPTION: JUNE 13, 2024

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OVERVIEW

The City of Alexandria Supplemental Retirement Plan (“Plan”) is a defined benefit pension plan established to compliment benefits provided by the Virginia Retirement System (“VRS”).

The Plan was originally effective as of August 1, 1970. The Plan is intended to qualify as a defined benefit pension plan under Code Section 401(a) and is a governmental plan under Code Section 414(d) and Section 3(32) of the Employee Retirement Income Security Act of 1974, as amended. The Plan is maintained for the exclusive benefit of eligible employees and their beneficiaries.

This Investment Policy Statement (“IPS”) is divided into five sections.

- **Section 1 - Process** The process in making and executing investment policy
- **Section 2 - Strategy** Return assumption, asset allocation, performance criteria
- **Section 3 - Guidelines** Rules for individual accounts covering domestic and foreign equity
- **Section 4 - Managers** One-page manager descriptions and added guidelines
- **Section 5 - Glossary** Definitions of technical terms

SECTION 1 - PROCESS

A. Fiduciary Standards

Assets of the Plan shall be managed solely for the benefit of Plan participants in a manner consistent with fiduciary standards. Investments shall be made with the care, skill, and diligence that a prudent person would use in achieving the aims outlined in this IPS. Professionals serving the plan are to acknowledge in writing that they are fiduciaries of the Plan relative to the services they provide.

B. Board Duties

The Board has the responsibility of establishing and maintaining policies governing management of the Plan's financial assets (the "Fund"), including:

1. Setting of investment policy;
2. Choosing an asset allocation to balance risk and return;
3. Selecting and evaluating professionals to manage those assets;
4. Communicating guidelines to those professionals;
5. Monitoring performance of the plan;
6. Maintaining sufficient liquidity to pay benefits and expenses.

C. Investment Goals

The long-term goal of the portfolio is to earn the actuarial return assumption net of fees over a long period of time such as 20 years while assuming only as much risk as the Board believes is needed to achieve that return. Risk should also be thought of in the short term, meaning, the special stress that a sharp but temporary decline in value can place on the Fund.

The following philosophy should be followed in pursuing that goal:

1. Adhere to a long-term perspective;
2. Align strategy with goals and risk tolerance;
3. Maintain consistent exposure to the capital markets;
4. Use simple investment structures that the trustees understand;
5. Minimize investment costs.

D. Investment Guidelines

Section 3 contains general guidelines that apply to all managers within broad asset classes. These cover only asset classes that could potentially utilize an individual account structure, currently domestic and foreign public equity. Guidelines unique to a particular manager, if any, are attached to manager descriptions in Section 4. The Trustees understand that this IPS does not apply to investments in a commingled structure.

SECTION 2 - STRATEGY

The following sets out the Board's actuarial assumption, asset allocation and performance standards.

A. Actuarial Assumed Rate of Return: 6.75%

B. Asset Allocation

<u>ASSET CLASS</u>	<u>TARGET</u>	<u>RANGE +/-</u>
A. Domestic Large Cap Growth Equity	7%	3%
B. Domestic Large Cap Value Equity	8%	3%
C. Domestic Mid Cap Core Equity	10%	3%
D. Domestic Small Cap Core Equity	5%	2%
E. Foreign Developed Equity	10%	3%
F. Foreign Small Cap	5%	2%
G. Foreign Emerging Market Equity	5%	2%
H. Private Equity	10%	3%
I. Private Real Estate	10%	3%
J. Timber/Farmland	10%	3%
K. Domestic Fixed Income	10%	3%
L. Global Fixed Income	10%	3%
M. Cash	0%	5%
TOTAL	100%	

Cash flow should be managed to maintain each allocation within its range. Illiquid allocations that cannot be brought within range immediately should be combined to the extent possible with the most similar asset class for the purpose of rebalancing. Routine rebalancing does not require Board approval.

C. Performance Measurement

1. Time Period. Judgment regarding performance of both the portfolio and individual managers should ideally be over a market cycle to include both up and down markets. The Board may use shorter periods if performance trends fall short of expectations.

2. Portfolio Goal. The short-term goal is to rank in the upper half of a universe of public fund portfolios. The long-term goal is to earn the actuarial assumption over a long period of time such as 20 years, while assuming only as much risk as needed to achieve that return.

3. Manager Goals. Each manager shall be assigned a benchmark. Active managers are expected to outperform their benchmark over a market cycle net of fees, and to perform in the upper half of a universe of managers in a similar style. Passive managers are expected to nearly match their benchmark on a quarterly basis gross of fees.

D. Strategy

The allocation has average risk for a pension plan utilizing a 60/40 allocation of risk and safety assets. The safety assets are split evenly between real assets (timber, farmland, real estate) and fixed income. The Trustees believe this level of risk will close the funding gap while minimizing volatility.

SECTION 3 - GUIDELINES

A. Domestic Equity Guidelines

Domestic equity managers shall be governed by the following guidelines. Each manager is given full discretionary authority in managing money for the Plan with the exception of these guidelines.

1. Permissible securities. Permissible securities include common stocks, convertible securities, and ADRs for listed securities of foreign companies. Listed securities are those traded on the NYSE, AMEX and NASDAQ. Any investment in convertible debentures must carry an investment grade rating of “A” or better.
2. Non-permissible securities. Equity managers may not invest in foreign securities other than those evidenced by listed ADRs as defined above, fixed income securities, commodities, unregistered letter stock, warrants, real estate mortgages, all options and futures, real or personal property, oil and gas property, loans of portfolio securities, venture capital issues, private placements, securities of a contributing employer, and derivatives. Derivatives include collateralized mortgage obligations, interest-only and principal-only strips, and currency swaps or other specialized investment activities.
3. Non-permissible transactions. Except with the written consent of the Board, equity managers may not purchase securities on margin or sell short.
4. Cash Balances. Managers are expected to remain fully invested. However, the decision to maintain cash balances is left to the manager’s discretion, keeping in mind that the benchmark will be applied to the manager’s total portfolio and not just to the non-cash portion. Managers should inform the Board within 10 business days if cash balances exceed 10%. Cash and equivalents may be invested in commercial paper rated A1 or P1, repurchase agreements, U.S. Treasury Bills and money market funds.
5. Marketability. Securities should be marketable. It is understood that small- and mid-capitalization stocks offer less liquidity than more widely held securities.
6. Diversification. Notification shall be given to the Board and to the Board’s consultant in writing if any equity investment exceeds 5% of the portfolio at purchase or 10% at any quarterly valuation within 10 business days of such occurrence.
7. Trading. In placing portfolio transaction orders on behalf of the plan, the manager shall obtain execution of orders at the most favorable prices and at competitive commission rates, taking into consideration efficiency of execution. Any soft dollars created by trading should be treated as Plan assets.
8. Changes and legal action. The manager must notify the Board and consultant of changes in ownership structure and key personnel, litigation relating to investments, and enforcement action by any regulatory body within 14 days of learning about such changes or legal action.
9. Portfolio communications. Monthly the manager is expected to report to the Board and the consultant the market and book value of all securities and performance relative to the benchmark. Quarterly the manager is expected to provide a report detailing market overview, investment strategy, performance analysis, and statistics comparing the portfolio to the benchmark.

