
UNIVERSITY OF CALIFORNIA

**APPENDICES TO
INVESTMENT POLICY
STATEMENTS
OF UCRP and GEP**



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

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These Appendices are applicable to the UC Retirement Plan (UCRP) and General Endowment Pool (GEP), and are incorporated by reference into the Investment Policies of both UCRP and GEP (hereinafter referred to as “the Fund”). The term “constituents” is used to generically refer to the Pension’s participants and beneficiaries, and the Endowment’s donors.

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APPENDIX 4

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DERIVATIVES POLICY

1. INTRODUCTION

The purpose of the Derivatives Policy is to establish permitted (and prohibited) uses of derivatives, to establish procedures for managing risks related to derivative securities, and for monitoring and reporting of their use in the Fund.

2. DEFINITION AND SCOPE

A derivative is a contract or security whose value is *derived* from another security or risk factor. There are three fundamental *classes* of derivatives - futures, options and swaps - each with many variations; in addition, some securities are *combinations* of derivatives or contain *embedded* derivatives.

This Policy covers only futures, options, swaps, and their combinations. It is applicable to marketable equity and bond asset classes only, not to absolute return strategies, real estate, or private equity. Securities with embedded option features, such as callable or convertible bonds, or mortgaged backed securities, typically have different risks, and are discussed in the Fixed Income Guidelines.

3. DERIVATIVES POLICY

The Committee recognizes that all investing, including the use of derivatives, involves risk, and that derivatives use is part of modern institutional portfolio management. The principal risk of derivative strategies comes from the potential to lever a portfolio (i.e., to magnify risk exposures using borrowed funds) or otherwise speculate (express views on a security or risk factor without committing capital). Successful and prudent use of derivatives thus depends on

- Well defined uses for derivatives, and avoidance of economic leverage
- Monitoring and measuring risk, and limits on economic exposures
- Investment manager internal controls and defined procedures for managing risk

The following policies govern the use of derivative securities in the Fund:

1. All derivative strategies are *prohibited unless specifically allowed in writing* as part of an investment manager's guidelines. In the latter case, those guidelines must be consistent with the policies stated herein.
2. Use of derivatives to create economic leverage is prohibited, *except for specific strategies only*, as per the Investment Policy Statement of UCRP and GEP, Section 2g, on page 6.
3. Permitted applications for derivatives are (a) efficient substitutes for physical securities, (b) managing risk by hedging existing exposures, or (c) to implement arbitrage or other approved active management strategies, and are detailed in the following section.
4. Although individual derivative securities may be considered risky or inappropriate as stand-alone investments, their use in a portfolio may actually reduce or otherwise manage risk.

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Therefore *the risk of derivatives – and their acceptability as investments - should be measured by their impact on the portfolio in which they are used, not in isolation.*

5. The Chief Investment Officer shall implement procedures to ensure (a) that the purpose, use, and risks of derivative strategies are well understood and consistent with overall investment objectives and individual strategies, (b) that risks taken are prudent and maintained within acceptable limits, (c) that expected return is commensurate with the risk taken, (d) that their potential impact on the value of the Fund’s assets is measured periodically, and (e) that there is compliance with this policy (see below, section 8).

4. USE OF DERIVATIVES

The use of derivatives instruments and strategies will be allowed in three broad areas:

- As efficient substitutes for physical securities for portfolio management , and during portfolio rebalancing, asset allocation, or transition management
 - It is often possible to create the same economic exposure to an asset or asset class by using derivatives as by purchasing the assets directly (in the “cash” or “spot” markets), but with these advantages
 - Reduced transaction cost
 - Increased speed of execution
 - Reduced disruption to existing portfolio strategies
 - Better risk-reward trade-off than exists in the cash markets
- To manage risk by hedging existing exposures
 - Hedging is 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
- To implement arbitrage strategies
 - Arbitrage is the simultaneous purchase and sale of similar securities in order to capture a perceived pricing disparity between them

These acceptable uses are described in detail below (see sections 4A-C) in the context of specific investment functions.

4A. PORTFOLIO REBALANCING, ASSET ALLOCATION AND TRANSITION MANAGEMENT

Following are potential uses of derivatives, which *may* be permitted for use. This is a representative, not an exhaustive list.

- Maintaining exposure to an asset class or risk factor when large cash inflows or outflows are expected (without changing the existing portfolios’ holding of physical securities). In the case of equity portfolios, this is referred to as cash equitization, but the concept and practice applies to any asset class for which derivatives exist.
- Implementing an asset allocation efficiently prior to manager selection and/or before funding is completed
- Implementing a portfolio restructuring / rebalancing efficiently prior to manager selection and/or before funding is completed
- Implementing tactical asset allocation programs efficiently

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- Implementing “alpha transport” or “portable alpha” strategies (i.e., to separate capital market exposures from the active management process and maintain a desired asset allocation while optimizing the use of active risk) between distinct asset classes, such as from (to) equity to (from) fixed income
- Implementing a portfolio insurance strategy during a period of heightened market volatility

4B. EQUITY PORTFOLIO MANAGEMENT

Following are potential uses of derivatives, which *may* be permitted for use. This is a representative, not an exhaustive list.

- Maintaining exposure to an asset class when large cash inflows or outflows are expected (without changing the portfolio’s holding of physical securities)
- Obtaining exposure to a sector, country, or asset class more efficiently or more cheaply than is possible in the spot markets
- Eliminating or reducing the performance “drag” of cash held to facilitate transactions by purchasing ETF’s or futures
- Return enhancement in a risk controlled framework (e.g., selling covered calls)
- Hedging anticipated market moves (without changing a portfolio’s holding of physical securities) using futures and/or options. Such hedging is limited to (a) offsetting existing positions, or (b) offsetting anticipated near term portfolio rebalancing.
- Hedging foreign currency exposure using foreign exchange forwards, futures, or options.
- Implementing long/short, market neutral, or other arbitrage strategies.
- Implementing “alpha transport” or “portable alpha” strategies within an asset class or across distinct equity asset classes

4C. FIXED INCOME PORTFOLIO MANAGEMENT

Following are potential uses of derivatives, which *may* be permitted for use. This is a representative, not an exhaustive list.

- Maintaining exposure to an asset class or risk factor when large cash inflows or outflows are expected (without changing the portfolio’s holding of physical securities)
- Modifying a portfolio’s duration or otherwise changing its exposure to various points along the yield curve (without changing the portfolio’s holding of physical securities)
- Maintaining a portfolio’s targeted yield curve exposure while making sector or security selection decisions which would otherwise change it
- Modifying a portfolio’s credit quality by creating a synthetic credit exposure or neutralizing (hedging) a particular credit exposure
- Obtaining exposure to a sector, country, or asset class more efficiently or more cheaply than is possible in the spot markets
- Facilitating arbitrage strategies, to exploit perceived relative value between securities, subject to the fundamental policy prohibiting leverage stated above
- Eliminating or reducing the performance “drag” of cash held to facilitate transactions by purchasing futures

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- Enhancing return by substituting an exposure in the cash market with a similar derivative exposure
- Hedging anticipated market moves using futures and/or options.
- Hedging foreign currency exposure using foreign exchange forwards, futures, or options.
- Implementing “alpha transport” or “portable alpha” strategies within an asset class or across distinct fixed income asset classes

5. AUTHORITY TO USE DERIVATIVES

The Chief Investment Officer will determine whether the Fund’s investment managers may employ particular permitted strategies. For each investment manager, after determining that the purpose falls within this policy, and that the investment manager has adequate controls and procedures to monitor and measure risk, that manager’s investment guidelines will be developed or modified to permit use of those particular strategies.

The Chief Investment Officer will determine that the investment manager has, at a minimum,

- A defined purpose for each derivatives strategy within the investment mandate, including a thorough understanding of the proposed benefits and potential risks
- Developed and implemented written policies for controlling market, counterparty credit, liquidity, and basis risk
- Ability to value the derivative instruments, and explain the frequency and source of pricing
- Adequate analytical tools to measure and control the risks of the derivatives and assess their impact on the portfolio, on at least a daily basis
- Procedures for periodically stress testing the projected returns of the derivative instruments on both a stand-alone and portfolio basis. In addition, managers must demonstrate awareness of and controls for model risk.
- Adequate internal controls and organizational capabilities for monitoring and reporting market and counterparty credit risk, and internal procedures for identifying and reversing risks in excess of agreed upon limits
- Adequate internal controls and organizational capabilities to account for and control legal, settlement, and operational risk
- Ability to demonstrate compliance with this policy and answer reasonable requests for reporting derivative positions and their risk characteristics

Appropriate senior members of the Office of the Chief Investment Officer, including a senior member of the Risk Management function, will conduct the necessary due diligence and make a recommendation to the Chief Investment Officer concerning the scope of the derivative strategies permitted and any required investment guidelines or amendment(s) to the manager’s investment guidelines.

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6. PERMITTED INSTRUMENTS

6A. The following derivative types are permitted under this policy, subject to the conditions and restrictions noted above. This is a representative, not an exhaustive list. As markets evolve and new derivative instruments and strategies are developed, the Chief Investment Officer and Regents' Investment Consultant may permit the use of additional derivative instruments or strategies not listed herein, on a case-by-case basis, provided they are consistent with this Policy and with the investment manager's mandate and risk parameters.

- Interest rate futures, commodity futures and equity index futures
- Exchange traded funds (ETF's)
- Foreign currency options, futures and forwards
- Over-the-counter (OTC) options and options on futures
- Swaps and swaptions
- Inverse Floaters
- Credit Default Swaps (CDS)
- Structured Notes, *as long as* the structures are transparent and contain only types and amounts of exposures permitted in these Policies.

6B. The following derivative strategies are not permitted

- Derivative positions creating economic leverage in the portfolio context
- Derivatives used for speculative purposes

7. LIMITATIONS, CONTROLS, AND RESTRICTIONS
(see Definitions, section 9)

7A. Portfolio Rebalancing / Asset Allocation

- Selling (writing) uncovered options is prohibited
- Long futures positions must be backed by 100% cash or cash equivalents (i.e., leverage is not permitted)
- Short futures positions must be collateralized by a risk equivalent (long position) of highly correlated physical securities.

