

**UNIVERSITY OF CALIFORNIA
APPENDICES TO INVESTMENT POLICY STATEMENTS**

recourse to the Regents, a public corporation, with respect to GEP investments in the Program.

12. Letters of credit may be obtained or funding guarantees provided in favor of a lender in connection with the development and operation of a property managed by a Separate Account manager through a property title holding corporation owned by the Regents as trustee of UCRP, or the Regents, a public corporation, with respect to GEP investments in the Program, provided that such letter or guarantee does not encumber any assets other than those previously committed to such separate account to fund such investment.
13. The acquisition price of any single property or collective investment vehicle (portfolio of properties) shall not exceed 5% of the total Separate Account program long-term allocation (that is, Net Asset Value + Unfunded Commitments + unused capacity consistent with the long-term policy targets of Real Estate). The ~~Treasurer~~ [Chief Investment Officer](#) may approve the acquisition of properties greater than 5% but less than 10% of the total Program allocation.
14. Fund of Fund investments are permitted
15. Club deals and co-investments, in aggregate, shall not exceed ~~7.5~~ [15](#)% of total Program market value, [up to a limit of \\$300 million for any single deal](#).

~~Note: Compliance with some of these guidelines will not be required until a sufficient number of investments have been made. The Treasurer will keep the Committee periodically informed as to the status of its compliance with these guidelines.~~

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APPENDIX 7N

~~Effective: April 1, 2011~~ [This version: November 15, 2012](#)

~~Replaces version: May 17, 2007~~ [Last approved: April 1, 2011](#)

**PUBLIC REAL ESTATE SECURITIES
INVESTMENT GUIDELINES**

The purpose for these performance objectives (“Objectives”) and management guidelines (“Guidelines”) is to clearly state the investment approach, define performance objectives and to control risk in the management of the Public Real Estate Securities allocation of the Fund (“the Program”). These Objectives and Guidelines shall be subject to ongoing review by the Committee. Capital market conditions, changes in the investment industry, new financial instruments, or a change in the Committee’s risk tolerance, are among factors to be considered in determining whether the Guidelines shall be revised.

1. Investment Policy

a. Investment Objective

The primary investment objective of the Program is to generate a rate of return from investments in public real estate securities which exceeds the return on the global real estate securities market, measured by the FTSE EPRA NAREIT Global Index return (“Benchmark”), while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by hiring multiple external investment managers (“Managers”). Each Manager’s strategy will focus on a subset of the global real estate securities market in which the Manager is believed to have a competitive advantage in providing returns in excess of its respective benchmark on a risk adjusted basis. The ~~Treasurer~~ [Chief Investment Officer](#) will monitor whether the aggregate of all externally managed portfolios adheres to these Guidelines, and in particular achieves the overall performance and risk objectives stated below. In addition, each Manager shall have written guidelines, which will detail its strategy, performance objectives, permitted investments, and restrictions. The ~~Treasurer~~ [Chief Investment Officer](#) will monitor each Manager’s adherence to its respective guidelines. In no case may a Manager’s guidelines create potential conflict with the Guidelines for the Program.

c. Performance Objective

Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines. The Program return is expected to meet or exceed a weighted aggregate of these benchmarks, on a consistent basis over time, after deducting all costs and expenses.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 450 basis points. Each Manager will have a unique active risk budget, relative to its style benchmark, which is appropriate to its individual strategy, and specified in its guidelines, and which will reflect the risk-return profile of its specific investment objectives.

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e. Other Constraints and Considerations

- Managers shall comply with applicable State and Federal laws and regulations and the prudence requirement described in section 3(a) of the Policy.
- Managers shall act solely in the interest of the Fund's constituents.
- Implementation of this Program shall comply with the Fund's Policy.

2. Investment Guidelines

a. Asset Allocation

It is expected that the Program will be fully invested in equity and equity-related securities at all times. Any cash held by Managers of separate accounts for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian. The ~~Treasurer~~ [Chief Investment Officer](#) or designated overlay manager may equitize this cash using appropriate derivatives contracts.

b. Types of Securities

The Program will be invested in diversified portfolios of real estate securities that are listed on national securities exchanges. Managers may also invest in stocks that are traded over-the-counter and in other real estate-related securities and private placements as limited in their guidelines. A real estate-related company is one in which the predominant share of EBITDA is derived from rental income and/or the equity ownership of real estate.