10. Proxy voting. The manager is to cast all proxy votes solely in the economic interest of the Plan using its best judgment. An annual proxy report should be provided to the Plan including affirmation that all votes were cast, summation of votes cast, and an explanation of any variance with this policy.

B. Foreign Equity Guidelines

Foreign equity managers shall be governed by the following guidelines. Each manager is given full discretionary authority in managing money for the Plan with the exception of these guidelines.

1. Permissible securities. Non-U.S. common stock traded on any major stock exchange, convertible securities, ADRs and GDRs for listed securities of foreign companies. Any investment in convertible debentures must carry an investment grade rating of “A” or better.
2. Non-permissible securities. Equity managers may not invest in domestic securities other than those evidenced by listed ADRs as defined above, fixed income securities, commodities, unregistered letter stock, warrants, real estate mortgages, all options and futures, real or personal property, oil and gas property, loans of portfolio securities, venture capital issues, private placements, securities of a contributing employer, and derivatives. Derivatives include collateralized mortgage obligations, interest-only and principal-only strips, and currency swaps or other specialized investment activities.
3. Non-permissible transactions. Except with the written consent of the Board, equity managers may not purchase securities on margin or sell short.
4. Cash Balances. Managers are expected to remain fully invested. However, the decision to maintain cash balances is left to the manager’s discretion, keeping in mind that the benchmark will be applied to the manager’s total portfolio and not just to the non-cash portion. Managers should inform the Board within 10 business days if cash balances exceed 10%. Cash and equivalents may be invested in commercial paper rated A1 or P1, repurchase agreements, U.S. Treasury Bills and money market funds.
5. Marketability. Securities should be marketable. It is understood that small- and mid-capitalization stocks offer less liquidity than more widely held securities.
6. Diversification. Notification shall be given to the Board and to the Board’s consultant in writing if any equity investment exceeds 5% of the portfolio at purchase or 10% at any quarterly valuation within 10 business days of such occurrence.
7. Trading. In placing portfolio transaction orders on behalf of the plan, the manager shall obtain execution of orders at the most favorable prices and at competitive commission rates, taking into consideration efficiency of execution. Any soft dollars created by trading should be treated as Plan assets.
8. Changes and legal action. The manager must notify the Board and consultant of changes in ownership structure, and key personnel, litigation relating to investments, and enforcement action by any regulatory body within 14 days of learning about such changes or legal action.

9. Portfolio communications. Monthly the manager is expected to report to the Board and the consultant the market and book value of all securities and performance relative to the benchmark. Quarterly the manager is expected to provide a report detailing market overview, investment strategy, performance analysis, and statistics comparing the portfolio to the benchmark.

10. Proxy voting. The manager is to cast all proxy votes solely in the economic interest of the Plan using its best judgment. An annual proxy report should be provided to the Plan including affirmation that all votes were cast, summation of votes cast, and an explanation of any variance with this policy.

The manager shall be governed by the following guidelines in managing money for the City of Alexandria Supplemental Plan. The manager is given full discretionary authority with the exception of the restrictions above.

SECTION 4 – MANAGERS

The strategies currently employed to manage the asset allocation above are:

- A1. Polen Capital Management Focus Growth (domestic equity -- large cap growth)
- A2. Xponance Asset Management and Investment Large Cap Growth

- B. Brandywine Dynamic Large Cap Value (domestic equity - large cap value)

- C. Champlain Mid Cap Fund (domestic equity – mid cap core)

- D. PIMCO StocksPLUS Small Fund (domestic equity – small cap core)

- E. Hardman Johnston International Equity (foreign equity – developed)

- F. Acadian Asset Management

- G1. Wellington Emerging Markets Research Equity (foreign equity – emerging)
- G2. PIMCO RAE Fundamental Emerging Markets Fund (foreign equity – emerging)

- H1. Hamilton Lane Secondary Fund III (private equity)
- H2. Hamilton Lane Private Equity Fund IX (private equity)
- H3. Hamilton Lane Co-Investment Fund IV (private equity)
- H4. Hamilton Lane Equity Opportunities Fund V (private equity)
- H5. Landmark Partners XIV (private equity)

- I. Prudential PRISA (private real estate)

- J1. Hancock Timberland X (timber)
- J2. Molpus Sustainable Woodlands IV (timber)
- J3. UBS AgriVest Farmland Fund (farmland)

- K1. PIMCO Total Return Fund (domestic core plus fixed income)
- K2. Core Plus Bond / PGIM Fund (domestic core plus fixed income)

- L. BNY Mellon Global Core Plus - U.S.\$ Hedged Fund (foreign fixed income)

A1. Polen Capital Management Focus Growth

1. Asset Class: domestic equity-large cap growth

2. Type: individual account

3. Benchmark: Russell 1000G

4. Fee: 50 bps

5. Inception: 3Q 2011 Termination: plan to terminate pending finalized contract with Xponance

6. Description

Polen believes earnings growth drives stock prices over the long term. The strategy is to create a concentrated portfolio of 15-25 high-quality companies and hold them for an average of five years. These companies are characterized by high free cash flow, low debt, high return on equity, strong revenue growth, stable-to-improving margins, and a sustainable competitive advantage.

The philosophy, attributed to Benjamin Graham, is: “In the short term, the market is a voting machine, in the long term, it is a weighing machine.” The manager seeks to create high active share, meaning the portfolio differs from the benchmark. The manager is agnostic about sector exposure.

Polen’s philosophy tends to underperform during so-called junk rallies like 2003 and 2013, when the market favored stocks with the lowest quality ratings; and periods like the tech bubble of 1999 when a narrow group of large tech stocks accounted for a disproportionate amount of market outperformance.

7. Rationale

The Board chose to style the large cap equity position by using separate strategies to manage value and growth. Polen was selected based on the belief that a relatively small employee-owned firm specializing in growth equity with a focused portfolio and low turnover was most likely to outperform the benchmark over the long term.

8. Environmental, Social and Governance Criteria (ESG)

Polen believes management of ESG issues is connected to a company’s financial sustainability. Their ESG analysis is an integral part of their assessment of the material issues that may affect the company’s long-term sustainability and ability to deliver value to stakeholders. They supplement internal research with company ESG ratings and research from Sustainalytics.

9. Manager Guidelines

Polen is governed by the domestic equity guidelines in Section 3A of this IPS. There are currently no exceptions to this policy.

A2. Xponance Asset Management and Investment Large Cap Growth

1. Asset Class: domestic equity-large cap growth
2. Type: individual account
3. Benchmark: Russell 1000G
4. Fee: 3.5 bps
5. Inception: pending When Initiated, Open Ended

6. Description

Xponance was chosen to replace the current large cap growth manager. The legal contract with Xponance was being negotiated as of this writing.

Xponance is an index fund manager providing coverage of large cap growth stocks. An index fund owns all equities within the underlying index – in this case the Russell 1000 – in the same proportion as the index itself. If Apple comprises 6% of the index based on its value (number of shares multiplied by price per share), then an index fund holds that same proportion of Apple stock.

Of the various index funds offered, Xponance was chosen because it offered 1) a low price 2) an individual account that could be customized if desired and 3) the ability to explain aspects of indexing and the market to the Board.