7B. Equity Portfolio Management

- The net of long and short dollar exposures to assets or currencies, whether derived from physical or derivative securities, must be less than or equal to the dollar market value of the portfolio, except for very small, inadvertent, or temporary amounts that occur in the normal course of portfolio management
- The gross dollar exposures of the portfolio from physical and derivative securities (whether futures, options, or swaps), cannot exceed 300% of the market value of the aggregate underlying portfolio, at all times
- The Chief Investment Officer may impose further limits on the use of derivatives so that derivative notional values are not only constrained by their contribution to portfolio risk factors (such as beta, regional or industry exposure) but also with consideration to:

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liquidity, counterparty credit risk, pricing transparency, and model risk. Thus derivative use may be limited even if other portfolio risk limits are not breached.

7C. Foreign Exchange Transactions

- Foreign exchange derivative contracts must have a maturity less than or equal to the anticipated holding period of the underlying security.

7D. Fixed Income Portfolio Management

- The net of long and short dollar exposures to assets or currencies, whether derived from physical or derivative securities, must be less than or equal to the dollar market value of the portfolio, except for very small, inadvertent, or temporary amounts that occur in the normal course of portfolio management
- The gross dollar exposures of the portfolio from physical and derivative securities (whether futures, options, or swaps), cannot exceed 300% of the market value of the aggregate underlying portfolio, at all times
- The Chief Investment Officer may impose further limits on the use of derivatives so that derivative notional values are not only constrained by their contribution to portfolio risk factors (such as contribution to portfolio effective duration and spread duration) but also with consideration to: liquidity, counterparty credit risk, pricing transparency, and model risk. Thus derivative use may be limited even if other portfolio risk limits are not breached.

8. MONITORING AND REPORTING

The Chief Investment Officer will implement procedures for periodic monitoring of derivative strategies. Investment managers will be required to provide the following to the Chief Investment Officer:

- Month end position report of derivatives
 - Report will include impact on portfolio, using metrics determined by the Chief Investment Officer
 - For fixed income managers only, report will include contribution to portfolio effective duration and effective convexity
- Quarterly statement of compliance with this policy
- Quarterly strategy report, including economic exposure to each class of derivatives, their use within the portfolio, performance characteristics, and risk controls employed.
- Quarterly report on counterparty credit risk for OTC derivatives

When derivatives are used by the Chief Investment Officer for portfolio rebalancing or asset allocation, the Operations and Trading functions will provide the following to the Chief Investment Officer:

- Daily position, exposure, and profit/loss (P/L) reports

The Chief Investment Officer's risk management process for derivatives will include:

- Monthly reconciliation of managers' derivatives reports with custodian positions in derivatives (for all managers who are permitted to use derivatives)

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- Monthly review of Managers' use of derivatives relative to their own policies and with their intended use of derivatives, and with this Policy
- Monthly reports of risk model results (for fixed income managers only)
 - Contribution to effective duration and effective convexity, by portfolio, of *all* positions
 - Economic exposures and risk characteristics of derivatives designated in section A above
 - Stress tests will be required for volatile classes of derivatives such as IOs, POs, and Inverse Floaters
- A monthly statement that all portfolios are in compliance with this policy, and a description of any instances of non-compliance and their disposition
- An annual report on potential model risk (for the risk model currently in use by the Chief Investment Officer)

While the risk of an individual derivative security may be large, risk will be assessed in a portfolio framework (i.e., how each portfolio responds to various market and interest rate scenarios, with and without the derivatives).

9. DEFINITIONS

- a. Derivative: a bilateral contract or payment exchange agreement whose value derives from the value of an underlying asset, reference rate, or index.
- b. Investment Manager: term includes portfolio managers with a fiduciary responsibility for a given investment mandate, whether directly employed by the Chief Investment Officer or an external asset management firm.
- c. Leverage: in the context of these guidelines means "economic leverage," not "gross leverage."
- d. 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
- e. 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.
- f. 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.
- g. 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.
- h. Gross leverage: a term used to indicate that the gross dollar exposure of a portfolio exceeds the net market value of the total portfolio

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APPENDIX 5

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PROXY VOTING POLICY

INTRODUCTION

It is part of the generally accepted standards of fiduciary care that proxy-voting rights must be diligently exercised as an aspect of fiduciary duty. The purpose of this policy is to establish the principles and process for the exercise of that duty.

PROXY VOTING POLICY

1. In general, but with certain exceptions, proxy issues that are of a routine business management nature, such as election of directors and appointment of auditors, are voted in accordance with the recommendations of management.
2. Other issues will be reviewed case-by-case and are generally voted according to existing Chief Investment Officer's Proxy Guidelines (see Exhibit I).
3. For all shares in the Russell 3000 Index portfolio managed by State Street Global Advisors (SSGA), the manager will vote proxies in accordance with the Chief Investment Officer's Proxy Guidelines.
4. For all shares in the MSCI EAFE Index fund, SSGA will vote proxies in accordance with SSGA's Proxy voting policy, incorporated by reference.
5. If the Chief Investment Officer's Proxy Guidelines conflict with those of SSGA, those of the Chief Investment Officer shall have precedence.
6. SSGA may use a third party organization, such as Institutional Shareholder Services (ISS) to manage the voting process and will provide a written summary of all proxy votes on all Fund assets on an annual basis.
7. For all shares in external managers' portfolios, the Chief Investment Officer will appoint a third party organization, such as Institutional Shareholder Services (ISS), to vote all proxies in accordance with the Chief Investment Officer's Proxy Guidelines, and to provide a written summary of all proxy votes on all Fund assets on an annual basis.

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APPENDIX 5 - EXHIBIT I

**OFFICE OF THE CHIEF INVESTMENT OFFICER GUIDELINES FOR PROXY
VOTING**

Note: These are general guidelines with broad application. Company-specific issues, such as past performance, shareholder responsiveness, etc. may result in a deviation from the standard recommendation.

I. Social Issues

Issues that are controversial or relate to social issues (i.e., tobacco issues, animal testing, military contracts, etc.) are reviewed on a case-by-case basis in light of their potential long-term economic impact on shareholders, along with ongoing review of company codes of conduct and social responsibility, any existing UC policies, and the advice of independent proxy monitor services. This may result in a vote against management if the company is not reasonably responsive to shareholder concerns.

II. Corporate Governance

A. Classified Board (or staggered board proposals): The Chief Investment Officer recommends annual elections for directors and that classified boards not be allowed, as they tend to entrench management.

B. Cumulative voting or restoration of cumulative voting issues: In general, the Chief Investment Officer recommends a vote in favor of cumulative voting. California law allows companies incorporated in the state to eliminate cumulative voting with shareholder vote.

C. Preemptive Rights or restoration of limited preemptive rights: The Chief Investment Officer recommends a vote in favor, as this is normally good for shareholders.

D. Confidential Voting Issues: The Chief Investment Officer recommends a vote with management, as existing voting safeguards are normally adequate to protect shareholder interests.

E. Authorization of blank check preferred (poison pill): The Chief Investment Officer recommends a vote against these anti-takeover measures as they overtly entrench management and have specific anti-takeover intent.

F. Fair price super-majority proposals: The Chief Investment Officer recommends a vote against supermajority proposals of 85 percent or more.

G. Golden Parachutes: Although the Chief Investment Officer recommends a vote against these incentives for management when they provide overly rich rewards for executives upon a takeover of the company, they should be assessed on a case-by-case basis with that negative criterion in mind.

III. Compensation Issues

A. Stock option plans resulting in over 10 percent dilution shall be examined on a case-by-case basis to determine the dilution in the context of the peer group and norms. Plans with excessive dilution may be voted against.

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- B. Stock options for non-employee directors are examined on a case-by-case basis. Excessively rich plans for non-employee directors, where the annual payments exceed the average for its peer group may be voted against.
- C. Compensation for non-employee directors, which take the form of retirement payments, is normally voted against.
- D. Exchanging underwater options (granting lower-priced options to replace higher-priced options) issues are normally voted against.
- E. Granting stock options to executives to be exercised at less than fair market value is normally voted against.
- F. Employee stock purchase plans normally are voted in favor as they involve a purchase of common shares at 15 percent of market value through payroll deduction. Plans at discounts of more than 85 percent (although there are very few) are examined on a case-by case basis.

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APPENDIX 6

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INVESTMENT MANAGER
SELECTION, OVERSIGHT, REVIEW, AND TERMINATION

When selecting investment managers, the Chief Investment Officer will:

- Follow a due-diligence process to make prudent selections of investment managers. The due-diligence process will involve analyzing investment manager candidates in terms of certain:
 - **Qualitative Characteristics**, such as key personnel, investment philosophy, investment strategy, research orientation, decision-making process, and risk controls.
 - **Quantitative Characteristics**, such as CFA Institute-compliant composite return data, risk-adjusted rates of return (e.g., information ratios), and other risk factors.
 - **Organizational Factors**, such as type and size of firm, ownership structure, client-servicing capabilities, record of gaining and keeping clients, and fees.Other factors will be considered as part of the due-diligence process as facts and circumstances warrant.
- Use third-party database(s) to access appropriate screening information and ensure an unbiased and objective search process.
- With respect to qualified retirement plans, select only entities that meet the definition of “investment manager” under Section 3(38) of ERISA (a bank, insurance company, or investment adviser registered under the Investment Advisers Act of 1940).

A key aspect of a prudent investment program is the designation of a performance benchmark for each investment manager. This benchmark should be specified in writing, and should satisfy the same set of quality criteria as stated for asset class benchmarks in [Appendix 1](#), section B. In addition, the benchmark for an actively managed portfolio should also satisfy the criteria of Ownership: the investment manager should be aware of and accept accountability for the constituents and performance of the benchmark. It is encouraged that the benchmark be embedded in and integral to the investment process and procedures of the investment manager.