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Lend securities
- Purchase commodities or commodity derivatives
- Purchase fixed income securities except for cash equivalents used for facilitating transactions
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- ~~Buy or write equity linked notes~~
- Employ economic leverage in the portfolio through borrowing or derivatives

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk and will exhibit portfolio risk characteristics similar to those of the Benchmark. The ~~Treasurer~~ [Chief Investment Officer](#) is responsible for managing aggregate risk exposures. The following limitations apply:

- The Program's beta with respect to the Benchmark will not be significantly different from 1.0, as measured over the most recent 12 month period.

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- Notwithstanding the overall diversification of the Program, the Treasurer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.
- The aggregate holdings within separate accounts of any security may not exceed 4.9% of that security's outstanding shares.

It is expected that each Manager's portfolio will be appropriately diversified, within limits established in its guidelines and relative to its performance objectives, to control risk, but without unduly restricting a Manager's ability to out-perform its benchmark. That is, an individual Manager's portfolio may be more concentrated than is appropriate for the Program's aggregate investments.

e. Managers shall employ best execution. Transactions may be directed to brokers/dealers designated by the ~~Treasurer~~ Chief Investment Officer at the Manager's discretion when best execution is available.

f. Managing Cash Flows

The ~~Treasurer~~ Chief Investment Officer may use derivative contracts (including but not limited to index futures and ETF's) for facilitating investment of cash flows related to contributions, withdrawals, or other asset allocation rebalancing.

3. Evaluation and Review

a. Policy and Guideline Review

The ~~Treasurer~~ Chief Investment Officer shall review the Objectives and Guidelines at least annually, and report to the Committee on the impact of the Guidelines on the Program's performance.

b. Program performance and risk exposures shall be evaluated at multiple levels in accordance with the performance objectives of the Program and individual Managers.

4. Reporting

On a quarterly basis, the ~~Treasurer~~ Chief Investment Officer shall provide the following reports to the Committee:

~~g.~~ a. A performance attribution explaining differences in sector weights and returns (property type and/or geographical sectors, as appropriate), between the aggregate Program investments and the Benchmark, and an explanation of any material differences.

~~h.~~ b. A forecast risk report, using the ~~Treasurer~~ Chief Investment Officer's risk system, showing the total, systematic ("common factor"), and non-systematic ("residual") risk of the aggregate portfolio, the Benchmark, and the active Program relative to the Benchmark, and an explanation of any material differences.

~~i.~~ c. A summary of individual manager performance, on an absolute and benchmark relative basis.

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| Managers will be required to provide the ~~Treasurer~~[Chief Investment Officer](#) monthly and quarterly reports, including but not limited to:

- a. A monthly performance statement for the portfolio (gross and net) and the benchmark, and provide the gross performance for the product Composite at least quarterly.
- b. If available, a monthly or quarterly forecast risk report, using the Manager's risk system, showing the total, systematic ("common factor"), and non-systematic ("residual") risk of the portfolio relative to the benchmark.
- c. A monthly or quarterly variance analysis, indicating sources of performance variances (difference between portfolio and benchmark return), and an explanation of any material differences.
- d. A quarterly review of portfolio and strategy performance including a market outlook.
- e. An annual statement of compliance with investment guidelines.

5. Definitions: See Appendix 8

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APPENDIX 7O

~~Effective: July 19, 2012~~ [This version: November 15, 2012](#)

~~Replaces version approved: April 1, 2010~~ [Last approved: July 19, 2012](#)

**ABSOLUTE RETURN (AR) STRATEGIES
INVESTMENT GUIDELINES**

The purpose of portfolio guidelines is to clearly define performance objectives, state the investment approach, and to control risk. Portfolio guidelines should be subject to ongoing review. A change in the allocation to the strategy or the Investment Committee's risk tolerance can be among the reasons for a guideline review.