7. Rationale

The selection of an index fund manager for large cap growth grew out of a long-standing debate within the Board as to the value of active equity management. Given the desire by several Board members to convert some positions to passive management, large cap growth was chosen as the place to start because active management had failed to add value to the index over long periods of time.

8. Environmental, Social and Governance Criteria (ESG)

A general index fund such as this does not have an ESG component in its composition. Owners of individual equity positions (as opposed to owners of a commingled fund) can vote their proxies according to ESG considerations. That matter will be taken up with Xponance when the contract is finalized.

9. Manager Guidelines

Xponance will replicate the Russell 1000 growth index in the manner described above. Guidelines are 1) no short positions, 2) allowed use of exchange traded funds 3) 1% maximum cash holding and 4) maximum tracking error of 0.25%.

B. Brandywine Dynamic Large Cap Value

1. Asset Class: domestic equity-large cap value
2. Type: individual account
3. Benchmark: Russell 1000V
4. Fee: 65 bps on 1st \$10 million; 45 bps on the next \$40 million
5. Inception: 3Q 2016 Termination: Open Ended

6. Description

The strategy seeks to exploit behavioral biases in pricing securities that persist over long periods of time. The three areas employed are a) valuation (price to earnings, price to book, etc.) b) sentiment (price momentum, price trend, price volatility) and c) quality (return on equity, share change).

The weighting of these factors shifts during the stock market cycle. Brandywine classifies the market as either deep value (valuation spreads between companies are wide but narrowing) or broad value (valuation spreads between companies are narrow but widening). These cycles last 2-4 years.

During periods of deep value, the strategy emphasizes valuation and price volatility and decreases exposure to quality. During periods of broad value, the strategy emphasizes quality and price momentum but decreases exposure to value. Gross of fees the strategy has out performed the benchmark every year since inception (2007) gross of fees except 2010, when it underperformed by about 200 bps.

7. Rationale

The Board chose to style the large cap equity position by using separate strategies to manage value and growth. After terminating the previous value manager, the Board was impressed by the record, discipline and apparent simplicity of the Brandywine strategy. Of note was the manner in which the strategy shifts through the market cycles, a feature missing from most equity strategies. The stance taken by the Board differed from that of Fire and Police, which chose to index this allocation.

8. Environmental, Social and Governance Criteria (ESG)

At the firm level, Brandywine Global has fully committed to ESG initiatives across their business segments and ESG factors are considerations in many of their strategies. However, the Dynamic Large Cap Value strategy does not consider ESG factors when constructing a portfolio at this time.

9. Manager Guidelines and Exceptions

Brandywine is governed by the domestic equity guidelines in Section 3A of this IPS. There are currently no exceptions to these guidelines.

C. Champlain Mid Cap Fund

1. Asset Class: domestic equity-mid cap core
2. Type: individual account
3. Benchmark: Russell Mid Cap
4. Fee: 85 bps
5. Inception: 4Q 2011 Termination: Open Ended

6. Description

The Champlain strategy uses the S&P Mid Cap 400 Index as its investible universe. The first step is to divide the index into five sectors and avoid certain risks: fashion in the consumer sector, spread businesses in financials, government reimbursement risk in health care, lack of unique process in industrials, and rapid product obsolescence in technology.

Next, Champlain applies a series of quality attributes: excess return on capital, a strong balance sheet, credible management, high quality earnings, and superior relative growth. Third, Champlain uses information from two outside vendors to determine fair value applying four different methodologies. Champlain seeks a discount of 20%-25% to fair value in establishing new positions. The process tends to avoid certain sectors such as energy in that are cyclical, capital intensive, or lack sustainable long-term growth.

The process tends to not do well in periods of rapid growth fueled by above-average fiscal or monetary stimulus such as the recovery from the Great Financial Crisis. Those periods favor low-quality cyclical companies with high levels of debt and low profit margins.

7. Rationale

Champlain was selected primarily because of its ability to add significant value against the benchmark, but to do so by protecting on the downside. The mid cap space was given a large allocation relative to its market capitalization because it was felt to be a good tradeoff between higher projected return of small cap and lower volatility of large cap.

8. Environmental, Social and Governance Criteria (ESG)

Champlain incorporates ESG into their investment process when analyzing a company's management team and capital allocation decisions. They believe good capital allocation decisions lead to sustainable excess returns. In addition, risks associated with environmental or social impacts like climate change and board diversity are also taken into consideration during their evaluation process.

9. Guidelines and Exceptions

Champlain is governed by the domestic equity guidelines in Section 3A of this IPS. There are currently no exceptions to these guidelines.

D. PIMCO StocksPLUS Small Fund

1. Asset Class: domestic equity – small cap core
2. Type: mutual fund, ticker PSCSX
3. Benchmark: Russell 2000
4. Fees: 69 bps
5. Inception: 4Q 2011 Termination: Open Ended
6. Description

The StocksPLUS Small Fund uses derivatives to create the return of the Russell 2000, and invests the excess cash in fixed income instruments designed to deliver higher yield than that assumed in the derivatives contracts. This technique is a type of portable alpha. The investor therefore receives the benchmark return plus incremental yield (which can be positive or negative) less expenses. The strategy also benefits from being on the lending side of small cap stocks to those who want to short them, as the market for lending small cap stocks tends to favor lenders.

The strategy tends to underperform in the following environments: 1) a flat to inverted yield curve 2) low yield premiums vs. Treasuries, and 3) periods when financing cost associated with synthetic long equity index exposure is above short-term LIBOR.

7. Rationale

StocksPLUS appears to have an ability to consistently add excess return in ways unrelated to equity. This results in part from supply/demand imbalance for the Russell 2000 index. Futures tend to roll cheap because many small cap managers short the index to hedge the broad beta. There is a consistent demand to short the Russell 2000 while there is no consistent demand for long exposure. This imbalance is not typical for other equity segments like the S&P 500. StocksPLUS therefore provides a different source of excess return than our other active equity strategies.

8. Environmental, Social and Governance Criteria (ESG)

At the firm level, PIMCO incorporates ESG factors into their investment research process to better assess risks and identify broad secular trends. However, the StocksPLUS Small Fund does not consider ESG factors when constructing a portfolio.

9. Manager Guidelines

StocksPLUS is a commingled fund governed by its own prospectus and not this IPS. Guidelines for the strategy may be viewed at the following site and selecting PSCSX:

<http://investments.pimco.com/prospectuses>

E. Hardman Johnston International Equity

1. Asset Class: foreign equity - developed markets
2. Type: individual account
3. Benchmark: MSCI EAFE
4. Annual Fee: 80 bps
5. Inception: 3Q 2011 Termination: Open Ended

6. Description

Hardman Johnston seeks to own growth companies (EPS growth of 10% or more) with sustainable competitive advantage that are leaders in their industry either worldwide or locally. As a result, statistics such as EPS growth relative to trailing five-year earnings, and p/e ratio relative to trailing 12-month earnings, tend to be higher than the benchmark.

Johnston holds a concentrated portfolio of about 30 stocks. Johnston is willing to pay a little more for companies it believes are able to grow at an above-average rate for the foreseeable future.

7. Rationale

The Board selected Johnston because it is a high quality manager with a focused portfolio that picks companies with superior financial characteristics and market positions that should result in above-average stock appreciation over long periods of time, and protect on the downside. The firm is employee owned and relatively small within the international arena.