Investment managers will provide to the Chief Investment Officer the following:

- A monthly performance statement for the portfolio (gross and net) and the benchmark. Also include the gross performance for the product Composite at least quarterly
- If available, a monthly or quarterly forecast risk report, using the investment manager’s risk system, showing the total, systematic (“common factor”), and non-systematic (“residual”) risk of the portfolio relative to the benchmark
- A monthly or quarterly variance analysis, indicating sources of performance variances (difference between portfolio and benchmark return), and an explanation of any material differences
- A quarterly review of portfolio and strategy performance including a market outlook
- An annual statement of compliance with investment guidelines
- Any other items specified by the appropriate guidelines under the Policy

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In order to ensure that thorough and consistent manager oversight is carried out on a regular basis, it is the intent of the Chief Investment Officer to meet with each investment manager once each calendar year, and no less than once every eighteen months. In addition to the investment performance review listed above, several other issues will be reviewed. These include brokerage commissions, account turnover, personnel turnover, client service issues, investment guideline compliance and changes in ownership.

The Committee acknowledges that, from time to time, it may be necessary to replace an existing investment manager. Consequently, the following guidelines will govern review and/or termination of investment managers because of qualitative, quantitative, or organizational concerns.

At each quarterly performance evaluation, the Chief Investment Officer will initiate an inquiry should any investment manager not meet the established performance objectives, including:

- Significantly underperform the previously agreed-upon benchmark over the cumulative performance period, with proper adjustment for the manager's active risk.

Additionally, the Chief Investment Officer will initiate an inquiry should any investment manager:

- Undergo significant organizational changes, including departure of key investment professionals;
- Implement significant change in strategy;
- Be involved in material litigation;
- Be involved in an SEC or other securities investigation;
- Be acquired by or acquire another firm.

After reviewing the appropriate qualitative and quantitative information, the Chief Investment Officer may deem it appropriate to terminate, place the investment manager on notice, or to take no action at that time. In cases in which the manager is placed on notice, the manager will be informed of this decision in writing. The manager may be removed from this status upon exhibiting significant organizational and/or performance changes.

Should the investment manager fail to exhibit the desired changes, the Chief Investment Officer will conduct further discussions and analysis to determine if termination is warranted. While a systematic process will be carried out in such instances, the decision to retain or terminate a manager will not be made by a formula and will be made at the discretion of the Chief Investment Officer. It is a judgment that depends on the Chief Investment Officer's confidence in the investment firm to perform in the future.

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APPENDIX 7

Asset Class Guidelines

- 7A) U.S. Equity Guidelines
 - 7B) Developed Market Non US Equity Guidelines
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APPENDIX 7A

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U.S. EQUITY
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 U.S. Equity 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 common stocks of US companies which exceeds the return on the broad US equity market, measured by the Russell 3000 Tobacco Free Index (“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 broad equity 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 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 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

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 250 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 or held by Managers for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian. The 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 common stocks that are listed on national securities exchanges. These common stocks shall be predominantly of companies domiciled in the United States, or which derive the majority of their sales and earnings from the United States. Managers may also invest in stocks that are traded over-the-counter and in other equity-related securities and private placements as limited in their guidelines. Subject to limitations in their guidelines, Managers may also obtain equity exposure through their own specialty commingled funds.

Use of and limits on equity derivative securities by individual managers must be specified in writing in their guidelines and must be consistent with the Derivatives Policy, Appendix 4.

Nothing in these guidelines shall be construed to restrict the use of diversified global equity strategies (consisting of equities of U.S. and Non-U.S. domiciled companies). The Chief Investment Officer shall ensure that such strategies are consistent with both these guidelines and the guidelines of the Non-U.S. equity Program, and the Manager(s)' guidelines will be structured to ensure that performance and risk objectives for both equity classes are met.

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 and margin requirements as part of a portable alpha strategy
- Buy party-in-interest securities
- Buy lettered, legend, or other restricted stock, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives
- Employ gross leverage in their portfolio in excess of 300% of the market value of the portfolio, at all times

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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 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.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.
- The aggregate holdings of any security may not exceed 4.9% of that security's outstanding shares.
- No investment with any single manager can represent more than 12% of the total Program's assets. Passive (i.e., index replicating) managers are not subject to this limitation.

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 Chief Investment Officer at the Manager's discretion when best execution is available.

f. Managing Cash Flows

The 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 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 Chief Investment Officer shall provide the following reports to the Committee:

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APPENDICES TO INVESTMENT POLICY STATEMENTS

- a. A performance attribution explaining differences in sector weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 7B

This version: November 15, 2012

Last approved: February 14, 2006

DEVELOPED MARKET NON U.S. EQUITY
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 Developed Market Non U.S. Equity 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 common stocks of Non US domiciled, developed market companies which exceeds the return of the MSCI World ex-US (Net Dividends) Tobacco Free Index (“Benchmark”), while maintaining risk similar to that of the Benchmark. The Benchmark shall be unhedged (see part (e) below).

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 broad equity 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 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 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

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 300 basis points. Each Manager will have a unique active risk budget, relative to its style

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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.

e. Currency Risk

The Committee accepts that as a US dollar denominated investor, investing in Non US developed markets equity implicitly involves currency risk. The Committee accepts this additional risk or volatility as part of the asset class and has adopted an “unhedged” performance benchmark. An unhedged benchmark is a benchmark in which the underlying securities’ returns are translated from their local currency back to US dollars at each measurement date.

However, this general policy toward currency risk shall not prevent individual Managers from fully or partially hedging or otherwise actively managing the currency risk in their portfolios (subject to their individual guidelines). Nor shall it prevent the Chief Investment Officer from employing currency overlay managers to manage the currency risk of the aggregate portfolio.

The contribution to active risk resulting from the aggregate of active currency management, whether by Managers or by the Chief Investment Officer’s overlay managers, shall be included in the total tracking error and be subject to limitations above and to the Retirement Fund’s overall risk budget as described in Appendix 2.

f. 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 interests 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 for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian. The Chief Investment Officer or designated overlay manager may equitize this cash using appropriate derivative contracts.

b. Types of Securities

The Program will be invested in diversified portfolios of common stocks that are listed on national securities exchanges. These common stocks shall be predominantly of developed market companies domiciled outside the United States, or which derive the majority of their sales and earnings from countries outside the United States. Managers may also invest in stocks that are traded over-the-counter and in other equity-related securities and private placements as limited in their guidelines. Subject to limitations in their guidelines, Managers may also obtain equity exposure through their own specialty commingled funds.

Managers may use currency futures, forward contracts, or options to manage currency risk and hedge existing equity exposures. Use of and limits on equity derivative securities by individual managers must be specified in writing in their guidelines and must be consistent with the Derivatives Policy, Appendix 4.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

Nothing in these guidelines shall be construed to restrict the use of diversified global equity strategies (consisting of equities of U.S. and Non-U.S. domiciled companies). The Chief Investment Officer shall ensure that such strategies are consistent with both these guidelines and the guidelines of the U.S. equity Program, and the Manager(s)' guidelines will be structured to ensure that performance and risk objectives for both equity classes are met.

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, within separately managed accounts, as per the Policy, section 5b.
- Lend securities
- Purchase commodities or commodity derivatives within separately managed accounts
- Purchase fixed income securities except for cash equivalents and margin requirements as part of a portable alpha strategy
- Buy party-in-interest securities
- Buy lettered, legend, or other restricted stock, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives
- Employ gross leverage in their portfolio in excess of 300% of the market value of the portfolio, at all times

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 Chief Investment Officer is responsible for managing aggregate risk exposures, including country allocation, industry allocation, and currency. 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.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.
- The aggregate holdings of any security may not exceed 4.9% of that security's outstanding shares.
- No investment with any single manager can represent more than 12% of the total Program's assets. Passive (i.e., index replicating) managers are not subject to this limitation.

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.

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

f. Managing Cash Flows

The 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 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in sector, country, and currency weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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

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- e. An annual statement of compliance with investment guidelines
- 5. Definitions: See Appendix 8**

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APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7C

This Version: November 15, 2012

Last approved: February 14, 2006

EMERGING MARKET NON U.S. EQUITY
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 Emerging Market Non U.S. Equity 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 common stocks of emerging market domiciled companies which exceeds the return on the MSCI Emerging Market (Net Dividends) Index (“Benchmark”), while maintaining risk similar to that of the Benchmark. The Benchmark shall be unhedged (see part (e) below).

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 broad equity 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 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 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

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 400 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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APPENDICES TO INVESTMENT POLICY STATEMENTS

e. Currency Risk

The Committee accepts that as a US dollar denominated investor, investing in Emerging Markets equity implicitly involves currency risk. The Committee accepts this additional risk or volatility as part of the asset class and has adopted an “unhedged” performance benchmark. An unhedged benchmark is a benchmark in which the underlying securities’ returns are translated from their local currency back to US dollars at each measurement date.

However, this general policy toward currency risk shall not prevent individual Managers from fully or partially hedging or otherwise actively managing the currency risk in their portfolios (subject to their individual guidelines). Nor shall it prevent the Chief Investment Officer from employing currency overlay managers to manage the currency risk of the aggregate portfolio.

The contribution to active risk resulting from the aggregate of active currency management, whether by Managers or by the Chief Investment Officer’s overlay managers, shall be included in the total tracking error and be subject to limitations above and to the Retirement Fund’s overall risk budget as described in Appendix 2.

f. 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 interests 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 for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian. The 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 common stocks that are listed on national securities exchanges. These common stocks shall be predominantly of companies domiciled in emerging market countries. Managers may also invest in stocks that are traded over-the-counter and in other equity-related securities and private placements as limited in their guidelines. Subject to limitations in their guidelines, Managers may obtain equity exposure through their own specialty commingled funds.

Managers may use currency futures, forward contracts, or options to manage currency risk and hedge existing equity exposures. Use of and limits on equity derivative securities by individual managers must be specified in writing in their guidelines and must be consistent with the Derivatives Policy, Appendix 4.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, within separately managed accounts, as per the Policy, section 5b.
- Lend securities
- Purchase commodities or commodity derivatives, within separately managed accounts
- Purchase fixed income securities within separately managed accounts, except for cash equivalents and margin requirements as part of a portable alpha strategy, or in lieu of the same company's equity securities
- Buy party-in-interest securities
- Buy lettered, legend, or other restricted stock, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives
- Employ gross leverage in their portfolio in excess of 300% of the market value of the portfolio, at all times

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 Chief Investment Officer is responsible for managing aggregate risk exposures, including country allocation, industry allocation, and currency. 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.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.
- The aggregate holdings of any security may not exceed 4.9% of that security's outstanding shares.
- No investment with any single manager can represent more than 15% of the total Program's assets. Passive (i.e., index replicating) managers are not subject to this limitation.

