

Oregon Investment Council

Statement
of
Investment Objectives and Policy Framework
for the
Oregon Public Employees Retirement Fund

Adopted: February 27, 2002

Revised: July 28, 2004; April 27, 2005; May 18, 2005; January 18, 2006; July 6, 2006; January 31, 2007; September 26, 2007; January 30, 2008; April 29, 2009; May 27, 2009; April 28, 2010; December 1, 2010; April 27, 2011; April 25, 2012; October 30, 2013; and December 3, 2014

Contents

1. Purpose
2. Investment Objective
3. Policy Asset Mix, Risk Diversification and Return Expectations
4. Passive and Active Management
5. Public Equity Strategy
6. Fixed Income Strategy
7. Real Estate Strategy
8. Private Equity Strategy
9. Alternatives Strategy
10. Performance Monitoring and Evaluation

Glossary of Selected Terms

Terms explained in the glossary are *italicized* when they first appear in this document.

1.0 Purpose

- 1.1 This Statement of Investment Objectives and Policy Framework (the “Statement”) summarizes the philosophy, objectives and policies approved by the *Oregon Investment Council* (the “Council”) for the investment of *Oregon Public Employees Retirement Fund* (“OPERF” or the “Fund”) assets.
- 1.2 The Council approved these objectives and framework after careful consideration of OPERF benefit provisions, and the implications of alternative objectives and policies.
- 1.3 The Statement has been prepared with five audiences in mind: 1) incumbent, new and prospective Council members; 2) Treasury staff; 3) OPERF active and retired members; 4) the Oregon State Legislature and Governor; and 5) agents engaged by the Council to manage and administer Fund assets.
- 1.4 The Statement summarizes more detailed policy and procedure documents prepared and maintained by the staff of the *Office of the State Treasurer*, and numerous other documents that govern the day-to-day management of OPERF assets including agent agreements, individual investment manager mandates and limited partnership documents.
- 1.5 The Council regularly assesses the continued suitability of its approved investment objectives and policies, initiates change as necessary and updates these documents accordingly.

2.0 Investment Objective

- 2.1 Subject to ORS 293.721 and 293.726, the investment objective for the *Regular Account* is earning, over rolling, consecutive twenty-year periods, an annualized *return* that equals or exceeds the *actuarial discount rate* (ADR) approved by the Public Employees Retirement Board (PERB) and used to value OPERF liabilities.
- 2.2 The Council believes, based on the assumptions outlined herein, that the investment policies summarized in this document will provide the highest probability of achieving this objective, at a level of *risk* that is acceptable to active and retired OPERF members. The Council evaluates risk in terms of the probability of not achieving the ADR over a consecutive, twenty-year time horizon.
- 2.3 Historically, members were allowed to direct up to 75% of their contributions to the *Variable Account*. While no longer receiving new contributions, the Variable Account’s objective remains investment performance consistent with the *MSCI All Country World Index*.
- 2.4 The Council has established investment objectives for individual asset classes that are also summarized in this Statement.

3.0 Policy Asset Mix, Risk Diversification and Return Expectations

- 3.1 After careful consideration of OPERF’s investment objective, *liability* structure, *funded status* and liquidity needs, as well as the return, risk and *diversification* characteristics of different asset classes, the Council approved the asset mix policy presented in Exhibit 1 for the OPERF Regular Account. The Council’s total fund asset mix policy and active management return expectations are also summarized in Exhibit 1.
- 3.2 Of its total assets, 57.5 percent of OPERF is targeted for investment in *equities*, inclusive of *private equity*. Equity investments have generated the highest returns over long time periods, but can also produce low and even negative returns over shorter time periods.
- 3.3 The risk of low returns over shorter time periods makes 100% equity policies unsuitable for most pension funds, including OPERF. By investing across multiple equity asset classes, and in lower return but less risky *fixed-income* and *real estate* assets, the Council is managing and diversifying the Fund’s overall risk.
- 3.4 Specific asset class exposures are maintained within the ranges outlined in Exhibit 1.
- 3.5 At a 7.6% expected annual return, the Fund has a 50% probability of earning an annualized return equal to or exceeding its actuarial discount rate over a consecutive 20-year horizon or, approximately, the next two to three market cycles.