8. Environmental, Social and Governance Criteria (ESG)

Hardman Johnson incorporates ESG into both its screening process as well as its fundamental research. The firm includes ESG scores from MSCI and Sustainalytics in its proprietary stock screen and ranking system. Stocks that rank in the top quartile receive deep fundamental research, which considers how ESG factors can impact the business model sustainability.

9. Manager Guidelines

Johnston is governed by the foreign equity guidelines in Section 3B of this IPS. There are currently no exceptions to these guidelines.

F. Acadia Asset Management

1. Asset Class: foreign equity – small cap
2. Type: commingled fund
3. Benchmark: MSCI EAFE Small Cap
4. Annual Fee: 75 bps
5. Inception: 4Q 2023 Termination: Open Ended

6. Description

Acadia was one of the earliest institutional investors in foreign small cap stocks dating back to the early 1990s. It is a quantitative strategy, meaning that stocks are selected based on computer models using statistical analysis and not by information derived from analyst visits to companies followed by the creation of earnings projections and growth rates. The portfolio is large in number of holdings and assets relative to others; it has about 1,700 stocks (100 is typical) and about \$9 billion in assets. The strategy has recently been closed due to capacity constraint.

7. Rationale

Foreign small cap has the most companies of any subsegment of the equity market, 18,000 stocks of which 6,000 are large enough to be investible. Many of these companies get scant attention from the research community. Because the market is so large and inefficient, we believe above-average growth is likely for a subset of these companies, and that Acadia can take advantage of these inefficiencies.

Foreign small cap was the only equity subsegment in which we had not invested prior to the establishment of this allocation. Acadia was chosen because it was believed Acadia's process could add value versus the benchmark while mitigating risk due to the large number of securities in the portfolio. In the language of baseball, Acadia tries to hit singles and doubles but avoids swinging for the fences at the risk of striking out.

8. Environmental, Social and Governmental (ESG) Criteria

ESG criteria are incorporated into the strategy using quantitative techniques such as analysis of earnings calls using artificial intelligence. Quantitative techniques can also be applied to pull relevant ESG information from written company communication. Acadia believes this enables a quantitative process to uncover ESG information better than a fundamental process.

9. Manager Guidelines

Acadia is a commingled fund governed by its own prospectus and not this IPS. Guidelines for the strategy may be viewed by emailing Julie Snaman (jsnaman@acadian-asset.com).

G1. Wellington Management Company Emerging Markets Research Equity

1. Asset Class: Foreign Equity - Emerging Markets
2. Type: commingled fund
3. Benchmark: MSCI EM
4. Annual Fee: 75 bps
5. Inception: 4Q 2018 Termination: Open Ended
6. Description

Wellington's philosophy is based on the idea that companies in the same industry can perform very differently over time, and stock prices will follow. The portfolio remains neutral to the benchmark regarding country and sector allocations, the sole performance driver being stock picking. Buy and sell decisions are based on fundamental research conducted by global industry analysts. The analysts serve as portfolio managers for their industries and manage sub portfolios based on their own investment philosophy and process. The firm believes this diversity in stock-picking approach should provide a more consistent return pattern over time.

7. Rationale

Emerging market equity offers the potential to earn above-average return, but with greater volatility. The Board was attracted to Wellington's unique approach of combining a variety of analytical and valuation techniques for inclusion in the portfolio. Wellington's analysts are experts and careerists in their industries, giving them an informational advantage over analysts who are generalists or who regard research as a stepping stone to portfolio management.

8. Environmental, Social and Governance Criteria (ESG)

Wellington believe ESG analysis and integration is return enhancing and risk mitigating. Wellington's global investment analysts seek to understand potential impacts of ESG issues on businesses. They also engage with their companies on ESG issues they believe will benefit investors.

9. Manager Guidelines

The Wellington EM strategy is a commingled fund governed by its own prospectus, which is not publicly available.

G2. PIMCO RAE Fundamental Emerging Markets Fund

1. Asset Class: foreign equity - emerging markets
2. Type: mutual fund, ticker PEIFX institutional shares
3. Benchmark: MSCI EM
4. Annual Fee: 75 bps
5. Inception: 4Q 2011 Termination: Open Ended
6. Description

RAE is a suite of strategies developed by Rob Arnott and Research Affiliates. Marketed as “smart beta”, the strategies use rules-based methodology to construct portfolios that contain most companies in the underlying index, but weight those companies based on fundamentals and not on market capitalization. The metrics used to weight companies were sales, cash flow, dividend yield and book value. In a traditional index, market capitalization is used to create these weights.

When RAFI joined PIMCO to market these strategies, three additional groups of factors were added to the investment process. Quality factors were added to weed out distressed companies, so-called value traps. Momentum factors were added to make sure the strategy didn’t trade too much against momentum. Active bets were diversified by pushing them down from the largest companies to smaller companies. The use of these enhancements is based on RAFI’s research. While we utilize the RAE strategy for emerging markets, similar strategies exist for other segments of the equity markets both domestic and foreign.

Although originally called “fundamental indexing,” with this last set of enhancements these strategies severed any similarity they had with index funds. They are properly viewed as quantitative strategies that utilize factors believed to enhance return.

7. Rationale

Emerging market equity generally is intended to offer above-average return at the cost of greater volatility. This strategy offers a diversifying source of return, as it’s source of intended outperformance is quantitative and not fundamental, like Wellington.

8. Environmental, Social and Governance Criteria (ESG)

At the firm level, PIMCO incorporates ESG factors into their investment research process to better assess risks and identify broad secular trends. However, the RAE Fundamental Emerging Markets Fund does not consider ESG factors when constructing a portfolio.

9. Manager Guidelines

The PIMCO Fundamental RAE EM Fund (PEIFX) is a commingled fund governed by its own prospectus. Guidelines may be viewed at <http://investments.pimco.com/prospectuses>

H1-4. Hamilton Lane Private Equity Funds

1-5. The portfolio has broad exposure to private equity through four Hamilton Lane funds.

- a. Secondary Fund III Inception: 4Q 2014 Termination: 10 years Commitment: \$6 million
Annual Fee: years 1-3, 100 bps; years 4+ declines 10%, 12.5% carry over 8% hurdle
- b. Multistrategy Fund IX Inception: 3Q 2015 Termination: 14 years Commitment: \$4.5 million
Annual Fee: year 1, 50 bps; year 2, 75 bps; years 3-9, 100 bps; years 10-12 50 bps; beyond, 0 bps; 10% carry over 8% hurdle for secondaries and co investments.
- c. Co-investment Fund IV Inception: 1Q 2018 Termination: 10 years Commitment: \$3.65 million
Annual Fee: 1% years 1-5 on committed capital, 1% years 6-10 on net invested capital.
- d. Equity Opportunities Fund V Inception: 3Q 2021 Termination: 12 years Commitment: \$5 million
Annual Fee: 100 bps with 10% carry over 8% hurdle (see glossary)

6. Description

Private equity is ownership of companies that do not have publicly registered securities. Private equity involves taking small companies, growing them, and taking them public, or selling them privately, or taking public companies private and improving them for sale. Hamilton Lane is a fund-of-funds manager; it invests in multiple managers which invest in multiple companies to create a diversified portfolio. Returns in private equity are commonly quoted net of fees.