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 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 Chief Investment Officer at the Manager's discretion when best execution is available.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

f. Managing Cash Flows

The 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 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in sector, country, and currency weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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

UNIVERSITY OF CALIFORNIA
APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7D

This version: November 15, 2012

Last approved: March 19, 2008

GLOBAL EQUITY
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 Global Equity allocation of the Fund (“the Program”). Wherever appropriate, these guidelines and objectives are consistent with guidelines for other Public Equity classes. 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 common stocks which exceeds the return on the global equity market, measured by the MSCI All Country World Index (ACWI) Investable Market Tobacco Free (Net Dividends) Index (“Benchmark”), while maintaining risk similar to that of the Benchmark. The Benchmark shall be unhedged (see part (e) below).

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 equity 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 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 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

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 400 basis points. Each Manager will have a unique active risk budget, relative to its style

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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.

e. Currency Risk

The Committee accepts that as a US dollar denominated investor, investing in Global equity implicitly involves currency risk. The Committee accepts this additional risk or volatility as part of the asset class and has adopted an “unhedged” performance benchmark. An unhedged benchmark is a benchmark in which the underlying securities’ returns are translated from their local currency back to US dollars at each measurement date.

However, this general policy toward currency risk shall not prevent individual Managers from fully or partially hedging or otherwise actively managing the currency risk in their portfolios (subject to their individual guidelines). Nor shall it prevent the Chief Investment Officer from employing currency overlay managers to manage the currency risk of the aggregate portfolio.

The contribution to active risk resulting from the aggregate of active currency management, whether by Managers or by the Chief Investment Officer’s overlay managers, shall be included in the total tracking error and be subject to limitations above and to the Retirement Fund’s overall risk budget as described in Appendix 2.

f. 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 or held by Managers for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian. The 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 common stocks that are listed on national securities exchanges. Managers may also invest in stocks that are traded over-the-counter and in other equity-related securities (such as ETF’s) and private placements as limited in their guidelines. Subject to limitations in their guidelines, Managers may also obtain equity exposure through their own specialty commingled funds.

Managers may use currency futures, forward contracts, or options to manage currency risk and hedge existing equity exposures. Use of and limits on currency and equity derivative securities by managers must be specified in writing in their guidelines and must be consistent with the Derivatives Policy, Appendix 4.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

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 and margin requirements as part of a portable alpha strategy
- Buy party-in-interest securities
- Buy lettered, legend, or other restricted stock, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives
- Employ gross leverage in their portfolio in excess of 300% of the market value of the portfolio, at all times

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 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.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.
- The aggregate holdings of any security may not exceed 4.9% of that security's outstanding shares.
- No investment with any single manager can represent more than 15% of the total Program's assets. Passive (i.e., index replicating) managers are not subject to this limitation.

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 Chief Investment Officer at the Manager's discretion when best execution is available.

f. Managing Cash Flows

The 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.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

3. Evaluation and Review

a. Policy and Guideline Review

The 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in sector, currency, and country weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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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APPENDICES TO INVESTMENT POLICY STATEMENTS**

APPENDIX 7E

This version: November 15, 2012

Last approved: February 14, 2006

**LONG DURATION FIXED INCOME
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 Long Duration Fixed Income 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 US dollar denominated bonds which exceeds the return on the long duration US fixed income market, as measured by the Citigroup Large Pension Fund Index (“Benchmark”), while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by the Chief Investment Officer’s internal fixed income staff, and may be supplemented by hiring multiple external investment managers (internal and external strategies will be collectively referred to as “Managers”). Each strategy will focus on a subset of the broad fixed income 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 Chief Investment Officer will monitor whether the aggregate of all fixed income 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 Chief Investment Officer will monitor each Manager’s adherence to its respective guidelines. In no case may a Manager’s guidelines conflict with the Guidelines for the Program.

c. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 150 basis points. Each Manager will have a unique active risk budget, relative to its style

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APPENDICES TO INVESTMENT POLICY STATEMENTS

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.

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

The portfolio will be invested **primarily** in marketable, publicly traded, investment grade fixed income instruments, notes and debentures denominated in U.S. dollars.

b. Types of Securities

The Program will be invested in diversified portfolios of fixed income securities, similar to those in the benchmark, and their derivative securities, subject to restrictions noted below in section 2c and 2d. For a description of the Benchmark see Appendix 8 (Definitions).

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of "allowable" investment securities. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents' Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments

- a. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal Agencies or U.S. government-sponsored corporations and agencies
- b. Obligations of U.S. and foreign corporations such as corporate bonds, convertible and non-convertible notes and debentures, preferred stocks, and bank loans
- c. Mortgage-backed and asset-backed securities, including CMBS, mortgage TBA's, and other MBS derivatives, including CMO's, REMICS, IO's, and PO's
- d. CBO's, CLO's, and CDO's
- e. Obligations of international agencies, supranational entities, and foreign governments (or their subdivisions or agencies), as well as foreign currency linked securities, warrants, preferred stocks and forward contracts.
- f. Obligations issued or guaranteed by U.S. local, city and state governments and agencies
- g. Private Placements or Rule 144A securities, issued with or without registration rights

2. Short term fixed income instruments

- a. US Treasury and Agency bills and notes
- b. Certificates of deposit
- c. Bankers acceptances
- d. Commercial paper

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APPENDICES TO INVESTMENT POLICY STATEMENTS

- e. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
 - f. Eurodollar CD's, TD's, and commercial paper
 - g. US and Eurodollar floating rate notes
 - h. Money market funds managed by the Custodian
 - i. Short Term Investment Pool (STIP), managed by the Chief Investment Officer
3. Fixed income derivatives
- a. US Treasury, Agency, and Eurodollar futures
 - b. Interest rate options, swaps, and swaptions
 - c. Credit default swaps (CDS) and their derivatives
 - d. Foreign currency forward contracts and options
 - e. Inflation linked futures and swaps
 - f. Total rate of return swaps

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Purchase equity securities (other than preferred stock) or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy
- Purchase or sell foreign exchange contracts for any purpose other than hedging their portfolio exposures

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - The average weighted effective duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
 - No more than 10% of the Program's investments, measured by market value, should be below "investment grade", i.e. rated lower than the following standards or their equivalent by all major NRSRO's
 - Standard & Poor's and Fitch (BBB-)
 - Moody's (Baa3)
 - Commercial Paper must have a rating of at least A-1, P-1, D-1, or F-1

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- The Program's investments should exhibit an average credit quality of A (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
- Except for securities issued by the US Treasury or Agencies of the US Government, no more than 3% of the Program's market value may be invested in any single issuer.
- **Liquidity risk**
 - No more than 20% of the Program's market value may be invested in Private Placements or Rule 144A securities.
 - The Program's investments in aggregate of any security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Chief Investment Officer.
- **Foreign exchange risk**
 - No more than 10% of the Program market value can be invested in securities denominated in currencies other than US dollar.
- **Asset allocation risk**
 - The Program's investments in aggregate may overweight or underweight Core sectors so that the Core sector contribution to portfolio effective duration is within +/- 50% of the corresponding Benchmark core sector contribution to portfolio effective duration. [Core sectors are defined as Government Sponsored, Credit, and Collateral.]
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.

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

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

f. Managing Cash Flows

Managers may use derivatives and foreign exchange forwards for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio. (Leverage is not permitted.)

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3. Evaluation and Review

a. Policy and Guideline Review

The 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in sector weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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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APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7F

This Version: November 15, 2012

Last approved: February 14, 2006

CORE FIXED INCOME
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 Core Fixed Income 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 US dollar denominated bonds which exceeds the return on the aggregate US fixed income market, as measured by the Barclays Capital US Aggregate Index (“Benchmark”), while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by the Chief Investment Officer’s internal fixed income staff, and may be supplemented by hiring multiple external investment managers (internal and external strategies will be collectively referred to as “Managers”). Each Manager’s strategy will focus on a subset of the broad fixed income 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 Chief Investment Officer will monitor whether the aggregate of all fixed income 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 Chief Investment Officer will monitor each Manager’s adherence to its respective guidelines. In no case may a Manager’s guidelines conflict with the Guidelines for the Program.

c. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, or style benchmark, which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 100 basis points. Each Manager will have a unique active risk budget, relative to its style

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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.

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

The portfolio will be invested primarily in marketable, publicly traded, investment grade fixed income instruments, notes and debentures denominated in U.S. dollars.

b. Types of Securities

The Program will be invested in diversified portfolios of fixed income securities, similar to those in the benchmark, and their derivative securities, subject to restrictions noted below in section 2c and 2d. For a description of the Benchmark see Appendix 8 (Definitions).