Exhibit 1: Policy Mix and Return Expectations for OPERF Regular Account

Asset Class	Target Allocation (%)	Re-balancing Range (%)	Expected Annual Policy Return^{1, 2} (%)	Expected Annual Active Management Return (net of fees) (%)	Expected Annual Total Return (%)
Public Equities	37.5	32.5-42.5	7.9	0.75	8.6
Private Equity	20	16-24	10.2	0.7	10.9
Total Equity	57.5	52.5-62.5			
Fixed Income	20	15-25	2.3	0.35	2.6
Real Estate	12.5	9.5-15.5	7.1	0.75	7.8
Alternatives	10	0-10	6.4	0.5	6.9
Total Fund	100		7.0	0.6	7.6

1. Based on capital market forecasts developed by the Council’s investment consultant, SIS, for the next two to three market cycles.

2. Total Fund expected returns are simply the weighted averages of the individual asset class returns. The policy mix’s geometric mean return expectation is 7.9%.

- 3.6 The policy mix’s 7.6% average annual return expectation was developed with reference to observed long-term relationships among major asset classes, adjusted to account for current market conditions. The Council believes this return expectation is reasonable, but recognizes that over shorter time periods, actual returns can deviate significantly from expectations – both positively and negatively.

- 3.7 U.S. equity, non-U.S. equity, and fixed-income asset classes are managed using both passive and active management strategies. Active management of the Fund's public market equity and real estate allocations is expected to earn a 0.75% per annum return premium over rolling, consecutive five-year periods (and relative to those allocation's respective benchmarks). The Council recognizes that unsuccessful active management can reduce total fund returns.
- 3.8 The OIC has allocated up to 3.0% of total Fund assets for investment in an *Opportunity Portfolio*, the objective of which is to provide enhanced returns and better diversification for OPERF. Investments in the *Opportunity Portfolio* are expected to comprise a combination of both shorter-term (1-3 year) and longer-term holdings. The *Opportunity Portfolio* has no strategic target since, by definition, eligible investments will only be pursued on an opportunistic basis; moreover, the *Opportunity Portfolio* allocation shall not result in an allocation range breach for any of the other five, primary asset class allocations.
- 3.9 OPERF cash balances are invested in the *Oregon Short Term Fund* and managed to levels that are deliberately minimized but still sufficient to cover OPERF's short-term cash flow needs.
- 3.10 In an effort to minimize cash balances at both the fund and manager level, the OIC has retained an overlay manager to more closely align the actual Fund portfolio with the approved policy mix, generally through the purchase and sale of futures contracts to increase or decrease specific asset class exposures, as necessary.
- 3.11 The Council shall review, at least biennially, its expectations for asset class and active management performance, and assess how the updated expectations affect the probability that the Regular Account will achieve its investment objective.

4.0 Passive and Active Management

- 4.1 Passive management uses lower cost *index funds* to access the return streams available from the world's capital markets. Active management tries to earn higher returns than those available from index funds through the application of manager skill in the form of sector and security selection as well as market and/or asset mix timing decisions.
- 4.2 The Council uses passive management to control costs, evaluate active management strategies, capture exposure to *efficient market* segments, manage *tracking error* and facilitate policy mix re-balancing activities. Exchange-traded *real estate investment trusts (REITS)* may also be used to maintain the Fund's real estate exposure within specified policy ranges.
- 4.3 The Council approves active management of Fund assets when proposed active strategies offer sufficiently high expected incremental returns, net of fees, and when the magnitude of potential under-performance can be estimated, monitored and managed.
- 4.4 The Council must accept active management in those asset classes for which there are no passive management alternatives, in particular, real estate, private equity and other alternative and opportunistic investment strategies.

- 4.5 The Council prefers active management strategies that emphasize sector and/or security selection decisions rather than market and/or asset mix timing decisions as the former are much better supported by professional experience and academic research.
- 4.6 At the aggregate level of the Regular Account, active management strategies authorized by the Council are expected to **add 0.6% of annualized excess return**, net of fees, over rolling, consecutive five-year periods. **Relative to the policy benchmark, Regular Account active risk shall be managed to a 2 to 3 percent annualized tracking error target.**