Secondary funds are existing private equity positions purchased from other entities. Multi-strategy funds invest in primary and secondary funds, with an emphasis on primary funds, across the risk spectrum. Co-investment funds involve investment alongside another private equity investor and have the advantage of charging only a single layer of fees. They are typically more focused and entail greater risk than secondary or multi-strategy funds.

7. Rationale

Private equity was added to the portfolio as a means of increasing return and providing diversification. As the number of publicly traded stocks has shrunk, an increasing amount of equity activity takes place in the private markets. Private equity also tends to be less volatile than public equity.

8. Environmental, Social and Governance Criteria (ESG)

Hamilton Lane believes ESG evaluation is critical to risk management and mitigation. The firm created a separate Responsible Investment Committee to monitor the firm's ESG policy and participate in allocation decisions for all strategies.

9. Manager Guidelines

Hamilton Lane investments are comingled vehicles described in private placement memoranda that are not publicly available.

H5. Landmark Partners XIV

1. Asset Class: private equity
2. Type: commingled fund, \$4.0 million commitment, closed end
3. Benchmark: S&P Completion Index
4. Annual Fee: 100 bps with 10% carry over 8% hurdle (see glossary)
5. Inception: 3Q 2010 Termination: 14 years

6. Description

Private equity is equity ownership in companies that do not have publicly registered securities. Private equity usually involves taking small companies, growing them, and selling them into the public markets or to another private equity firm. However, it can also involve taking public companies private, improving them, and bringing them public or selling them to another private equity firm.

Landmark, like Hamilton Lane, is a fund-of-funds manager, meaning it invests in multiple managers, each of which invests in multiple companies, to create a portfolio with diversification across vintage years (the year the investment was initiated), geography and industry type. As a result, the Fund pays two layers of fees, one to Landmark and the other indirectly to the underlying manager. Returns in private equity are commonly quoted net of fees. Landmark is the largest manager of secondary private equity funds and focuses exclusively on that market. Most investor capital is committed without knowing what those investments will be. Commitments are made based on Landmark's stated intentions for investing the fund, and its history in managing similar funds.

7. Rationale

Private equity was added to the portfolio to increase return and add diversification. Landmark was the Fund's first private equity investment. HLSF III was added later to increase the capital committed to private equity. These two secondary funds were chosen initially instead of primary funds to mitigate or avoid the J curve, the period of negative return characteristic of new private equity investments. The J curve tends to be greater for primary investments versus secondary investments.

8. Environmental, Social and Governance Criteria (ESG)

Landmark formally adopted an ESG policy in 2016 and became a signatory to the Principles for Responsible Investment ("PRI"). They continually monitor the ESG progress of their underlying funds to ensure clients' interests are well protected.

9. Manager Guidelines

Landmark XIV is a commingled fund governed by its own prospectus and not this IPS. Because it is a private investment not registered with the SEC, information about the fund is provided in a private placement memorandum which is not publicly available.

1. Prudential PRISA

1. Asset Class: private real estate
2. Type: commingled fund, open end
3. Benchmark: NCREIF ODCE
4. Fees: 100 bps.
5. Inception: 2Q 2010 Termination: open ended

6. Description

PRISA is a private diversified property fund exceeding \$20 billion with current leverage of about 20%. The fund is diversified by property type (multi-family, retail, industrial, office, self-storage, hotels) and geography (West, East, South, Midwest) with focus on the six gateway markets (San Francisco, Los Angeles, Chicago, Boston, New York, Washington D.C.).

The goal of PRISA is to deliver returns between stocks and bonds, with income comprising two-thirds of return and appreciation comprising one-third. Income is generated by rents. Appreciation is calculated by rolling appraisals completed on the entire portfolio every year.

PRISA is a core open-ended fund, meaning that 1) money can be put into or taken out of the fund on a quarterly basis unless management imposes queues, and 2) risks assumed include rent and valuation risk and some improvement risk but little development risk.

7. Rationale

PRISA is intended to act as a bond substitute, offering an income component (like a coupon) and an underlying value (like bond principal) that can fluctuate. Real estate can be superior to bonds in that it can appreciate in a rising rate environment and respond positively to inflation. Core real estate can be inferior to bonds in that its principal value can decline like equity in times of severe stress (2008) or during a real estate downturn (mid 1990s) when bond values hold steady or even increase. It is the current belief of the Board that interest rates will rise and inflation will increase for the intermediate term, making real estate a superior alternative to fixed income.

8. Environmental, Social and Governance Criteria (ESG)

PRISA incorporates ESG practices into their investment process and management of the fund. They use a data-driven approach to identify ways to improve environmental performance, optimize their GRESB and UN PRI scores, add value to their properties and reduce operating expenses.

9. Manager Guidelines

As a commingled fund PRISA is managed in accordance with its own investment policy. Further information about PRISA can be found on the PGIM Real Estate Investors home page, <http://www.pgimrealestate.com>.

J1. Hancock Timberland X

1. Asset Class: timber
2. Type: commingled fund, \$4mm commitment, closed end
3. Benchmark: NCREIF Timber
4. Fees: 95 bps with 20% carry over 7% hurdle (see glossary)
5. Inception: 2Q 2010 Termination: 13 years plus three years to dispose of properties

6. Description

Hancock Timberland X (HTX) is a diversified portfolio of timber properties that are managed for current and future harvesting and sold at the end of the partnership's life. The partnership is now fully invested. It owns six properties: North River in Southwest Washington; Fern Ridge in Northwest Oregon; Silver Mountain in Northeast Oregon, Northeast Washington and Idaho; Prairie Lake in Southern Oregon; Acadia in Louisiana; and 31% ownership in a Hancock Queensland Plantations in Queensland, Australia.

The continued biological growth of trees increases both volume and value per volume as small trees used for particleboard become large trees used for saw timber. The manager has the option of not harvesting if market prices are unfavorable. Trees are subject to a variety of different risk factors including flooding, fire, hurricanes, drought and insect infestation, of which insects have historically caused the most damage.

7. Rationale

Integrating ESG standards is fundamental to Hancock's investment process from acquisition due diligence through on-the-ground property management. The team focuses on sustainability and considers climate change impact, emissions, deforestation, and CO2 sequestration when evaluating investment properties. Hancock also provides regular reports on ESG factors available to all investors.

8. Environmental, Social and Governance Criteria (ESG)

Integrating ESG standards is fundamental to Hancock's investment process from acquisition due diligence through on-the-ground property management. The team focuses on sustainability and considers climate change impact, emissions, deforestation, and CO2 sequestration when evaluating investment properties. Hancock also provides regular reports on ESG factors available to all investors.

9. Manager Guidelines

HTX is governed by the offering memorandum which is not publicly available.

J2. Molpus Sustainable Woodlands IV

1. Asset Class: timber
2. Type: commingled fund, \$1.2mm, closed end
3. Benchmark: NCREIF Timber
4. Fees: 95 bps
5. Inception: 4Q 2015 Termination: 10 years, plus two 2-year extensions (discretionary)

6. Description

Molpus is a firm dedicated solely to timber investments within the United States, and primarily focused on Southeastern pine timber. The current fund has as its stated goal investing in North America, primarily in the United States, including five regions: the Southeast, Inland West, Great Lakes, New England. In late 2015 Molpus acquired property in Louisiana, calling almost 45% of total capital.