Performance Objective:

The objective of the absolute return strategy (AR) portfolio is to earn an annualized return that exceeds the Performance Benchmark (below). The AR portfolio should also provide diversification benefits to the overall portfolio by offering returns that exhibit moderate correlation to the performance of other asset classes. The portfolio shall be composed of absolute return and market directional type strategies.

Portfolio Performance Benchmark

The performance benchmark is a weighted combination of 50% times the return of the HFRX-Absolute Return Strategies Index plus 50% times the return of the HFRX Market Directional Index.

Portfolio Guidelines

1. Permissible investments include vehicles that invest primarily in Long/Short strategies (including U.S., dedicated Non-U.S., short bias, and global equities), Relative Value strategies (including equity market neutral, convertible bond arbitrage, relative value credit, and fixed income), Event Driven strategies (including distressed securities, special situations, and risk arbitrage strategies), and Opportunistic strategies (including macro, CTA and portfolio hedge).
2. Investments may be made in vehicles that invest in single or multiple strategies.
3. Investments may be made in a variety of vehicle structures, which may include: separate accounts, funds-of-one, comingled hedge funds, funds of hedge funds, and drawdown structures.
4. Policy ranges for the strategies are:

	<u>Range</u>
Long/Short Equity	10-50%
Event Driven	10-50%
Relative Value	10-50%
Opportunistic	10-50%

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5. No investment with any single manager can represent more than 10% of the AR portfolio.
6. Gross accounting leverage at the aggregate portfolio level shall not exceed 4.5 times the market value of the total AR assets. No more than 25% of the portfolio may be invested in managers who use on average more than 4.5 times gross accounting leverage. Recognizing the illiquidity of these investments, these constraints should guide the execution of the AR program, but may be exceeded temporarily between rebalancing. All leverage shall be non-recourse to the Regents, as trustee of UCRP, with respect to UCRP investments in the Program. All leverage shall be non-recourse to the Regents, a public corporation, with respect to GEP investments in the Program.
7. The ~~Treasurer~~ [Chief Investment Officer](#) may not incur debt to leverage the AR portfolio; however, portable alpha strategies are permitted.
8. No more than 15% of the total AR portfolio forecast risk may be derived from any single manager.
9. Total AR portfolio forecast risk shall be maintained at a level of no more than 8.0% of total invested capital.

[Definition] Gross Accounting Leverage: the ratio of the sum of the absolute values of the long and short exposures of a portfolio divided by the net market value of the total portfolio. Gross accounting leverage of the AR portfolio is the sum of the individual manager leverage ratios, weighted by their market values.

[Definition] Forecast Risk: the volatility of forecast returns, as measured by annualized standard deviation. Forecast risk is calculated using a factor based risk model, which decomposes each AR portfolio investment's forecast risk into forecast systemic factor exposures and forecast residual risks, making adjustments for strategy evolution and various liquidity and valuation related considerations.

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~~APPENDIX 7P~~

~~Last approved: August 16, 2005~~

~~This Version: February 14, 2006~~

~~INVESTMENT OF CASH COLLATERAL
INVESTMENT GUIDELINES~~

~~This policy represents a set of guidelines governing the investment of cash collateral provided by borrowers of securities through a Securities Lending Program for the Fund. Collateral held on behalf of the Fund is managed by a qualified investment manager ("Manager") in a separate investment fund (the "Account").~~

~~Through active management of the Account, the Manager shall seek to provide safety of principal, daily liquidity and a competitive return.~~

~~The following guidelines govern investments held by the Account.~~

~~**(A) Investment Management**~~

~~1. U.S. Government – U.S. Treasury bills, notes and bonds, and other obligations issued by the U.S. Government, its agencies or sponsored agencies:~~

~~a. Maturity may not exceed five years.~~

~~2. Corporate Debt Obligations (including commercial paper, floating rate notes and master demand notes, and excluding asset-backed commercial paper, mortgage-backed securities and letter of credit backed commercial paper):~~

~~a. Issuer must have a short term debt rating not lower than A1, P1, D-1, or F-1 and the issuer must have a minimum long term debt rating not lower than A2/A from one of the NRSRO's. In the event the issuer is only rated in either the long term or the short term area the issuer shall have a rating not lower than the rating required above for such area.~~