5.0 Public Equity Strategy

- 5.1 OPERF's public equity allocation is managed with the objective of earning at least **75 basis points** in annualized net excess return relative to the *MSCI All Country World Investable Market Index (ACWI IMI – net)* (unhedged) over rolling, consecutive five-year periods. **Relative to that same benchmark, active risk shall be managed to a 0.75 to 2.0 percent annualized tracking error target.**
- 5.2 Key elements of the strategy:
- (a) In an effort to enhance return, maintain an over-weight to small capitalization stocks and other well supported sources of return premia. These strategic overweights or "tilts" are based on and supported by robust empirical research that historically links persistent and pervasive evidence of excess returns to systematic "factor exposures" such as size (i.e., small cap), value and momentum. Implementation of other factor tilts may be considered at the manager, strategy or mandate level upon approval of both the Chief Investment Officer (CIO) and OIC.
 - (b) Multiple, specialist active managers with complementary investment styles are employed. For example, some OPERF managers focus on growth stocks, some on value stocks, some on large capitalization stocks and others on small capitalization stocks. This diversified approach produces more consistent excess return opportunities and minimizes the Fund's exposure to any single investment organization.
 - (c) Active management is more common within OPERF's non-U.S. equity allocation because non-U.S. markets appear to provide more opportunities for the successful application of manager skill.
 - (d) Managers with skills in security selection and country allocation are utilized as these attributes have been shown to be the principal sources of excess returns in non-U.S. equity portfolios. In addition, managers who have demonstrated an ability to add value through currency management are permitted to do so.
 - (e) Aggregate exposures to countries, economic sectors, investment styles and market capitalization tiers are monitored and managed relative to corresponding benchmark exposures.

6.0 Fixed Income Strategy

6.1 OPERF's fixed income allocation is managed with the objective of earning **35 basis points** in annualized, net excess returns relative to a blended benchmark comprised of 40% *Barclays U.S. Aggregate Index*, 40% *Barclays U.S. 1-3 Year Government/Credit Index*, 15% *S&P/LSTA Leveraged Loan Index* and 5% *Bank of America Merrill Lynch High Yield Master II Index* over rolling, consecutive five-year periods. **Relative to the above-described benchmark, active risk with the OPERF fixed income allocation is managed to a 1 to 2 percent annualized tracking error target.**

6.2 Key elements of the strategy:

- (a) At least 95% of the OPERF fixed income allocation is actively managed due to performance and cost considerations. Specifically, excess returns from active fixed income management are more likely as many investors hold fixed income securities to meet regulatory and liability matching objectives, and hence are not total return oriented. This market dynamic produces systematic mis-pricings of fixed income securities that skilled investment managers can exploit. Active fixed income management fees are also much lower than active equity management fees.
- (b) Multiple active generalist managers will be used for a majority of the fixed income asset class, rather than the specialist manager approach used within OPERF's public equity allocation. However, the OIC may utilize specialist fixed income managers as warranted or necessary, although fixed income manager mandates generally have little impact on the Fund's total risk due to fixed income's lower overall Fund allocation and fixed income managers' generally low tracking error.
- (c) Fixed income managers are selected for their skills in issue selection, credit analysis, sector allocations and duration management.
- (d) Aggregate exposures to duration, credit and sectors are monitored and managed relative to corresponding exposures in the fixed income allocation benchmark.

7.0 Real Estate Strategy

7.1 OPERF's real estate allocation is managed with the objective of earning at least **75 basis points** in annualized, net excess returns relative to the *NCREIF Index* over rolling, consecutive five-year periods. Because 80% of the Fund's real estate investments are illiquid and/or traded infrequently, conventional risk budget concepts are not applicable.

7.2 Key elements of the strategy:

- (a) Real Estate is 100% actively managed because a passive replication of the full breadth and depth of the real estate asset class is not viable.
- (b) *Core* property investments represent 30% of the Fund's real estate allocation, with a range of 25% to 35%. Specialist managers are utilized. Risk is diversified by investing across the following major property types: office; apartments; retail; and industrial. The OPERF real estate allocation may also include structured investments in alternative property types with Core-like risk and return attributes.