7. Rationale

Like real estate, timber has bond-like qualities: an underlying value that is relatively stable, and an income component from the harvesting of the wood like a coupon payment. Timber has relatively low correlation to other asset classes, making it a good diversifier. Returns should be between stocks and bonds, but historically were somewhat higher than stocks. This return pattern changed after the Great Financial Crisis when a decline in single family home construction depressed prices for wood. Home construction and wood prices both began recovering after the Covid Crash of 2020.

Molpus is a follow-on timber investment to Hancock in an attempt to keep the allocation close to the 5% target.

8. Environmental, Social and Governance Criteria (ESG)

Molpus incorporates environmental, social, and governance (ESG) policies and practices into investment analysis and decision-making. They are active landowners who seek appropriate disclosure on ESG issues from all the major entities in which they invest or partner with. The viability and success of their timberland investments are contingent upon the management of their forests on a sustainable basis. They also recognize the importance of land-based solutions and healthy forests in climate change mitigation and carbon sequestration.

9. Manager Guidelines

The fund is bound by the offering memorandum which is not publicly available.

J3. UBS AgriVest Farmland Fund

1. Asset Class: private farmland
2. Type: commingled fund, open end
3. Benchmark: NCREIF Farmland
4. Fees: 100 bps on invested capital, 20 bps on cash and equivalents
5. Inception: 2Q 2014 Termination: open ended

6. Description

The AgriVest Farmland Fund is similar to a timber fund, except that it is open end providing quarterly investment openings and redemptions at the discretion of the manager. The fund owns land which is leased to operating farmers. Within the scope of agricultural managers, AgriVest is one of the most conservative. The farmer takes all the risk and reward associated with producing the crop, while UBS gets a lease payment as per the contractual agreement. We expect returns to be between stocks and bonds but toward the low end of the spectrum for farmland because of the conservative strategy

The fund invests primarily in annual row crops like corn, wheat and soybeans (72%), with smaller allocations to vegetable crops (16%) and permanent crops like nut and fruit trees (12%). As with the leasing strategy this positions UBS on the conservative end of the risk/reward spectrum, as permanent crops can fluctuate considerably in value but tend to have higher return.

7. Rationale

Investing in farmland provides regular bond-like returns from lease payments with the potential for the underlying properties to appreciate in value if interest rates rise and inflation returns, as we expect. Farmland also provides diversity away from timber, which we also use as a bond substitute.

8. Environmental, Social and Governance Criteria (ESG)

The goal of the AgriVest Farmland Fund is to reduce environmental impact while maximizing total returns. The Fund is enrolled in the newly developed ESG standards for farmland portfolios titled "Leading Harvest Farmland Management Standard". These standards address economic, environmental, social and governance issues associated with managing farmland sustainably.

9. Manager Guidelines

The offering memorandum for the fund is not publicly available.

K1. PIMCO Total Return Fund

1. Asset Class: fixed income, core plus
2. Type: mutual fund, ticker PTTRX institutional shares
3. Benchmark: BC Aggregate
4. Fees: 46 bps
5. Inception: 1Q 2011 Termination: open ended

6. Description

The PIMCO Total Return Fund. The Fund is an institutional fixed income fund that invests primarily in bonds classified as core within the Barclay's Capital Aggregate Index. These include investment grade bonds (rated at or above BBB by Standard & Poors, Baa3 by Moody's). These bonds are contained in three broad sectors: governments (obligations of the US Government); agencies (obligations by agencies backed or with the implied backing of the US Government); mortgage-backed securities; and corporates.

In addition to these categories, the fund can take positions in bonds outside the index, the plus part of the portfolio, including: Treasury Inflation Protection Securities (TIPS), domestic bonds below investment grade (so-called "junk" bonds); sovereigns (bonds issued by foreign governments, usually in their own currency); and foreign corporates. Investments in these other vehicles provide diversity and are made in the hope of earning incremental return to the index.

7. Rationale

Total Return is relatively expensive compared with most core bond funds. The investment was made to capture the greater diversity and potentially higher returns offered by this less constrained strategy. PIMCO has historically been adept at managing risk, a critical quality when the strategy has the flexibility of diversifying into riskier credits.

8. ESG

At the firm level, PIMCO incorporates ESG factors into its investment research process to better assess risks and identify broad secular trends. However, the Total Return Fund does not include ESG factors when constructing a portfolio.

9. Manager Guidelines

The PIMCO Total Return Fund is a commingled fund governed by its own prospectus and not this IPS. Guidelines for the strategy may be viewed at the following site.

<http://investments.pimco.com/prospectuses>

K2. Core Plus Bond / PGIM Fund

1. Asset Class: fixed income, core plus
2. Type: institutional sub-advised separate account
3. Benchmark: BC Aggregate
4. Fees: 40 bps
5. Inception: 1Q 2015 Termination: open ended

6. Description

Prudential Global Investment Management (PGIM) is subadvisor to the Core Plus Bond strategy. PGIM is an indirect, wholly owned subsidiary of Prudential Financial Inc. The strategy seeks to add 150 bps of excess return annually over a market cycle, assumed to be 3-5 years, by emphasizing relative-value based sector allocation, research-based security selection, and modest duration and yield-curve positioning.

PGIM can have significant exposure to securities rated below investment grade. Guidelines for the fund allow wide latitude: 50% in non-US dollar denominated fixed income securities, Yankee and Euro bonds; 75% in mortgage-related securities; 20% each in municipal bonds, bank loans, supranational debt, structured notes and mortgage derivatives; 80% corporate bonds; 35% asset-backed securities; 10% each in convertible bonds, preferred securities, ETFs replicating an index, and private placements (excluding 144As and Reg S); 40% in emerging market securities; 10% in various short-term money-market instruments; and 30% in over-the-counter derivatives such as forward contracts (bonds and foreign exchange) and swaps.

7. Rationale

PGIM was selected by Prudential as sub advisor for the fund in December 2014 to replace PIMCO when William Gross, lead portfolio manager on the flagship Total Return Fund, left PIMCO. Prudential maintains a fiduciary relationship to the fund in selecting and monitoring the investment manager. The fund has the potential to use the wide latitude in sector selection to outperform the benchmark, which is comprised solely of domestic investment-grade bonds. The fund is expected to outperform PIMCO Total Return with significantly greater volatility. The fund is used by Prudential to pay benefits and is therefore an operational necessity in operating the plan.

8. ESG

At the firm level, PGIM incorporates ESG factors into its investment research process to better assess risks and identify broad secular trends. However, the Core Plus Bond Fund does not include ESG factors when constructing a portfolio.

8. Manager Guidelines

PGIM is a sub advised separate account of Prudential. A Fact Sheet for the strategy may be found by searching for under PGIM Core Plus Bond.