~~b. The Account may hold no more than 5% of its assets in unsecured Corporate Debt Obligations issued by a single issuer and its affiliates.~~

~~c. The Account will not hold corporate debt obligations issued by securities broker/dealers or their parent companies, except where issued by parent or holding companies with diversified business holdings wherein businesses other than securities brokerage and dealers represent a majority of their activities.~~

~~d. Maturity may not exceed two years.~~

~~3. Domestic or London Eurodollar Certificates of Deposit; Yankee Certificates of Deposit; London Time Deposits; and bankers acceptances issued by U.S. banks, foreign branches of U.S. banks, or U.S. branches of foreign banks, which are subject to state or federal banking regulations in the U.S., or London branches of foreign banks.~~

~~a. Nassau and Grand Cayman Time deposit centers are permitted but are limited to a maximum 5% of the portfolio's assets at time of purchase and maturity shall not exceed 7 days.~~

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~~b. — All banks must have minimum assets of \$5 billion and a short-term debt rating not lower than A1 and P1 and a long-term debt rating not lower than A2/A. In the event the issuer is only rated in either the long-term or the short-term area the issuer shall have a rating not lower than the rating required above for such area.~~

~~c. — Not more than 5% of the Account's holdings may be invested in instruments issued by a single U.S. or foreign bank and its affiliates.~~

~~d. — Maturity may not exceed 190 days except when matched against term loans, which may not exceed one year. Day count will commence (measured) from settlement date using conventional market cash, regular or spot settlement.~~

~~4. — U.S. dollar denominated supranational and sovereign debt obligations:~~

~~a. — Issuing sovereign entity must have a long-term debt rating not lower than A.~~

~~5. — Repurchase agreements:~~

~~a. — All counter parties must have executed a written repurchase agreement.~~

~~b. — All repurchase transactions must be fully collateralized by collateral determined by Manager in its discretion, which collateral may include, but not be limited to, any of the following: US Treasuries, US Treasury STRIPS, federal agency obligations, mortgage-backed securities, federal agency REMICS/CMOs, commercial paper, corporate obligations, asset-backed securities, equities, whole loans, or any combination thereof.~~

~~c. — All counterparties shall have a long-term debt rating not lower than A2/A.~~

~~d. — The Account must take possession of collateral either directly or through an independent third-party custodian.~~

~~6. — Shares in registered money market mutual funds governed by SEC Rule 2a-7, which by definition maintains a constant dollar value and is restricted to investments in top-tier rated securities:~~

~~a. — No more than 5% of the Account may be invested in any single money market mutual fund, nor may the Account own more than 5% of the net asset value of a single money market fund.~~

~~7. — Asset Backed Securities (ABS), rated AAA, collateralized by auto or credit card receivables:~~

~~a. — Maximum average life for Asset Backed Securities is 5 years.~~

~~b. — Asset Backed Securities are limited to a maximum of 50% of the portfolio at time of purchase.~~

~~8. — Securities issued in currencies other than US Dollar are not permitted.~~

(B) Liquidity and Investment Maturity

The Manager will endeavor to manage the Account such that it maintains sufficient liquidity to honor the termination of security loan transactions with borrowers and return cash collateral to borrowers. Manager will manage the Account so that the weighted average maturity of the portfolio will not exceed 120 days.

~~1. No investment of securities lending cash collateral shall be made, directly or indirectly, in commercial paper or other obligations of Manager or its parent company or any of its~~

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~~affiliates or in any derivative instrument with respect to which State Street or any affiliate is a counterparty.~~

~~2. Loans of domestic securities must be initially collateralized at 102% and loans of non-dollar securities must be initially collateralized at 105%, and all borrowers shall be required to deliver additional collateral, immediately, in the event the market value of the collateral falls below 100%.~~

~~3. When the Manager lends non-dollar securities it may accept as collateral sovereign debt denominated in the same currency as the non-dollar security. The issuing sovereign entity must have a long-term debt rating not lower than A2/A.~~

~~4. In the event that an issuer's rating is downgraded such that it no longer meets the criteria set forth in I. above, the investment may be held to maturity if the maturity date is 30 days or less, providing Manager's credit analysis does not demand other action. Investments with a maturity longer than 30 days will be sold in a prudent manner.~~

~~5. No investment of securities lending cash collateral shall be made in any commingled funds, including mutual funds, managed by Manager or its affiliates.~~

~~6. Floating rate investments must not exceed 65% of the portfolio at time of purchase.~~

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APPENDIX 7 ~~Q~~ P

This version: November 15, 2012

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**REAL ASSETS
INVESTMENT GUIDELINES**

The purpose of these investment management guidelines (“Guidelines”) is to clearly state the investment approach, define performance objectives, and to control risk within the Real Assets portfolio (“Portfolio”). These guidelines shall be subject to ongoing review.