- (c) Exchange traded real estate investment trusts (REITs) represent 20% of the Fund's real estate allocation, with a range of 15% to 25%. Active management will include style and capitalization specialists, as well as broad market managers. Up to 50% of the REIT exposure may be invested in markets outside the United States.
- (d) *Value Added* property investments represent 20% of the OPERF real estate allocation, with a range of 15% to 25%, and may include direct investments in each of the property types listed above, as well as structured investments in alternative property types. Risk is diversified by property type and geography.
- (e) *Opportunistic* property investments represent 30% of the OPERF real estate allocation, with a range of 20% to 40%. Relative to Core and Value Added strategies, real estate investments will be characterized as "opportunistic" based on higher risk/return expectations and other prevailing market conditions.
- (f) Within its real estate allocation, the Fund may participate in *co-investment* opportunities.

8.0 Private Equity Strategy

8.1 OPERF's private equity allocation is managed with the objective of earning at least **300 basis points** in annualized, net excess returns relative to the Russell 3000 Index over very long time horizons, typically rolling, consecutive 10-year periods. Because private equity investments are often illiquid and/or traded infrequently, risk budget concepts are not applicable.

8.2 Key elements of the strategy:

- (a) Private Equity is 100% actively managed because private equity index funds are not available.
- (b) Risk within OPERF's private equity allocation is diversified by investing across different fund types and strategies including *venture capital, leverage buyout, mezzanine debt, distressed debt, sector funds, secondaries* and *fund-of-funds*.
- (c) OPERF's private equity allocation is further diversified by investing across *vintage year, industry sectors, investment size, development stage* and *geography*.
- (d) OPERF's private equity investments are managed by external managers operating as general partners. Considerations for private equity manager selection include access to transactions (i.e., "deal flow"), specialized areas of operating expertise, established or promising net of fees performance track records, unique or differentiated investment methodologies and transparent/verifiable reporting processes.
- (e) Within its private equity allocation, the Fund may participate in co-investment opportunities.

9.0 Alternatives Strategy

9.1 OPERF's allocation to Alternatives is managed with the objective of earning at least **400 basis points** in annualized, net excess returns relative to *CPI* over rolling, consecutive

ten-year periods. Because 80% of the OPERF alternatives allocation is illiquid and/or traded infrequently, risk budget concepts are not applicable.

9.2 Key elements of the strategy:

- (a) Alternatives are 100% actively managed because index funds replicating the broad alternatives market are not available.
- (b) *Infrastructure* investments represent 30% of the Fund's alternatives allocation, with a range of 25% to 35%. Specialist managers are utilized, and risk is diversified by investment type, size and geography. Specific infrastructure sector exposures will likely include energy, transportation, ports and water in both domestic and international markets and comprising both mid-size and large capitalization enterprises.
- (c) *Natural Resource* investments represent 45% of the Fund's alternatives allocation, with a range of 40% to 50%. Risk is diversified by investing across multiple industry sectors including oil and gas, agriculture, timberland, mining and commodities. Specialist managers are utilized in both domestic and international markets and across both active and some passive strategies.
- (d) *Hedge Funds* represent 20% of the Fund's alternatives allocation, with a range of 15% to 25%. Hedge Fund investments may include relative value, macro, arbitrage and long/short equity strategies. Risk is diversified by investing in multiple managers and across several strategies.
- (e) *Other* investments may represent 5% of the Fund's alternatives allocation, with a range of 0% to 10%. Investment strategies will be characterized as "other" based on prevailing market conditions as well as a specific strategy's unique "value proposition" or investment thesis.
- (f) Within its alternatives allocation, the Fund may also participate in *co-investment* opportunities.

10.0 Performance Monitoring and Evaluation

10.1 The Council and its agents use a variety of compliance verification and performance measurement tools to monitor, measure and evaluate the management of OPERF assets. Monitoring, reporting and evaluation frequencies range from daily to annually, although quarterly is the most commonly used reporting frequency.

10.2 The Council has developed a performance monitoring and evaluation system that answers two fundamental fiduciary questions:

- Are Fund assets being prudently managed? More specifically, are Fund assets being managed in accordance with established laws, policies and procedures, and are individual investment managers in compliance with their respective mandates?
- Are Fund assets being profitably managed? More specifically, has Fund investment performance affected benefit security, and has capital market risk in general and active management in particular been sufficiently rewarded?

10.3 When a breach of policies, procedures or portfolio mandates is reported or detected, the Council requires a supporting report explaining how the breach was discovered, the

reasons for the breach, actions taken to rectify the breach, and steps taken to mitigate future occurrences.