L. BNY Mellon (formerly Standish) Global Core Plus - U.S.\$ Hedged Fund

1. Asset Class: global fixed income
2. Type: institutional commingled fund
3. Benchmark: Barclays Global Aggregate – US \$ Hedged
4. Fees: 35 bps
5. Inception: 2Q 2016 Termination: open ended

6. Description

The strategy rotates among government, high yield, investment grade credit, emerging markets, mortgages and securitized bonds, targeting a return of the BC Global Aggregate plus 100-150 bps per annum gross of fees over a 3–5 year time period. The strategy uses bonds, cash currencies and derivatives to achieve these goals, and takes modest currency risk.

In analyzing securities for inclusion in the portfolio the team compares real yields and uses research to analyze why securities appear cheap or expensive, then overlays a view of whether individual markets are bullish or bearish using technical and contrarian indicators. Best ideas may be based on country, yield curve positioning, duration, or currency positioning in addition to basic security selection.

7. Rationale

Global fixed income was added to the portfolio to increase diversification given the bleak outlook for US fixed income in a rising rate environment. Foreign fixed income securities coming from other economies at different points in the interest rate cycle may provide superior return. BNY (formerly Standish) was selected because it appeared smaller and more nimble than the other firms, and because the fees were lower.

8. Environmental, Social and Governance Criteria (ESG)

ESG plays a role in the team's Credit Research process as ESG and climate risk are factors that are considered when they analyze individual credits. The team utilizes a proprietary scoring system that includes and assessment and how a company's management team responds to environmental and social issues as part of their due diligence process.

9. Manager Guidelines

This investment is held in the form of a commingled fund and as such the guidelines in this IPS are not applicable. The guidelines for the strategy are available upon request.

SECTION 5 - GLOSSARY

We believe Trustees can better understand concepts in this IPS by familiarizing themselves with the terms in this glossary. Some terms are used in the IPS, while others are related but found in other contexts.

Active Management Any stock selection process that purposefully deviates from an underlying fundamental index. The alternative to active management is passive management, or owning all stocks in a fundamental index.

Actuarial Assumption A long-term assumed rate of return from investments that is used in calculating how much must be contributed by the plan sponsor. The primary goal of the investments is to earn the actuarial assumption.

Actuary A professional who calculates the funded status of a plan and the annual required contribution by taking the amount in the plan with an assumed investment rate, and then estimating benefits that must be paid.

ACWI An acronym standing for All Country World Index. Formally MSCI ACWI, it is another index used to track world markets and includes all major markets worldwide. Of note, ACWI ex-US includes all of the stocks in the MSCI EAFE and the MSCI EM indices plus Canada, making it the most general non-US market index in the MSCI family.

ADR An abbreviation for American Depository Receipt. An ADR is a security representing a foreign stock allowing that stock to trade on a US exchange. Use of ADRs makes trading in foreign stocks cheaper and more efficient, particularly for smaller investors and institutions.

Alternative Strategies A general term for investments outside mainstream stocks and bonds, usually combinations of equity and fixed income, sometime with complex financial structures including leverage and derivatives.

Annual Contribution The amount calculated by the actuary which the plan sponsor is encouraged and sometimes required to make based on liabilities that increased in the prior year and amortization of any unfunded prior liabilities.

Asset Allocation How assets in a fund are divided, on a percentage basis, among asset classes or sub classes.

Asset Class An asset class is a group of investments that have common characteristics in terms of return and risk. Technically there are four asset classes – equity, fixe income, currency and real assets – but the term is often used to designate asset subclasses such as domestic large cap equity.

Basis Points (bps) Unit of measure equal to 1/100th of a percent. 1% equals 100 bps. If a manger beats his/her benchmark by half a percent, that is equal to 50 bps. The bps measure is used as a convenient means of communicating fractional changes of a percent. Thus, when the Fed raises interest rates by a quarter point, that can be expressed as 25 bps

Benchmark An underlying measure, usually an index or combination of indices, used to compare or judge the performance of an active manager. Managers usually invest mostly or entirely in securities within their assigned benchmark, with the idea of beating the return of that benchmark through active management.

Carry Term used in fee structures of alternative investment strategies such as hedge funds and private equity. Refers to a percent of return, usually above some hurdle rate, retained by the manager as a performance fee. As an example, if a manager charged a 10% carry above an 8% hurdle rate, and the manager earned 8% plus \$100, the manager would retain \$10 of that \$100 as a performance fee on top of any other fees charged.

Claw back An element of a performance fee requiring a manager to give back a fee paid in one period if cumulative return falls below the hurdle rate in a future period.

Commingled Structure An investment vehicle in which funds from multiple investors are pooled in one investment, resulting in fractional ownership. Funds invested in a commingled structure are held at the custodial bank of the manager, not the client, and follow the guidelines set up by the manager in the fund's prospectus. This is as opposed to an individual account in which the funds are held in the client's custodial bank and governed by the client's investment policy statement. A mutual fund is a type of commingled structure.

Core Real Estate. Invests primarily in fully leased properties in the six gateway markets – San Francisco, Los Angeles, Chicago, New York, Boston and Washington, DC – with leverage of 20%-40%. Risk taken is primarily change in underlying property value.

Core Plus Real Estate Includes core real estate with the addition of properties that may need some improvement or development to reach full potential. Leverage is somewhat higher than for core, 30%-50%, and risk also includes some leasing and development risk. Geographic concentration outside the gateway markets can be greater. Anticipated returns and economic risk are both higher.

CPI Consumer price index, a measure of inflation based on changes in a basket of consumer goods and services.

Developed Markets The portion of the global market that excludes the United States and Canada, but includes countries with markets and accounting conventions similar to ours. The 10 largest developed markets are the UK, Japan, France, Switzerland, Germany, Australia, the Netherlands, Spain, Sweden and Hong Kong.

Dollar-Weighted Return Method of performance measurement that allows for the timing of cash flows into and out of a portfolio to have an impact on rate of return. This method is appropriate only for portfolios whose managers have discretion over cash flows, such as private equity and real assets.

Domestic Market Any asset market confined to the United States.

Duration (Or more specifically, Modified Duration) A measure of the sensitivity of a bond price to a 1% change in interest rates. A duration of 10 means that a 1% increase in interest rates results in a 10% decline in price. Bonds with higher duration are more at risk of capital loss in a rising rate environment.

EAFE An acronym (formally MSCI EAFE, a product of the firm Morgan Stanley) standing for Europe, Asia and the Far East used as an index for 21 developed countries outside the United States. The largest by size of market capitalization are Japan, the United Kingdom, France, Germany, Switzerland, Australia, Hong Kong, Netherlands, Spain, Sweden, Italy and Denmark. The EAFE index excludes stocks in the United States, Canada, and emerging markets.

ERISA Employee Retirement Income Security Act. 1974 law governing most private pension and benefit plans. ERISA established guidelines for the management of pension funds. The law specifically excludes public plans, but most public plans use ERISA as the gold standard for pension management. The rise of the consulting industry, and the creation of most market indices used to measure manager performance (large cap, small cap, value, growth, etc.), date from the passage of ERISA.

Emerging Markets The portion of investment markets that excludes the United States, Canada, and foreign developed markets such as the UK, Japan and Germany. The 10 largest emerging markets are China, South Korea, Taiwan, India, South Africa, Brazil, Mexico, Russia, Malaysia and Indonesia. Excluded from this definition are the very smallest markets called Pioneer Markets. MSCI EM is the Morgan Stanley index that tracks this sector.