These Guidelines are applicable to the entire Portfolio consisting of investments made on behalf of the UCRP and GEP (“the Funds”). The allocation of investments between the Funds will be managed by the ~~Treasurer~~ Chief Investment Officer in accordance with the respective performance and risk objectives of the Funds.

Strategic Objective

The Portfolio shall be managed with the objective of preserving capital while maximizing the risk-adjusted returns of the Funds through income generation and long-term capital appreciation, enhancing diversification, and hedging against inflationary risks.

Performance Objective

The primary performance objective of the Portfolio is to generate annualized net-of-fee returns, after adjusting for risk, which exceeds the return of the Performance Benchmark on a consistent basis over time.

Performance Benchmark

The Committee has adopted the following performance benchmarks for each of the underlying strategies within the Portfolio:

<u>Strategy</u>	<u>Benchmark</u>
Timberland	IRR-Based Benchmark
Energy	IRR-Based Benchmark
Infrastructure	IRR-Based Benchmark
Commodities	S&P GSCI Reduced Energy Index
Opportunistic	IRR-Based Benchmark

Investment Guidelines

1. Investments shall be made through limited liability ~~investment vehicles~~ structures –such as limited partnerships, limited liability corporations, and other ~~pooled investment funds~~ vehicles. Permissible investments shall ~~also include~~ but are not limited to funds, funds-of-funds, ~~vehicles, secondaries,~~ co-investments and direct investments, and may include both publicly traded and private market assets. ~~made through title holding corporations.~~

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2. The Portfolio shall adhere to the following ~~long-term allocation targets and~~ ranges:

Strategy	<u>Long Term</u> <u>Target Allocation</u>	Allowable Ranges	
		<u>Min</u>	<u>Max</u>
Timberland	30%	0%	40 <u>50</u> %
Energy	30%	0%	40 <u>50</u> %
Infrastructure	20%	0%	30 <u>50</u> %
Commodities	10%	0%	20 <u>50</u> %
Opportunistic	10%	0%	20 <u>50</u> %
Total	100%	-	-

~~3. Investments shall be primarily equity oriented, but may also include debt instruments secured by real assets with equity-like returns.~~

~~4.3.~~ No single ~~investment partnership commitment (including co-investments / direct equity investments)~~ can represent, at the time of commitment, more than ~~10~~15% of the overall ~~Portfolio~~ real assets allocation, defined as the most recent quarter book value plus unfunded commitments plus target commitment for the current (one) year.

~~5. No single investment, at the time of commitment, can exceed 20% of the total capital being raised for that investment.~~

~~6.4.~~ No investment with any single investment manager or general partner can represent more than ~~15~~20% of the overall Portfolio.

~~7.5.~~ No investment with any single investment manager or general partner can exceed ~~20~~30% of that manager's total assets under management, up to \$100 million. Exceptions to this limitation may be made by the Chief Investment Officer.

~~8.6.~~ Investments in multiple vehicles managed by the same manager are permitted. However, the total commitment to these investments (including co-investments and direct equity investments), at the time of commitment, may not exceed 30% of the budgeted three-year allocation defined as current book value plus unfunded commitments plus approved commitment level for the current year and two subsequent years.

~~9. Investments outside the U.S. must be diversified by geographic location and may not represent more than 35% of the Portfolio.~~

~~10.7.~~ The Portfolio shall be diversified across time, ~~with no more than 35% of the budgeted allocation being committed in any single year.~~

~~11.8.~~ Use of derivative securities by individual investment managers must be specified in writing in the manager's guidelines and must be consistent with the Derivatives Policy, Appendix 4.