- 10.4 One of many reports used by the Council to satisfy the requirements of 10.2 above is a simple comparison of Regular Account investment performance relative to the ADR over rolling, consecutive five-year periods. Other reports help the Council assess whether or not the Fund was rewarded for its allocations to higher return, higher risk equity investments and whether or not the active management strategies utilized added or subtracted from policy returns on a net of fees basis.
- 10.5 The reporting described in this section gives the Council a consolidated or “big picture” view of Regular Account investment performance. This view is the first level of a comprehensive four-level performance report used by the Council to monitor and evaluate Regular Account investment performance over different time horizons. Level two examines Regular Account investment performance excluding hard-to-price illiquid assets such as real estate and private equity investments. Level three examines Regular Account investment performance across the six, primary asset class allocations: U.S. equity; non-U.S. equity; fixed income; real estate; private equity; and alternatives. Level four examines the performance of individual managers within each of the asset class allocations. This four-level reporting structure allows the Council to “drill down” to the level of detail it may need to identify potential performance problems and take whatever corrective actions that may be required.

- end -

Glossary

Actuarial Discount Rate (ADR): The interest rate used to calculate the present value of a defined benefit plan's future obligations and determine the size of the plan sponsor's annual contribution. The ADR approved by the PERB is currently 7.75%.

Alternatives: Investments that are considered non-traditional or emerging in nature. Presently, the following investment types are included within the OPERF alternatives allocation: hedge funds; infrastructure; natural resources; and commodities.

Asset Class: A collection of securities that have conceptually similar claims on income streams and have returns that are highly correlated with each other. The most frequently referenced asset classes include equities, fixed income, real estate and cash.

Bank of America Merrill Lynch U.S. High Yield Master II Index: At September 30, 2013, this index had a market value of approximately \$1.2 trillion comprised of approximately 2,200 issues. Its constituents are capitalization-weighted based on their current amount outstanding times the market price plus accrued interest. This index tracks the performance of publicly issued, U.S. dollar-denominated, below investment grade corporate debt. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining to final maturity as of an index rebalancing date, a fixed coupon schedule and a minimum outstanding of \$100 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the U.S. and Western Europe (the FX-G10 includes all Euro members, the U.S., Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden).

Barclays U.S. Aggregate Index: At September 30, 2013, this index had a market value of approximately \$16.7 trillion comprised of approximately 8,500 issues. Its constituents are SEC-registered, taxable, dollar denominated securities. This index covers the U.S. investment grade fixed rate bond market, and includes government, corporate, mortgage pass-through and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. The Aggregate Index was officially launched by the former Lehman Brothers on January 1, 1976, and its constituents must conform to the following parameters:

- Have at least one year to final maturity regardless of call features;
- Be rated investment-grade (Baa3/BBB- or higher) by at least two of the major ratings agencies (Moody's, S&P or Fitch);
- Be fixed rate, although securities with a coupon that steps up or changes according to a predetermined schedule are permitted;
- Be dollar-denominated and non-convertible; and
- Be publicly issued, although 144A securities with registration rights and Reg-S issues are included.

Barclays U.S. 1-3 Year Government/Credit Index: At September 30, 2013, this index had a market value of approximately \$3.8 trillion comprised of approximately 1,460 issues. It includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government), publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. This index is a sub-component of the Barclays Aggregate Index, was officially launched by the former Lehman Brothers on January 1, 1976, and its constituents must conform to the following parameters:

- Be a U.S. Government or investment grade credit security;
- Have at least one year to final maturity regardless of call features;
- Have at least \$250 million par amount outstanding;
- Be rated Baa3/BBB- or higher (i.e., “investment grade”) by at least two of the major ratings agencies (Moody's, S&P or Fitch);
- Be fixed rate, although securities with a coupon that steps up or changes according to a predetermined schedule are permitted;
- Be dollar-denominated and non-convertible; and
- Be publicly issued.

Basis Point: One basis point equals 0.01%. One hundred basis points equals one percentage point.

Benchmark: A standard by which investment performance can be measured and evaluated. For example, the performance of U.S. equity managers is often measured and evaluated relative to the Russell 3000 Index. In this case, the Russell 3000 Index serves as or represents the U.S. equity benchmark.