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of “allowable” investment securities. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents’ Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments

- a. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal Agencies or U.S. government-sponsored corporations and agencies
- b. Obligations of U.S. and foreign corporations such as corporate bonds, convertible and non-convertible notes and debentures, preferred stocks, and bank loans
- c. Mortgage-backed and asset-backed securities, including CMBS, mortgage TBA’s, and other MBS derivatives, including CMO’s, REMICS, IO’s, and PO’s
- d. CBO’s, CLO’s, and CDO’s
- e. Obligations of international agencies, supranational entities, and foreign governments (or their subdivisions or agencies), as well as foreign currency linked securities, warrants, preferred stocks and forward contracts.
- f. Obligations issued or guaranteed by U.S. local, city and state governments and agencies
- g. Private Placements or Rule 144A securities, issued with or without registration rights

2. Short term fixed income instruments

- a. US Treasury and Agency bills and notes
- b. Certificates of deposit
- c. Bankers acceptances
- d. Commercial paper

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- e. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
 - f. Eurodollar CD's, TD's, and commercial paper
 - g. US and Eurodollar floating rate notes
 - h. Money market funds managed by the Custodian
 - i. Short Term Investment Pool (STIP), managed by the Chief Investment Officer
3. Fixed income derivatives
- a. US Treasury, Agency, and Eurodollar futures
 - b. Interest rate options, swaps, and swaptions
 - c. Credit default swaps (CDS) and their derivatives
 - d. Foreign currency forward contracts and options
 - e. Inflation linked futures and swaps
 - f. Total rate of return swaps

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Purchase equity securities (other than preferred stock) or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy
- Purchase or sell foreign exchange contracts for any purpose other than hedging their portfolio exposures

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - The average weighted effective duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
 - No more than 10% of the Program's investments, measured by market value, should be below "investment grade", i.e. rated lower than the following standards or their equivalent by all major NRSRO's
 - Standard & Poor's and Fitch (BBB-)
 - Moody's (Baa3)
 - Commercial Paper must have a rating of at least A-1, P-1, D-1, or F-1

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- The Program's investments should exhibit an average credit quality of A (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
- Except for securities issued by the US Treasury or Agencies of the US Government, no more than 3% of the Program's market value may be invested in any single issuer.
- **Liquidity risk**
 - No more than 20% of the Program's market value may be invested in Private Placements or Rule 144A securities.
 - The Program's investments in aggregate of any security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Chief Investment Officer.
- **Foreign exchange risk**
 - No more than 10% of the Program market value can be invested in securities denominated in currencies other than US dollar.
- **Asset allocation risk**
 - The Program's investments in aggregate may overweight or underweight Core sectors so that the Core sector contribution to portfolio effective duration is within +/- 50% of the corresponding Benchmark core sector contribution to portfolio effective duration. [Core sectors are defined as Government Sponsored, Credit, and Collateral.]
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.

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

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

f. Managing Cash Flows

Managers may use derivatives and foreign exchange forwards for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio. (Leverage is not permitted.)

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APPENDICES TO INVESTMENT POLICY STATEMENTS

3. Evaluation and Review

a. Policy and Guideline Review

The 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in sector weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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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APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7G

This Version: November 15, 2012

Last approved: May 6, 2009

TIPS (TREASURY INFLATION PROTECTED 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 TIPS 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 US Government issued, dollar denominated, inflation protected bonds which exceeds the return on the Barclays Capital US TIPS Index (“Benchmark”), while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be managed by the Chief Investment Officer’s internal fixed income staff (“Manager”). The Chief Investment Officer will monitor whether the Program adheres to these Guidelines, and in particular achieves the performance and risk objectives stated below.

c. Performance Objectives

The performance objective of the Program is to exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 200 basis points.

e. Other Constraints and Considerations

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

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APPENDICES TO INVESTMENT POLICY STATEMENTS

2. Investment Guidelines

a. Asset Allocation / Types of Securities

The Program will be invested in diversified portfolios of fixed income securities, similar to those in the benchmark, and their derivative securities, subject to restrictions noted below in section 2c and 2d. For a description of the Benchmark see Appendix 8 (Definitions).

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of “allowable” investment securities. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents’ Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments
 - a. US Treasury Inflation Protected Securities
 - b. US Treasury nominal bonds and notes
 - c. Non-US sovereign inflation linked bonds (G10 countries only)
 - d. Corporate issued inflation linked bonds
2. Short term fixed income instruments
 - a. US Treasury bills and notes
 - b. Money market funds managed by the Custodian
 - c. Short Term Investment Pool (STIP), managed by the Chief Investment Officer
3. Fixed income derivatives
 - a. US Treasury and Eurodollar futures
 - b. Foreign currency forward contracts and options
 - c. Inflation linked futures and swaps
 - d. Total rate of return swaps

b. Restrictions

The Manager may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Purchase equity securities or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy
- Purchase or sell foreign exchange contracts for any purpose other than hedging their portfolio exposures

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APPENDICES TO INVESTMENT POLICY STATEMENTS

c. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - The average weighted effective duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
 - No more than 10% of the Program's investments, measured by market value, may be issued by non sovereign issuers
 - No more than 3% of the Program's market value may be invested in any single non sovereign issuer
- **Foreign exchange risk**
 - No more than 10% of the Program market value may be invested in securities denominated in currencies other than US dollar
 - All securities denominated in currencies other than US dollar must be currency hedged back to US Dollar

d. Managing Cash Flows

Manager may use derivatives and foreign exchange forwards for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio. (Leverage is not permitted.)

3. Evaluation and Review

a. Policy and Guideline Review

The 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.

4. Reporting

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

- a. A summary of Program investments and risks.
- b. A summary of Program performance, on an absolute and benchmark relative basis.

Manager will be required to provide the Chief Investment Officer monthly and quarterly reports, including but not limited to:

- a. Monthly accounting statements showing portfolio income, holdings and transactions

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APPENDICES TO INVESTMENT POLICY STATEMENTS

- b. Quarterly review of portfolio and strategy performance including a market outlook
- c. Annual statement of compliance with investment guidelines

5. Definitions: See Appendix 8

UNIVERSITY OF CALIFORNIA
APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7H

This Version: November 15, 2012

Last approved: February 14, 2006

NON DOLLAR DENOMINATED FIXED INCOME
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 Non Dollar Denominated Fixed Income 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 Non-US dollar denominated bonds which exceeds the return on the Non Dollar denominated global fixed income market, as measured by the Citigroup World Government Bond–ex U.S Index. (“Benchmark”), while maintaining risk similar to that of the Benchmark. The Benchmark shall be unhedged (see part (e) below).

b. Investment Strategy

The Program shall be implemented by a combination of the Chief Investment Officer’s internal fixed income staff and multiple external investment managers (internal and external strategies will be collectively referred to as “Managers”). Each Manager’s strategy will focus on a subset of the Non US dollar denominated fixed income 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 Chief Investment Officer will monitor whether the aggregate of all Non US dollar denominated fixed income 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 Chief Investment Officer will monitor each Manager’s adherence to its respective guidelines. In no case may a Manager’s guidelines conflict with the Guidelines for the Program.

c. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, (benchmark), which is appropriate to its individual strategy, and specified in its guidelines.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 200 basis points. Each Manager will have a unique active risk budget, relative to its specific 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.

e. Currency Risk

The Committee accepts that as a US dollar denominated investor, investing in Non US dollar denominated bonds implicitly involves currency risk. The Committee accepts this additional risk or volatility as part of the asset class and has adopted an “unhedged” performance benchmark. An unhedged benchmark is a benchmark in which the underlying securities’ returns are translated from their local currency back to US dollars at each measurement date.

However, this general policy toward currency risk shall not prevent individual Managers from fully or partially hedging or otherwise actively managing the currency risk in their portfolios (subject to their individual guidelines). Nor shall it prevent the Chief Investment Officer from employing currency overlay managers to manage the currency risk of the aggregate portfolio.

The contribution to active risk resulting from the aggregate of active currency management, whether by Managers or by the Chief Investment Officer’s overlay managers, shall be included in the total tracking error and be subject to limitations above and to the Retirement Fund’s overall risk budget as described in Appendix 2.

f. 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

The portfolio will be invested primarily in marketable, publicly traded, investment grade fixed income instruments, notes and debentures issued by developed market countries other than the U.S. and denominated in currencies other than U.S. dollars.

Nothing in these guidelines shall be construed to restrict the use of diversified global fixed income strategies (consisting of bonds denominated in both US and Non-US currencies). The Chief Investment Officer shall ensure that such strategies are consistent with both these guidelines and the guidelines of the other fixed income Programs, and may develop separate guidelines for such strategies to ensure that performance and risk objectives for all fixed income classes are met.

b. Types of Securities

The Program will be invested in diversified portfolios of fixed income securities, similar to those in the benchmark, and their derivative securities, subject to restrictions noted below in section 2c and 2d. For a description of the Benchmark see Appendix 8 (Definitions).

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APPENDICES TO INVESTMENT POLICY STATEMENTS

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of “allowable” investment securities. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents’ Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments
 - a. Obligations of foreign governments (or their subdivisions or agencies), international agencies, and supranational entities
 - b. Obligations of U.S. and foreign corporations such as corporate bonds, convertible and non-convertible notes and debentures, preferred stocks, and bank loans
 - c. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal Agencies or U.S. government-sponsored corporations and agencies
2. Short term fixed income instruments
 - a. US dollar and foreign currencies
 - b. Short term obligations of US and foreign governments
 - c. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
 - d. Eurodollar CD’s and Eurodollar floating rate notes
 - e. Money market funds managed by the Custodian
 - f. Short Term Investment Pool (STIP), managed by the Chief Investment Officer
3. Currency and Fixed income derivatives
 - a. Government bond and other bond index futures
 - b. Interest rate options, swaps, and swaptions
 - c. Single name or basket Credit default swaps (CDS)
 - d. Foreign currency forward contracts and options
 - e. Total rate of return swaps

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b..
- Purchase currencies (or bonds denominated in currencies) not freely convertible to US dollars
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Purchase equity securities or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy

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APPENDICES TO INVESTMENT POLICY STATEMENTS

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - The average weighted effective duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
 - No more than 10% of the Program's investments, measured by market value, should be below "investment grade", i.e. rated lower than the following standards or their equivalent by all major NRSRO's
 - Standard & Poor's and Fitch (BBB-)
 - Moody's (Baa3)
 - The Program's investments should exhibit an average credit quality of A (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
 - Except for securities issued by the US Treasury or sovereign entities included in the benchmark, no more than 3% of the Program's market value may be invested in any single issuer.
- **Liquidity risk**
 - The Program's investments in aggregate of any security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Chief Investment Officer.
- **Foreign exchange risk**
 - No more than 20% of the Program market value can be invested in securities denominated in currencies other than currencies included in the Benchmark
 - No more than 20% of the Program's net foreign exchange exposure (inclusive of currency overlay managers) can be in currencies not included in the Benchmark
- **Asset allocation risk**
 - The Program's investments in aggregate may overweight or underweight currencies so that each currency's exposure is within +/- 20 percentage points of the corresponding Benchmark currency's exposure for Euro and Yen denominated bonds, and is within +/- 10 percentage points of the corresponding Benchmark currency's exposure for all other currency denominated bonds, including US Dollar. That is, if Euro denominated bonds contribute 50% of the Benchmark, then the Program's Euro bonds exposure should be between 30% and 70%.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.