Equity Also called stock. Represents an ownership interest in a company with a claim on assets only after creditors are satisfied.

Eurodollar Bonds Bonds that pay interest and principal in Eurodollars, U.S. dollars held in banks outside the United States, primarily in Europe.

Fiduciary An entity holding assets in trust for a beneficiary. The fiduciary is charged with the responsibility of investing the money wisely for the benefit of the beneficiary. It is illegal for fiduciaries to invest or misappropriate money for their personal gain.

Fixed Income A category of securities requiring return of principal after a specified period of time plus interest during or at the end of that period. Fixed income securities may be backed by a claim against specific assets.

Fundamental Index. A group of stocks created for performance measurement or as an investment vehicle, such as the S&P 500, in which weights of the individual stocks are determined by fundamental factors such as sales, cash flow, book value and dividend yield. Other methods of constructing an index include an equal-weighted index in which each stock has the same weight, and a traditional index in which weights are determined according to market capitalization. (see Traditional Index.)

Gross of Fees A designation applied to an investment return calculated without subtracting fees paid.

Growth Stocks. Typically have higher valuation metrics such as price to book or price to earnings, and higher projected growth in sales and earnings, relative to value stocks. Russell and Standard & Poor's each have their own methodologies for dividing their stock market indices into value and growth stock components.

Hurdle Rate Feature of performance-based fees that sets a return goal over which the manager is entitled to a portion of the return.

Individual Account An account owned by a single investment entity such as a pension fund as opposed to a commingled fund in which assets from various sources are grouped together. An individual account is usually held at the fund's custodial bank and governed by the fund's investment policy statement.

Inflation-Related Assets Assets that rise or fall in value with changes in inflation, generally taken to include inflation-linked Treasury bonds (TIPS), commodities, and real estate.

IRR An abbreviation for internal rate of return. IRR is a form of measuring return that takes into account the pattern of cash flows. Mathematically, IRR is the discount rate at which the present value of the future cash flows of an investment equal the cost of the investment. IRR is typically used in calculating investment returns for strategies with very uneven cash flows which the manager controls, such as private equity.

Investment Policy Statement A statement of the procedures and policies that govern management of a pension fund. An investment policy statement is required for ERISA plans and customary for public plans.

J Curve Initial period of negative returns characteristic of many alternative assets such as timber and private equity when fees are charged before investments are made, and when investments are immature and therefore priced below acquisition value. The term refers to the graph of profitability through time, first down and then up, like the shape of the letter "J".

Large Cap An abbreviation for large capitalization stocks. The term refers to companies with high levels of equity capitalization (shares times price). Within the Russell indices, large capitalization stocks are those with market capitalization greater than \$10 billion. Mid cap refers to stocks with capitalization of \$2 billion-\$10 billion. Small cap refers to stocks with capitalization of less than \$2 billion. These break points change with the rise and fall of market values.

Leverage The use of debt to magnify returns of an investment. Leverage magnifies both gain and loss.

Market Cycle The cycle for any fluctuating market from one peak (or trough) to the next peak (or trough). Most commonly applied to stock prices and changes in GDP.

Market Index A measure of a sub segment of the investment markets. The first widely published index, the Dow Jones Industrial Average, was taken as a measure of general movement in the domestic stock market. The most common such measure today is the Standard and Poor's 500. Market indices exist for most major asset classes and subclasses.

Market Capitalization The value of outstanding debt or equity issued by a company. For equity, market capitalization is calculated as the number of shares x price per share. For debt, it is calculated as the number of bonds times the price.

Mid Cap An abbreviation for mid or middle capitalization stocks, those with market cap of \$2-\$10 billion. See also large cap.

Mutual Fund A type of commingled investment in which funds for different investors are pooled into a common vehicle. Mutual Funds are regulated by the Securities Act of 1940 and designated by a five-letter ticker symbol ending in X.

Net of Fees A designation applied to an investment return calculated after subtracting fees paid.

Open-Ended Fund Fund structure that allows investors to invest or withdraw funds, usually on a quarterly basis. This is as opposed to a closed-ended fund in which contributions are not accepted after an initial investment period, and contributions are returned only upon final liquidation of the fund.

Passive Investment An investment in a traditional (cap-weighted) index fund.

PCE An abbreviation for Personal Consumption Expenditures, an alternative measure of inflation to the consumer price index or CPI.

Performance Fee A fee structure, common in private alternative asset, in which the manager is entitled to a portion of return over a specified hurdle rate. A 20% share of return in excess of 8% is a typical structure.

Plan Sponsor Entity establishing and governing, directly or indirectly, a pension plan.

Performance Measurement A calculation of investment return based on guidelines established by the CFA Institute. May be time-weighted or dollar-weighted (see Time-Weighted Return and Dollar-Weighted Return).

Preferred Return See hurdle rate.

Private Equity Equity ownership in a company not traded on public markets. Private equity is offered in unregistered investment partnerships with investors getting paid out usually by taking the private company public or selling it to management or to another private equity partnership.

Private Real Estate. Real estate strategy offered in a private investment structure as opposed to a public REIT (real estate investment trust). Private real estate is less correlated to the equity market than a public REIT.

Prospectus Formal written offer to sell securities, contains internal guidelines that take the place of the guidelines in an investment policy statement.

Risk The chance that an anticipated investment return or goal will not be realized. Risk is approximated by measures of dispersion like volatility based on 1) short-term measures of historical return series and 2) a normal statistical distribution, which are at best approximations of true risk.

Small Cap An abbreviation for small capitalization stocks, those with market cap of less than \$2 billion. See also large cap.

Style Indices. The use of value and growth designations within a market index. For instance, the Russell 1000 is a large cap index divided into growth and value indices designated as Russell 1000V and Russell 1000G. Stocks are separated into the two categories based on factors such as stock price to book value and projected growth. Most major stock market indices can be subdivided into value and growth.

Tactical Asset Allocation Method of investing that shifts money among various asset classes, most notably between stocks and bonds, depending on which is expected to do best in the near- to intermediate-term.

Time-Weighted Return Method of performance measurement that eliminates the effect of cash flows into or out of a portfolio; the same rate of return will result regardless of the timing or size of cash flows. This is the preferred method of pension funds for creating a level playing field to compare portfolios whose managers have no control over clients' contributions or withdrawals.

Treasury Inflation Protected Securities TIPS are issued by the US Government, with yield explicitly tied to an inflation index.

Traditional Index. The weighted average return of stocks in a group such as the S&P 500, with weights based on market capitalization.

Universe Ranking A percentile ranking for a manager within a universe of managers in the same style (such as domestic large cap equity). Usually highest is 1 and lowest is 99.. A ranking of 25th percentile would mean the manager out performed 75% of the managers and under performed 25% within the large cap universe.

Value Stocks Typically have lower valuation metrics such as price to book value and price to earnings, and lower projected growth in sales and earnings, relative to growth stocks. Russell and Standard & Poor's each have their own methodologies to divide their stock market indices into value and growth stock components.

Yankee Bonds Dollar-denominated bonds issued in the United States by foreign banks and corporations.

Yield Curve A graph of the yield of U.S. Government obligations, with time on the X axis and yield on the Y axis. The curve is usually upward sloping because longer obligations, such as 10 years, usually have a higher yield than shorter obligations such as 2 years.