Benchmark Exposure: The proportion that a given stock represents within a benchmark, such as the Russell 3000 Index of U.S. equity securities. Allows investors to measure the extent to which a portfolio or specific investment strategy is over- or under-exposed to a particular stock or investment characteristic (e.g., market capitalization) relative to a benchmark.

Co-investment: Although used loosely to describe any two parties that invest alongside one another in the same company, this term has a special meaning in the context of an investment fund’s limited partners. By having co-investment rights, a limited partner can invest directly in a company that is simultaneously backed by the fund’s general partner. In this way, the limited partner has two separate stakes in the company: one, an indirect investment through its participation in the general partner’s fund; the second, a direct investment alongside the general partner. While the direct, co-investment opportunity is usually offered at terms and conditions more favorable than the fund investment, the direct, concentrated nature of the co-investment opportunity implies higher risk for the limited partner.

Core: Real estate investment strategies which exhibit “institutional” qualities, such as superior location, high occupancy and premium design and construction quality.

Credit: The measure of an organization’s ability to re-pay borrowed money. Used most often in a fixed income context. Organizations with the highest credit rating (i.e., those most likely to re-pay borrowed money) are assigned a AAA credit rating.

Distressed Debt: A private equity investment strategy that involves purchasing discounted bonds of a financially-distressed firm. Distressed debt investors frequently convert their holdings into equity and become actively involved in the management of the distressed firm.

Diversification: Reducing risk without a commensurate reduction in expected return by combining assets and/or investment strategies with low or uncorrelated return and volatility profiles. For example, a decline in the price of one asset (e.g., oil stocks) is offset by an increase in the price of another asset (e.g., airline stocks). In lay terms, this principal is often described as “putting your eggs into more than one basket”.

Duration: A financial measure used by investors to estimate the price sensitivity of a fixed-income security relative to changes in interest rates. For example, if interest rates increase by 1 percentage point, a 5-year duration bond will decline in price by approximately 5 percent.

Efficient Market: A market in which security prices rapidly reflect all information germane to the price discovery process. A primary implication of an efficient market is that active management efforts often fail to produce results that consistently beat the performance of an index fund or other passive strategy net of fees, transactions costs and other expenses.

Equities: Investments that represent ownership in a company and therefore a proportional share of company profits.

Fixed-Income: Debt obligations that specify the precise repayment of previously borrowed money. Typically, repayment takes the form of a series of fixed-amount, semi-annual interest payments and a single, final repayment of principal.

Funded Status: A comparison of a pension plan’s assets and liabilities where the latter are often referred to as the plan’s projected benefit obligation (PBO). When a plan’s assets exceed its PBO, the plan is considered overfunded. Conversely, if a plan’s assets are less than its PBO, the plan is considered underfunded and the plan sponsor has a net liability position with respect to its pension plan.

Fund-of-funds: Often organized by an investment advisor or investment bank, a fund that invests in other funds rather than directly in securities, operating firms or other assets.

Growth Stock: Stocks exhibiting faster-than-average earnings growth with expectations that such growth will continue. Growth stocks usually have high price-to-earnings ratios, high price-to-book ratios and low to no dividend yields.

Hedged: A term applied to one, more or an entire portfolio of assets indicating that the base country value of such assets is partially or wholly protected from foreign currency fluctuations. Forward currency contracts are typically used to hedge or offset the effects of these fluctuations.

Index Fund: A portfolio management strategy that seeks to match the composition and performance of a select index such as the Russell 3000 or S&P 500.

Leverage Buyout (LBO): A strategy in which debt financing is used to acquire a firm or business unit, typically in a mature industry. LBO debt is usually repaid according to a strict schedule that absorbs most of the acquired firm's cash flow.

Liability: A claim on assets by individuals or companies. In a pension context, liabilities represent the claim on fund assets by active and retired plan beneficiaries.

MSCI All Country World Investable Market Index (ACWI-IMI): A capitalization-weighted index that includes over 9,000 publically traded equity securities and is designed to measure equity market performance across developed and emerging markets. As of September 2013, this index consisted of 45 separate country indices comprising 24 developed and 21 emerging market countries. The developed market countries included are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market countries included are Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

MSCI World Ex-U.S. Index: Same as the MSCI ACWI-IMI index described directly above, except that U.S. stocks are excluded.

Market Capitalization: The value of a corporation as determined by multiplying the price of its shares by the number of shares outstanding. Investors often use market capitalization as an indicator of portfolio risk or volatility. In general, smaller capitalized companies are more volatile or risky than larger capitalized companies.