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

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

f. Managing Cash Flows

Managers may use derivatives and foreign exchange forwards for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio. (Leverage is not permitted.)

3. Evaluation and Review

a. Policy and Guideline Review

The 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in country and currency weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the 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.
- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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.

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- 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 7I

This Version: November 15, 2012

Last approved: February 14, 2006

HIGH YIELD DEBT
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 High Yield Debt 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 high yield US dollar denominated debt which exceeds the return of the non-investment grade fixed income market, as measured by the Merrill Lynch High Yield Cash Pay Index (“Benchmark”), while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by a combination of the Chief Investment Officer’s internal fixed income staff and multiple external investment managers (internal and external strategies will be collectively referred to as “Managers”). Each Manager’s strategy will focus on a subset of the high yield debt 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 Chief Investment Officer will monitor whether the aggregate of all high yield debt 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 Chief Investment Officer will monitor each Manager’s adherence to its respective guidelines. In no case may a Manager’s guidelines conflict with the Guidelines for the Program.

c. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, (benchmark), which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 350 basis points. Each Manager will have a unique active risk budget, relative to its specific

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APPENDICES TO INVESTMENT POLICY STATEMENTS

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.

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

The portfolio will be invested primarily in marketable, publicly traded, non-investment grade debt instruments, notes and debentures denominated in U.S. dollars.

b. Types of Securities

The Program will be invested in diversified portfolios of fixed income securities, similar to those in the benchmark, and their derivative securities, subject to restrictions noted below in section 2c and 2d. For a description of the Benchmark see Appendix 8 (Definitions).

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of “allowable” investment securities. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents’ Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments

- a. Obligations of U.S. and foreign corporations such as corporate bonds, convertible and non-convertible notes and debentures, preferred stocks, and bank loans
- a. Obligations of international agencies, supranational entities, and foreign governments (or their subdivisions or agencies).
- b. Obligations issued or guaranteed by U.S. local, city and state governments and agencies
- c. Private Placements or Rule 144A securities, issued with or without registration rights

2. Short term fixed income instruments

- a. US Treasury and Agency bills and notes
- b. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
- c. Money market funds managed by the Custodian
- d. Short Term Investment Pool (STIP), managed by the Chief Investment Officer

3. Fixed income derivatives

- a. US Treasury, Agency, and Eurodollar futures
- b. Interest rate options, swaps, and swaptions
- c. Credit default swaps (CDS) and their derivatives
- d. Total rate of return swaps

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c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Sell securities short, except for interest rate futures and options, credit default swaps, and foreign currency forwards and options
- Purchase equity securities or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy
- Purchase or sell foreign exchange contracts for any purpose other than hedging their portfolio exposures

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - The average weighted spread duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
 - No more than 10% of the Program's investments, measured by market value, should be rated "in default", i.e. rated lower than the following standards or their equivalent by all major NRSRO's
 - Standard & Poor's and Fitch (C)
 - Moody's (C)
 - The Program's investments should exhibit an average credit quality of B- (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
 - Except for securities issued by the US Treasury or Agencies of the US Government, no more than 5% of the Program's market value may be invested in any single issuer.
- **Liquidity risk**
 - No more than 30% of the Program's market value may be invested in Private Placements or Rule 144A securities
 - The Program's investments in aggregate of any marketable security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Chief Investment Officer.

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- **Foreign exchange risk**
 - No more than 10% of the Program market value can be invested in securities denominated in currencies other than US dollar
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager’s tracking error and/or contribution to active risk of the Program.

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

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

f. Managing Cash Flows

Managers may use derivatives for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio. (Leverage is not permitted.)

3. Evaluation and Review

a. Policy and Guideline Review

The 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in sector and quality weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.
- b. A forecast risk report, using the Chief Investment Officer’s risk system, showing the total, systematic (“common factor”), and non-systematic (“residual”) risk of the

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aggregate portfolio, the Benchmark, and the active Program relative to the Benchmark, and an explanation of any material differences.

- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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 7J

This version: Approved November 15, 2012; effective January 1, 2013

Last approved: July 1, 2008

**EMERGING MARKET DEBT
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 Emerging Market Debt 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 debt of issuers in emerging market countries which exceeds the return on the Benchmark, which is the J.P. Morgan Emerging Markets Bond Index – Global Diversified [hard currency], while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by a combination of the Chief Investment Officer’s internal fixed income staff, and multiple external investment managers (internal and external strategies will be collectively referred to as “Managers”). Each Manager’s strategy will focus on a subset of the emerging market debt universe 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 Chief Investment Officer will monitor whether the aggregate of all emerging market debt 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 Chief Investment Officer will monitor each Manager’s adherence to its respective guidelines. In no case may a Manager’s guidelines conflict with the Guidelines for the Program.

c. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, (benchmark), which is appropriate to its individual strategy, and specified in its guidelines.

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d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 500 basis points. Each Manager will have a unique active risk budget, relative to its specific 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.

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

The portfolio will be invested primarily in marketable, publicly traded, fixed income instruments, notes and debentures issued by emerging market sovereign or corporate issuers, denominated in U.S. dollars and issuers' local currencies.

b. Types of Securities

The Program will be invested in diversified portfolios of fixed income securities, similar to those in the benchmark, and their derivative securities, subject to restrictions noted below in section 2c and 2d. For a description of the Benchmark see Appendix 8 (Definitions).

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of "allowable" investment securities. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents' Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments

- a. Obligations of foreign governments (or their subdivisions or agencies), international agencies, and supranational entities.
- b. Obligations of foreign corporations such as corporate bonds, convertible and non-convertible notes and debentures, preferred stocks, and bank loans
- c. Private Placements or Rule 144A securities, issued with or without registration rights

2. Short term fixed income instruments

- a. US Treasury and Agency bills and notes
- b. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
- c. Eurodollar CD's, TD's, and commercial paper
- d. US and Eurodollar floating rate notes
- e. Money market funds managed by the Custodian
- f. Short Term Investment Pool (STIP), managed by the Chief Investment Officer

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3. Fixed income derivatives
- a. US Treasury, Agency, and Eurodollar futures
 - b. Interest rate options, swaps, and swaptions
 - c. Credit default swaps (CDS) and their derivatives
 - d. Foreign currency forward contracts and options
 - e. Total rate of return swaps

c. Restrictions

The Managers may **not**:

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Sell securities short, except for interest rate futures and options, credit default swaps, and foreign currency forwards and options
- Purchase equity securities or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - The average weighted effective duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
 - No more than 20% of the Program's investments, measured by market value, should be rated "B+" (or equivalent) or below by all major NRSRO's
 - Standard & Poor's and Fitch (B+)
 - Moody's (B1)
 - The Program's investments should exhibit an average credit quality of BB (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
 - Except for securities issued by the US Treasury or sovereign entities included in the Benchmark, no more than 5% of the Program's market value may be invested in any single issuer, without a written exception approved by the Chief Investment Officer.
- **Liquidity risk**
 - The Program's investments in aggregate of any security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Chief Investment Officer.

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- **Asset allocation and Foreign currency risk**
 - The Program's investments in aggregate may overweight or underweight issuer countries (including their currencies) so that each country's exposure is within +/- 20 percentage points of the corresponding Benchmark country's exposure. That is, if Brazilian bonds (including currency) comprise 20% of the total Benchmark, then the Program's Brazilian bond and currency exposure should be between 0% and 40%.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.

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

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

f. Managing Cash Flows

Managers may use derivatives and foreign exchange forwards for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio. (Leverage is not permitted.)

3. Evaluation and Review

a. Policy and Guideline Review

The 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 Chief Investment Officer shall provide the following reports to the Committee:

- a. A performance attribution explaining differences in country weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.

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- b. A forecast risk report, using the 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.
- c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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 also 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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APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7K

This version: November 15, 2012

Last approved: September 10, 2009

SHORT TERM INVESTMENT POOL (STIP)
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 University’s Short Term Investment Pool, or STIP (“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. Background:

The STIP is a cash investment pool established by The Regents and is available to all University groups, including retirement and endowment funds. The STIP allows fund participants to maximize income on their short-term cash balances by taking advantage of the economies of scale of investing in a larger pool and investing in a broader range of maturities.

b. Investment Objective

The Objective of the Program is to maximize returns consistent with safety of principal, liquidity, and cash flow requirements. The primary investment objective is to generate income from investments in short duration US dollar denominated bonds and cash equivalents. Because the liquidity needs of the University are subject to large and uncertain changes, the fund may materially increase its investments in highly liquid, cash equivalent securities from time to time.

Accordingly, the Benchmark will be a weighted average of the income return on a constant maturity two (2) year Treasury note and the return on US 30 day Treasury Bills. The weights for the two constituents will be the actual average weights of the bond and cash equivalent components of the pool. The Benchmark will be re-balanced monthly.

c. Investment Strategy

The Program shall be implemented by the Chief Investment Officer internal fixed income staff (“Manager”). The Chief Investment Officer will monitor the Program’s adherence to these Guidelines.

d. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees.

e. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 75 basis points.

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APPENDICES TO INVESTMENT POLICY STATEMENTS

f. 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.
- Manager shall act solely in the interest of the Fund's owners.
- Implementation of this Program shall comply with the Fund's Policy.

2. Investment Guidelines

a. Asset Allocation

The portfolio will be invested primarily in marketable, publicly traded, investment grade short term fixed income instruments, notes and debentures denominated in U.S. dollars.

b. Types of Securities

The Program will be invested in a diversified portfolio of fixed income securities, subject to restrictions noted below in section 2c and 2d.