~~Note: Compliance with some of these guidelines will not be required until a sufficient number of investments have been made. The Treasurer will keep the Committee periodically informed as to the status of its compliance with these guidelines.~~

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APPENDIX 7RQ

Effective: ~~April 1, 2010~~ [This version: November 15, 2012](#)

~~Replaces version: none~~ [Last approved: April 1, 2010](#)

**LIMITS ON THE SIZE OF INVESTMENTS WITH PUBLIC EQUITY AND FIXED
INCOME MANAGERS**

There are three broad reasons to limit the size of a management firm (“manager” or “product”) within an asset class: first, to reduce headline risk, second, to reduce business risk, and third, to reduce the potential for loss caused by the action of other investors in the product. Unlike investments in non-traditional asset classes, public equity and fixed income portfolios have greater transparency and liquidity, and assets are normally held by a trustee. Nevertheless, it is prudent to be mindful of the Fund’s exposure with individual investment management firms.

To best accomplish these goals, this Policy will primarily be stated in terms of principles and objectives and secondarily in explicit rules.

Principles

1. The University of California Pension and Endowment funds (“UC”) desires to retain the freedom of action to make investment decisions without being unduly influenced by the actions of other investors.
2. UC desires to minimize circumstances where the size of its investments results in value impairment.

Objectives

1. Each asset class should be diversified across a group of products with sufficiently dissimilar processes to minimize the possibility of significant concentration in individual assets. This diversification should consider investment style, strategy, statistical characteristics, and cross-holding of actual holdings.
2. UC’s exposure to any single management firm /product should be limited such that an event which has a negative impact on all investors within the firm/product does not cause a *disproportional* negative impact on the value of UC’s investment. Thus the size of a prudent investment must also consider ownership concentration of the *remainder* of the firm /product’s assets.

Rules

1. Notwithstanding the above, no ~~investment with a single firm should be more than 25% of that firm’s assets under management, nor should an~~ investment in a *single product* of a firm shall be more than ~~40~~25% of the assets of that product, unless mitigating circumstances exist. Such an exception must be approved in advance by the Chief Investment Officer.
2. Portfolios managed by staff within the Office of the ~~Treasurer~~Chief Investment Officer are exempt from this Policy.

Definition: a *single product* is defined as (a) the strategy UC invests in plus (b) any other strategy managed by the same team in the same manner using similar benchmarks.

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APPENDIX 8

This Version: ~~February 14, 2006~~ [November 15, 2012](#)

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DEFINITIONS

1. Actively managed: that part of the assets of the Program in which securities are purchased in different proportions than in the Benchmark in the expectation of earning a greater return than would be earned by replicating the Benchmark portfolio (“passive” investing).
2. Annualized tracking error budget: the amount of active risk which represents a typical amount of benchmark deviation for a Manager or the Program. The budget is not an absolute limit, and market conditions may dictate whether a greater or lesser amount of benchmark deviation is appropriate. The risk budget is normally expressed in forecast terms, and is compared to realized risk as a principal metric of the stability of a strategy.
3. Beta: the sensitivity of a portfolio to a benchmark, computed by regressing portfolio excess returns on benchmark excess returns from the same period. A beta of 1.0 indicates similar return variability as the benchmark. A beta of 1.2 (alternately, 0.80) indicates that for every 1% increase or decrease in the benchmark excess return, the portfolio’s excess return increases or decreases by 1.2% (alternately, 0.8%).
4. Cash equivalents: cash or short-term fixed income securities and an average quality rating of at least A or equivalent.
5. CDO, CLO, CBO: Collateralized Debt, Loan, and Bond obligations, respectively.
6. CMBS: Commercial mortgage backed securities.
7. CMO: Collateralized mortgage obligation (MBS derivative with unique structured risk and return characteristics).
8. Counterparty: One party to a trade legally bound to make a good delivery or a good payment.
9. Credit default swap (CDS): a ~~security~~ [financial contract](#) used to transfer the credit risk of a reference entity from one party (protection buyer) to another (seller). The protection buyer pays a premium to the protection seller, in exchange for a contingent payment following a credit event, such as defaults or bankruptcy.
10. Derivatives: ~~securities~~ [financial contracts](#) whose value is completely determined by the value of an underlying security.
11. Developed Markets: Countries which have achieved an advanced stage of economic development, whose securities markets have met certain standards for stability, and are included in one or more index provider’s Developed Markets indexes; to be distinguished from “Emerging Markets.”
12. Dollar delta (of an option): a measure of net dollar exposure of an option; defined to be the option’s notional value times the option’s delta.
13. Economic Leverage: in the context of portfolio management, is defined as a net dollar exposure to assets in excess of the dollar amount of invested capital as measured by current market value
14. Effective duration: a quantitative measure of the interest sensitivity of a fixed income instrument. It measures the approximate change in price of a security given a 100 basis point (one percentage point) change in the yield to maturity of the security.