Mezzanine: Either a private equity financing undertaken shortly before an initial public offering, or an investment strategy that employs subordinated debt (which has fewer privileges than bank debt but more standing than equity) and often is issued with attached equity warrants.

NCREIF Index: The NCREIF Property Index (NPI) is a quarterly, investment performance composite published by the National Council of Real Estate Investment Fiduciaries (NCREIF). This index measures the total return for a very large pool of commercial real estate properties acquired in private market transactions for investment purposes only. All NPI properties have been acquired, at least in part, on behalf of pension funds and other tax-exempt institutional investors. As such, all NPI properties are held and managed consistent with a fiduciary mandate. The specific qualifications for NPI inclusion are as follows:

- Operating properties only;
- Property types - apartments, hotels, industrial properties, office buildings, and retail only;
- Can be wholly-owned or held in a joint venture structure;
- Investment returns reported on a non-levered (i.e., independent of debt financing) basis;
- Must be owned/controlled by a qualified tax-exempt institutional investor or its designated agent; and
- Existing properties only (i.e., no development projects).

Office of the State Treasurer: Headed by the State Treasurer as the chief financial officer for the state, the Office of the State Treasurer is responsible for managing the day to day investment operations of the state pension fund (and other funds), issuing all state debt, and serving as the central bank for state agencies. Within the Office of the State Treasurer, the Investment Division also manages investment programs for the state's deferred compensation and college savings plans, and serves as staff to the Oregon Investment Council.

Opportunistic: Higher risk but higher expected return real estate investments that are usually illiquid, produce little or no current income and are often focused on distressed and/or highly leveraged properties.

Opportunity Portfolio: Includes non-traditional and/or concentrated investment strategies that may provide enhanced diversification and/or unique sources of return relative to the other asset classes included in the OIC's approved policy mix. The Opportunity Portfolio's objectives are pursued by investing in strategies that fall outside the boundaries of "strategic" or approved policy mix allocations including new or innovative strategies across a wide range of potential investment opportunities and with few limitations or constraints.

Oregon Investment Council (OIC): Oregon Revised Statute (ORS) 293.706 establishes the OIC, which consists of five voting members, four of whom are appointed by the Governor and subject to Senate confirmation (the Treasurer serves by position, and is not subject to confirmation). The members appointed by the Governor must be qualified by training and experience in the field of investment or finance. In addition, the Director of the Public Employees Retirement System is an ex-officio member of the OIC. ORS 293.721 and 293.726 establish the OIC's investment objectives and standards of judgment and care: "Moneys in the investment funds shall be invested and reinvested to achieve the investment objective of the investment funds, which is to make the moneys as productive as possible, subject to the prudent investor standard".

Oregon Public Employees Retirement Fund (OPERF): Holds the assets of beneficiaries of the Oregon Public Employees Retirement System (PERS). PERS is a state-wide, defined benefit retirement plan for units of state government, political subdivisions, community colleges and school districts. PERS is administered under ORS chapters 237, 238, 238A, and applicable provisions of the Internal Revenue Code by the Public Employees Retirement Board (PERB). Participation by state government units, school districts, and community colleges is mandatory. Participation by most political subdivisions is optional but irrevocable if elected. All system assets accumulated for the payment of benefits may legally be used to pay benefits to any of the plan members or beneficiaries of the system. PERS is responsible for administering the management of the plan's liability and participant benefits.

Oregon Short Term Fund (OSTF): The state's commingled cash investment pool managed internally by Treasury staff. The OSTF includes all excess state agency cash, as required by law, as well as cash invested by local governments on a discretionary basis. The OSTF is invested in accordance with investment guidelines recommended by the state's Oregon Short Term Fund Board and approved by the OIC.

Overweight: A stock, sector or capitalization exposure that is higher than the corresponding exposure in a given asset class benchmark, such as the Russell 3000 Index.

Private Equity: Venture Economics (VE) uses the term to describe the universe of all venture investing, buyout investing and mezzanine investing. Fund-of-funds investing and secondaries are also included in this term's broadest interpretation. VE is not using the term to include angel investors or business angels, real estate investments or other investing scenarios outside of the public market. See also *Alternatives*.

Real Estate: Investments in land and/or buildings.