The following list is indicative of the investment classes which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of "allowable" asset types. Security types and/or strategies not specifically enumerated, but which the Chief Investment Officer and Regents' Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

1. Fixed income instruments

- a. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal Agencies or U.S. government-sponsored corporations and agencies
- b. Obligations of U.S. and foreign corporations such as corporate bonds, notes and debentures, and bank loans
- c. Mortgage-backed and asset-backed securities
- d. Obligations of international agencies, supranational entities, and foreign governments (or their subdivisions or agencies)
- e. Obligations issued or guaranteed by U.S. local, city and state governments and agencies
- f. Private Placements or Rule 144A securities, issued with or without registration rights

2. Short term fixed income instruments (having maturity of less than 13 months)

- a. US Treasury and Agency bills and notes
- b. Certificates of deposit
- c. Bankers acceptances
- d. Commercial paper
- e. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
- f. Eurodollar CD's, TD's, and commercial paper
- g. US and Eurodollar floating rate notes
- h. Money market funds managed by the custodian

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APPENDICES TO INVESTMENT POLICY STATEMENTS

c. Restrictions

The following security types are **not** permitted:

- Interest rate derivative contracts, including options and futures
- Equity like securities, including but not limited to convertible bonds, preferred stocks, warrants, equity linked notes, and commodities
- Bonds issued in currencies other than US Dollar
- Foreign currency linked notes

The Manager may **not**:

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in its guidelines
- Buy securities on margin
- Sell securities short
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy
- Purchase or sell foreign exchange contracts

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
 - No security may have a maturity of more than 5 ½ years
- **Credit risk**
 - No more than 5% of the Program's investments, measured by market value, should be below "investment grade", i.e. rated lower than the following standards or their equivalent by all major NRSRO's
 - Standard & Poor's and Fitch (BBB-)
 - Moody's (Baa3)
 - Commercial Paper must have a rating of at least A-1, P-1, D-1, or F-1
 - The Program's investments should exhibit an average credit quality of A (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
 - No more than 5% of the Program's allocation to commercial paper may be invested in any single issuer. This guideline may be exceeded on a temporary basis due to unusual cash flows, up to a limit of 10%, for a period not to exceed one month.
 - Except for securities issued by the US Treasury or Agencies of the US Government, no more than 3% of the Program's market value (exclusive of commercial paper) may be invested in any single issuer.
- **Liquidity risk**
 - No more than 10% of the Program's market value may be invested in Private Placements or Rule 144A securities

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- The Programs' investments in aggregate of any security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Chief Investment Officer.

Subject to the limitations above, the investment manager has complete discretion with regard to choosing sector weights, issuers, and maturities.

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

3. Evaluation and Review

a. Policy and Guideline Review

The 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 Objectives of the Program and individual Managers.

4. Reporting

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

- a. A summary of Program investments and risks.
- b. A summary of Program performance, on an absolute and benchmark relative basis.

Manager will be required to provide the Chief Investment Officer monthly and quarterly reports, including but not limited to:

- a. Monthly accounting statements showing portfolio income, holdings and transactions.
- b. Quarterly review of portfolio and strategy performance including a market outlook.
- c. Annual statement of compliance with investment guidelines.

5. Definitions: See Appendix 8

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

APPENDIX 7L

This version: November 15, 2012

Last approved: April 1, 2011

**PRIVATE EQUITY
INVESTMENT GUIDELINES**

The purpose for portfolio guidelines is to clearly define performance objectives and to control risk. Portfolio guidelines to control risk should be subject to ongoing review.

Performance Objectives:

The objective of the private equity portfolio is to earn a return, after adjusting for risk, that exceeds the Russell 3000 Index return on a consistent basis over time.

Portfolio Guidelines:

1. Permissible investments include limited liability structures such as limited partnerships, limited liability corporations, and other vehicles that invest in venture capital, buyouts, and special situations. Permissible investments will be primarily private market assets, but may include publicly traded assets, and may also include funds of funds, secondaries, co-investments and direct equity investments.
2. Venture Capital investments shall be limited to a maximum of 40 percent of the private equity portfolio's total market value, with a long-term target weight of no more than 20 percent.
3. No single partnership commitment (including co-investments / direct equity investments) can represent, at the time of commitment, more than 5 percent of the current private equity allocation defined as the most recent quarter book value plus unfunded commitments plus target commitment for the current (one) year.
4. Investment in multiple funds of the same general partner is permitted. However, the total commitment to partnerships with the same general partner (including co-investments / direct equity investments), at the time of commitment, cannot exceed 15 percent of the budgeted three year private equity allocation defined as current book value plus unfunded commitments plus commitment level for the current year and two subsequent years.
5. The commitment to any individual partnership is recommended not to exceed 30 percent of the total capital raised by the partnership, up to a maximum of \$150 million. The maximum of 30 percent represents the ownership percentage of the partnership at each closing. Exceptions to this limitation may be made by the Chief Investment Officer.
6. The private equity portfolio should be diversified across time as well.
7. No single co-investment or direct investment company can represent, at the time of commitment, more than \$200 million at cost. No single co-investment in the General Endowment Pool can represent, at the time of commitment, more than \$100 million at cost.

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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.

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APPENDIX 7M

This version: November 15, 2012

Last approved: April 1, 2011

PRIVATE REAL ESTATE
INVESTMENT GUIDELINES

The purpose of the real estate investment guidelines is to define the investment objectives, philosophy, and specific guidelines for making investments and the benchmarks to measure performance.

These guidelines are applicable to the entire real estate program (“Program”) consisting of investments made on behalf of the UCRP and GEP funds. The allocation of investments between the two funds will be managed by the Chief Investment Officer in accordance with the performance and risk objectives of those funds.

Allocations and ranges for the four principal strategies are shown below.

Strategic Allocations		
Strategy	Allocation	Range
REITS	10%	5%-20%
Core Real Estate	30%	10%-80%
Value-Added Strategies	30%	10%-50%
Opportunistic Strategies	30%	10%-40%
Total	100%	

Core Real Estate, Value Added Strategies, and Opportunistic Strategies constitute “Private Real Estate.” Value Added and Opportunistic strategies together are referred to as “Non-Core.” REITS are discussed in the section “Public Real Estate Securities (Appendix 7N).” The term “Program” will be interpreted in the context of private or public real estate.

Investment Guidelines

1. The benchmark for evaluating the Program’s investment performance will be the National Council of Real Estate Investment Fiduciaries (NCREIF) Funds Index – Open-end Diversified Core Equity Index (“NFI-ODCE”). The Program return is expected to meet or exceed this benchmark, on a rolling three year basis, after deducting all costs and expenses (“net returns”).
2. Investments shall be in limited liability investment vehicles such as limited partnerships, limited liability corporations, private REITs, and other commingled investment Funds. Direct investments through discretionary Separate Accounts may be made through title holding corporations.

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3. Investments shall be primarily equity-oriented, but may also include debt instruments secured by real estate.
4. Specific property types in the Program shall be within the following ranges:

Property Diversification Guidelines	
Property Type	Range
Office	20%-50%
Apartments	15%-35%
Industrial	15%-35%
Retail	15%-35%
Hospitality	Up to 20%
Other (incl. student housing)	Up to 20%

5. Investments in the U.S. shall be diversified by geographic location as follows:
 - a. Exposure (current NAV) in any one NFI-ODCE region within the total Private program (commingled funds and separate accounts) not to exceed the weight of that region in the NFI-ODCE index by more than 5%.
 - b. Exposure (current NAV) in any one Metropolitan Statistical Area (or Metropolitan Statistical Division, if applicable) within the Separate Account portfolio not to exceed 20% of the Separate Account program allocation (“allocation” meaning: NAV + Unfunded Commitments).
6. Investments outside the U.S. may not represent more than 25% of the private real estate portfolio and at the portfolio level must be diversified by type and geographic location.
7. The Program’s investment in any one closed end fund shall not exceed 25% of the total capital being raised for that fund, up to a maximum of \$75 million.
8. No more than 15% of the Program’s commingled Fund Net Asset Value + Unfunded Commitments shall be invested with a single manager. No more than 25% of the Separate Account program allocation shall be invested with a single manager (“allocation” meaning: NAV + Unfunded Commitments).
9. The Program’s outstanding investment(s) with any given firm, including its affiliates and subsidiaries, may not exceed 20% of that firm’s total real estate equity under management.
10. In order to enhance the alignment of interests of the investor and the sponsor, the sponsor of a closed-end fund investment will be required to make a co-investment of at least 1%. This also applies prospectively to Separate Account managers, except where prohibited by law or regulation. Any exceptions must be approved by the Chief Investment Officer.
11. Leverage at the Program level shall not exceed 90% of the (gross) market value of the total assets of the Program. 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-

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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 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 15% of total Program market value, up to a limit of \$300 million for any single deal.

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APPENDIX 7N

This version: November 15, 2012

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**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 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 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 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
- 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 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.
- Notwithstanding the overall diversification of the Program, the Chief Investment Officer 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.

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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 Chief Investment Officer at the Manager's discretion when best execution is available.

f. Managing Cash Flows

The 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 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 Chief Investment Officer shall provide the following reports to the Committee:

- 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.
- b. A forecast risk report, using the 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.
- c. A summary of individual manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the 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.

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- 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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APPENDICES TO INVESTMENT POLICY STATEMENTS**

APPENDIX 7O

This version: November 15, 2012

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**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 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

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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 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 structures such as limited partnerships, limited liability corporations, and other vehicles. Permissible investments shall include but are not limited to funds, funds-of-funds, secondaries, co-investments and direct investments, and may include both publicly traded and private market assets.

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2. The Portfolio shall adhere to the following ranges:

<u>Strategy</u>	<u>Allowable Ranges</u>	
	<u>Min</u>	<u>Max</u>
Timberland	0%	50%
Energy	0%	50%
Infrastructure	0%	50%
Commodities	0%	50%
Opportunistic	0%	50%
Total	-	-

3. No single partnership commitment (including co-investments / direct equity investments) can represent, at the time of commitment, more than 15% of the overall real assets allocation, defined as the most recent quarter book value plus unfunded commitments plus target commitment for the current (one) year.
4. No investment with any single investment manager or general partner can represent more than 20% of the overall Portfolio.
5. No investment with any single investment manager or general partner can exceed 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.
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.
7. The Portfolio shall be diversified across time.
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.