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15. Emerging Markets: Countries at varying stages of economic development, whose securities markets have only recently met certain standards for stability, and are included in one or more index provider's Emerging Markets indexes; to be distinguished from "Developed Markets."
16. Equitizing cash: the process of purchasing equity derivatives for the purpose of maintaining equity exposure.
17. Equity related securities: includes, but is not limited to convertible securities, preferred securities, and equity warrants.
18. Eurodollar deposits: deposits issued in US dollars of foreign banks and foreign branches of US banks.
19. Forecast annualized tracking error: the forecast standard deviation of annual differences between the portfolio return and the benchmark return, based on the current holdings in a portfolio, and using a particular risk estimation methodology and system.
20. Global Equity Strategy: an investment mandate based on a global equity benchmark which includes equity securities of both U.S. and Non-US companies
21. Gross dollar exposure is defined as the sum of the combined long exposures and the absolute value of the short exposures, including all physical and derivative securities positions.
22. Gross leverage: a term used to indicate that the gross dollar exposure of a portfolio exceeds the net market value of the total portfolio
23. Hedging: the process of reducing the possibility for gain or loss over a specific future period by taking an opposite position, yet not altering the underlying portfolio structure.
24. IO, PO: Interest only and Principal only strips (CMO variety).
25. Leverage: in the context of asset class guidelines, means "economic leverage," not "gross leverage"
26. Management costs and fees: for the purpose of the Objective in Part 1, costs and fees shall refer only to those costs directly incurred by the ~~Treasurer~~ [Chief Investment Officer](#), either directly for this asset class or general office expenses allocated to it. It shall not include other University overhead or allocated indirect costs.
27. Net Dividends (with respect to a performance benchmark / market index): a calculation of total return which approximates the minimum dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates. [definition from MSCI]
28. Net dollar exposure (of a portfolio): the arithmetic sum of the dollar market values of all long (positive) and short (negative) positions in securities, plus the notional value of futures contracts, plus the dollar delta of options contracts.
29. NRSRO: Nationally recognized statistical rating organization, such as Moody's or Standard and Poor's.
30. Overlay manager: a manager whose mandate is to manage a specific risk factor, such as currency, of a group of accounts, each managed by a separate manager. The overlay manager usually compares the aggregate (net) exposures of underlying managers and adjusts those exposures to a pre-determined risk profile, e.g., the currency profile of the Benchmark.