Real Estate Investment Trusts (REIT): A real estate portfolio managed by an investment company for the benefit of the trust unit holders. Most REIT units are publically and exchange traded.

Regular Account: That portion of the Oregon Public Employees Retirement Fund that excludes the Variable Account. A diversified investment portfolio for which the asset allocation and general investment policies are established and approved by the OIC. Tier One participants are guaranteed a minimum rate of return based on the long-term interest rate used by the actuary, currently 7.75 percent. Tier Two participants have no guaranteed rate of return and receive benefits that reflect the Regular Account's actual or realized investment return.

Return: The gain or loss in value of an investment over a given period to time expressed as a percentage of the original amount invested. For example, an initial investment of \$100 that grows to \$105 over one year has produced a 5% return.

Risk: The probability of losing money or not achieving the expected investment outcome.

Russell 3000 Index: Measures the investment performance of a composite comprised of stocks issued by the 3,000 largest U.S. companies. Based on total market capitalization, this index represents approximately 98% of the investable U.S. equity market.

S&P/LSTA Leveraged Loan Index: At September 30, 2013, this index had a market value of approximately \$622 billion comprised of approximately 800 issuers and over 1,000 loan facilities. The index is designed to mirror the market-weighted performance of the largest institutional leveraged loan portfolios based on market weightings, spreads and interest payments. Facilities are eligible for inclusion in the index if they are senior secured institutional term loans with a minimum initial spread of 125 basis points and minimum one-year term. Facilities are retired from the index when there is no bid posted on the facility for at least 12 successive weeks or when the loan is repaid.

Secondaries: The purchase and sale of existing limited partnership commitments to other limited partners and/or fund sponsors.

Sector: A particular group of stocks or bonds that usually characterize a given industry or economic activity. For example, "pharmaceuticals" is the name given to stocks issued by companies researching, manufacturing and selling over-the-counter and prescription medicines. "Corporates" is the name given to fixed-income instruments issued by private and public companies.

Sector Funds: A pooled investment product that focuses on a particular industry or economic activity. For example, pooled funds that invest principally in technology stocks would be termed a technology sector fund.

Tracking Error: The amount by which an investor's investment performance differed from a corresponding or assigned benchmark. Usually measured and expressed as the standard deviation of returns relative to a pre-specified benchmark.

Unhedged: A term indicating that the value of one, more or an entire portfolio of assets may be affected by foreign currency fluctuations and that no deliberate attempt has been made to protect against such fluctuations.

Value Added: As used in real estate, may include office, retail, industrial and apartment properties, but may target structured investments in alternative property types such as hotels, student housing, senior housing and specialized retail uses. Portfolios or strategies that are positioned as Value Added are expected to produce returns between Core and Opportunistic portfolios/strategies. For example, a Value Added property may exhibit some “institutional” qualities such as good location and high design and construction quality, but may need significant leasing improvements to stabilize and enhance its value. Value Added investments may also include development opportunities with balanced risk/return profiles.

Value Stock: Stocks that appear to be undervalued for reasons other than low potential earnings growth. Value stocks usually have low price-to-earnings ratios, low price-to-book ratios and a high dividend yield.

Variable Account: The Variable Annuity Program allowed active PERS members to allocate a portion of their yearly employee contributions to a domestic equity portfolio. No such contributions were allowed after December 31, 2003. Active members who participated in the Variable Program had part of their balance invested in the Regular Account and part invested in the Variable Account. Unless a member explicitly elected to participate in the Variable Program, all of that member’s employee contributions were invested in the Regular Account. This “primary” election allowed members to place 25 percent, 50 percent or 75 percent of their employee contributions in the Variable Account. Variable Account balances increase or decrease depending on the investment performance of the variable fund, and individual participant accounts are credited for any amount (gain or loss) available for distribution. The OIC’s asset allocation policy purview only applies to the Regular Account since the OIC cannot control the investment option elections of Variable Program participants.

Venture Capital: Independently managed, dedicated pools of capital that focus on equity or equity-linked investments in privately held, high growth companies. Outside of the United States, the term venture capital is used as a synonym for all types of alternative or private equity.

Vintage Year: The calendar year in which an investment fund’s first closing occurs. For example, the 1995 vintage year for venture capital includes all venture capital funds that held a first closing in 1995.

- end -