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APPENDIX 7Q

This version: November 15, 2012

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**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 in a *single product* of a firm shall be more than 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 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 7R

This version: Approved March 14, 2013; effective April 1, 2013

OPPORTUNISTIC EQUITY
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 Opportunistic Equity 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

Investment Objective

The investment objective of the Opportunistic Equity Strategy is to achieve net excess returns above the MSCI All Country World Index (MSCI ACWI) Net Dividends Index, herein referred to as the Benchmark. The Benchmark is unhedged.

Investment Strategy

The investment strategy is to outperform the benchmark emphasizing investing in public equities in a differentiated way. The strategy will have fewer constraints on the portfolio as a whole, and therefore will place fewer constraints on underlying managers. It will make greater use of nontraditional approaches toward investing in equities. Portfolio construction will be a core-satellite strategy as outlined below:

Core Strategies

The core portion of the investment strategy will consist of equity managers whose aggregate net long exposure will range between 75% and 125%. The core component will range from 50% to 100% of the market value of the Opportunistic Equity portfolio.

The Program may utilize strategies such as: 130/30 strategies, long-biased strategies, and global (rather than U.S., Non-U.S. Developed, or Emerging Market regional) equity strategies. These core strategies will have fewer constraints and be more benchmark, style, and sector agnostic than traditional equity strategies. These strategies may have a greater tendency to be more concentrated than the typical public equity manager.

Satellite Strategies

The satellite component of the investment strategy will consist of niche or unique investments. The aggregate net long exposure of the satellite component will range between 50% and 150%, so long as the net long exposure of the Opportunistic portfolio as a whole is 75% to 125%. The satellite component will range between 0% and 50% of the market value of the Opportunistic Equity portfolio.

The satellite component could include the following: activist strategies, tactical or directional strategies, long/short strategies, specialty strategies (such as global small cap,

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emerging market small cap, country or sector specialists, frontier markets, and thematic investing), “best ideas” strategies, and overlay strategies.

2. Portfolio Construction

The construction of the Opportunistic Equity portfolio will consider the following attributes:

- a. Diversification. The portfolio will be diversified in the number of stocks held, sector, country, and regional weights.
- b. Differentiation. The portfolio will be constructed to ensure that there is significant differentiation relative to the benchmark and to traditional approaches toward investing in public equities. Differentiation will be achieved relative to traditional approaches to investing in public equity by using several (but not necessarily all) of the strategies listed in the section titled “Investment Strategy.” Differentiation relative to the benchmark will be achieved by maintaining a forecast active risk higher than what is typical for a long-only public equity portfolio.

3. Investment Guidelines

The Opportunistic Equity portfolio is subject to the constraints noted below. During the implementation of the Opportunistic Equity strategy, compliance with some of these guidelines may not be required.

- a. Active Risk Budget: The forecast active risk will be a range of 3-6% annualized standard deviation relative to the Benchmark.
- b. Beta: The Program’s beta with respect to the Benchmark will typically range between 0.75 and 1.25 over a full market cycle.
- c. Market Exposure: The portfolio’s net long equity exposure will range between 75% and 125%.
- d. The Opportunistic Equity portfolio will be invested in publicly traded stocks, including ETFs, ADRs, and other derivatives whose returns are derived from publicly traded stocks.
- e. Managers may invest in private companies subject to limitations stated in their guidelines.
- f. Non equity securities are permitted subject to the above constraints on beta and equity exposure.
- g. Managers may obtain equity exposure through specialty funds, such as ETFs or commingled funds, subject to limitations in their guidelines.
- h. Limits on the use of derivative instruments will be consistent with the Regents’ Derivatives Policy and will be specified in writing for each manager.
- i. Fund-of-funds are permitted.
- j. Investment in a single manager can represent no more than 15% of the market value of the Opportunistic Equity portfolio.
- k. Investment in a single manager can represent no more than 25% of the forecast active risk of the Opportunistic Equity portfolio.
- l. Country and Sector Weights: The portfolio will maintain allocations within plus or minus 15% to the U.S., Non-U.S. Developed Markets, and Emerging Markets, relative to the weights of those regions in the MSCI ACWI benchmark. The portfolio will also maintain sector weights within plus or minus 15% of the MSCI ACWI benchmark sector weights.

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- m. Policy ranges for the Opportunistic Equity portfolio are as follows:
 - 1. Core component 50-100%
 - 2. Satellite component 0-50%
- n. Gross Exposures: The portfolio is prohibited from employing gross leverage in the aggregate portfolio in excess of 150% of the market value of the portfolio.
- o. Portable alpha strategies are permitted; however, the Office of the Chief Investment Officer may not incur debt to leverage the portfolio.
- p. Lock-Ups: The average lock-up period for the portfolio as a whole will not exceed one year.
- q. Liquidity: A minimum of 65% of the Opportunistic Equity portfolio will offer redemptions in 90 days or less upon notification from U.C., subject to lock-up requirements.
- r. Preliminary gross and net returns will be required within six days of month end. Final gross and net returns will typically be required within twenty days of month end.

4. Definitions

- 1. Active Risk: a measure of the difference between a portfolio or strategy and a benchmark. It takes into account the size, volatility of, and correlations between the various exposures and risk factors which differ between portfolio and benchmark.
- 2. Activist strategy: Activist managers acquire larger ownership stakes in companies in an effort to improve the business performance of the companies they are invested in are managed. Activism in this sense is not engaged in environmental or social investing; the emphasis here is to improve the business performance of specific companies.
- 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. Equity Exposure: the gross exposure to equity securities or securities underlying equity derivatives
- 5. Forecast active risk: an estimate of the active risk of a portfolio or strategy based on the forecast volatilities and correlations among the securities or risk factors held in the portfolio as of a given date
- 6. Frontier markets: Equity markets not included in MSCI All Country World Index; they are considered too new or undeveloped to be included in the Emerging Market Index
- 7. 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.
- 8. Gross leverage: a term used to indicate that the gross dollar exposure of a portfolio exceeds the net market value of the total portfolio
- 9. Lock-up: the period of time after making an investment with a manager during which the investor may not withdraw or redeem any of the investment
- 10. 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.
- 11. Overlay strategy: a strategy intended to manage a specific risk factor, such as currency, of a group of accounts, each managed by a separate manager. The overlay is designed by

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comparing the aggregate (net) exposures of underlying managers and adjusting those exposures to a pre-determined risk profile, e.g., the currency profile of the Benchmark

12. Portable alpha strategy: an investment strategy constructed to have zero market risk (beta). Being independent of both the direction and the magnitude of the market's movements, it represents the manager's skill in selecting investments. Elimination of the market risk can be accomplished by means of short selling and derivatives such as futures, swaps, and options.
13. Realized annualized active risk: the standard deviation of the monthly differences between the portfolio return and the benchmark return, using monthly returns over a given historical period, multiplied by the square root of 12.
14. Unhedged benchmark: a benchmark in which the underlying securities' returns are translated from their local currency back to US dollars at each measurement date.

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APPENDIX 7S

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CROSS ASSET CLASS STRATEGIES
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 Cross Asset Class 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

Investment Objective

The objective of the Cross Asset Class Strategies (CAC) portfolio is to earn an annualized return, net of all fees and expenses, that exceeds the Performance Benchmark. The performance benchmark will be a weighted average of the UCRP and GEP policy benchmarks, weighted by the asset values of the UCRP and GEP, rebalanced monthly. (See below for explanation.)

Investment Strategy

The Program will have the scope to integrate and leverage best ideas across all asset classes through the following key objectives.

1. Utilize Strategic Partners in channeling best alpha and tactical beta signals to inform the Chief Investment Officer’s asset allocation process
2. Create an innovation engine for new investment ideas
3. Enhance the potential for higher returns and diversification across the overall plan by successful integration of CAC ideas in the total plan.

Portfolio Guidelines

1. Permissible investments include funds that invest in all strategies within all geographies. Examples include: global macro, CTA, selected portfolio hedges, Relative Value strategies, Event Driven strategies, currency strategies, volatility strategies, risk parity strategies, long only strategies, specialty strategies, and managed futures.
2. In the event of market dislocations and mispricing, CAC managers are also expected to develop timely investment innovations and products to allow the Chief Investment Officer to invest in niche or specialized strategies not specifically cited in the guidelines.
3. Investments may be made in funds that manage single or multiple strategies; however the mandate will generally seek to invest with core management entities which have capabilities across multiple strategies and geographies. This will provide the Chief Investment Officer with the ability to make timely investments in specific asset class strategies.

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4. No investment (the net asset value of UC's equity stake in a strategy) with any single manager can represent more than 33% of the CAC portfolio at time of investment, until such time that the CAC allocation (to UCRP or GEP) is greater than 6% of the total market value of UCRP or GEP, respectively. After that time, no investment with any single manager can represent more than 20% of the CAC portfolio at time of investment. Exceptions to this limit may be approved by the Chair of the Committee on Investments.
5. No investment with an asset management firm may exceed 15% of that firm's total assets under management.
6. The Chief Investment Officer may not incur debt to leverage the CAC portfolio; however, portable alpha strategies are permitted.
7. No more than 50% of the total CAC portfolio risk budget may be derived from any single manager.
8. Gross accounting leverage at the aggregate portfolio level shall not exceed 2.0 times the market value of the total CAC assets. 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.

Note: During the initial implementation of an allocation within the plans, compliance with some of these guidelines may not be required. The Chief Investment Officer and Regent's investment consultants will monitor and inform the Committee as to the status of its compliance with these guidelines.

Definitions

Gross Accounting Leverage: the ratio of the gross dollar exposures of a portfolio divided by the net market value of the total portfolio.

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.

Gross accounting leverage of the Program is the sum of the individual manager leverage ratios, weighted by their market values.

Note on Benchmark Calculation: the performance benchmark for the CAC program is calculated as follows: (a) first compute the weighted average of all the asset class benchmarks within UCRP (and GEP), where the weights are the current policy allocations to each asset class, *excluding* CAC. (b) divide that weighted average by [100% - Percent allocation to CAC]. Then the total fund policy benchmark return (*including* CAC) is identical to the CAC benchmark return.

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APPENDIX 8

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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 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: 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 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 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.