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31. Portfolio characteristics: attributes of a portfolio of securities, including but not limited to, weighted average market capitalization, weighted average dividend yield, weighted average price-earnings ratio, beta with respect to a benchmark, allocation among countries or geographical regions, sector weights, effective duration, credit quality.
32. Product Composite: the return on the weighted aggregate of all portfolios managed by an investment firm using a similar process; see the CFA Institute Performance Presentation Standards for further explanation.
33. Prudence Requirement: a requirement of anyone acting in the capacity of a fiduciary, that they act with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.
34. Realized annualized tracking error: the standard deviation of the monthly differences between the portfolio return and the benchmark return, using returns from the most recent 12 month period, multiplied by the square root of 12.
35. REMIC: Real estate mortgage investment conduit (CMO variety)
36. Repurchase agreement: Sale of a security with a commitment from the seller to buy back the security from the purchaser at a specified price at a designated future date. A repurchase agreement is a collateralized loan where the collateral is a security.
37. Separately managed account: an account entirely owned by The Regents of the University of California, as Fund trustee, for which investment policies and guidelines are determined jointly by the ~~Treasurer~~[Chief Investment Officer](#) and the manager.
38. Spread duration: a quantitative measure of the credit risk sensitivity of a fixed income instrument. It measures the approximate change in price of a security given a 100 basis point (one percentage point) change in the spread (over the Treasury curve) of the security.
39. Structured (levered) notes: securities where coupon or interest payments are leveraged, linked, or indexed to interest rates, index returns, foreign exchange rates, or other similar variables.
40. Unhedged benchmark: a benchmark in which the underlying securities' returns are translated from their local currency back to US dollars at each measurement date.
41. [Barclays Capital US Aggregate Index: The U.S. Aggregate covers the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS \(agency fixed-rate and hybrid ARM pass-throughs\), ABS, and CMBS. Issues are Market capitalization weighted. Securities must have a minimum maturity of one year to remain in the index. Securities must have a minimum quality investment grade by middle rating of Moody's, S&P, and Fitch.](#)
42. [Barclays Capital US TIPS Index: The U.S. TIPS Index covers all publicly issued US Treasury issued inflation linked bonds \(linked to the US Consumer Price Index\). Issues are Market capitalization weighted. Securities must have a minimum maturity of one year to remain in the index.](#)
43. [BofA/Merrill Lynch High Yield Cash Pay Index: This Index tracks the performance of US dollar-denominated below investment grade corporate debt, currently in a coupon paying period, which is publicly issued in the US domestic market. The country of risk of qualifying issuers must be an FX-G10 member, a Western European nation, or a territory of the US or a Western European nation. Individual securities of qualifying issuers must have a below investment grade rating \(based on an average of Moody's, S&P and Fitch\).](#)

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In addition, qualifying securities must have at least one year remaining term to maturity, a fixed coupon schedule and a minimum amount outstanding of \$100 million. 144a securities, both with and without registration rights, qualify for inclusion in the Index. Issues are Market capitalization weighted.

44. J.P. Morgan Emerging Markets Bond Index – Global Diversified: This index includes US dollar-denominated Brady bonds, Eurobonds, and traded loans issued by sovereign and quasi-sovereign entities. The EMBI Global Diversified defines emerging markets countries with a combination of World Bank-defined per capita income brackets and each country’s debt restructuring history. Issues are Market capitalization weighted but the index limits the weights of those index countries with larger debt stocks by only including a specified portion of these countries’ eligible current face amounts of debt outstanding. The maximum weight to a country is capped. Securities must have a minimum maturity of one year to remain in the index.
45. J.P. Morgan Global Bond Index - Emerging Markets Global Diversified [GBI-EM Global Diversified]: This index is a comprehensive Emerging Markets debt benchmark that track local currency bonds issued by Emerging Market governments (14 countries from Asia, Europe, Latin America, and Middle East/Africa). Countries are eligible for *inclusion* as long as they are classified as having a low or middle per capita income by the World Bank for at least two consecutive years. Markets with capital controls are not eligible. Issues are market capitalization weighted but the index limits the weights of those index countries with larger debt stocks by only including a specified portion of these countries’ eligible current face amounts of debt outstanding. The maximum weight to a country is capped at 10%. The excess is redistributed to those countries that have a market capitalization of less than 10%. Securities must have a minimum maturity of one year to remain in the index.
46. Citigroup Large Pension Fund Index: This index provides an appropriate benchmark for pension funds seeking to establish long-term core portfolios that more closely match the longer duration of their nominal dollar liabilities. Issues are Market capitalization weighted; sectors have fixed weights. Securities must have a minimum maturity of 7 years (non mortgage); one year (mortgage) to remain in the index. Securities must have a minimum quality BBB-/Baa3.
47. Citigroup World Government Bond Index ex-US: This index contains Sovereign debt denominated in the domestic currency (23 government bond markets: of Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Malaysia, Mexico, the Netherlands, Norway, Poland, Singapore, Spain, Sweden, Switzerland, U.K., and U.S.). Issues are Market capitalization weighted. Securities must have a minimum maturity of one year to remain in the index. Securities must have a minimum quality A-/A3.