UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

INVESTMENT POLICY STATEMENT

Item 603

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Item 603

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Introduction and Purpose

This document provides the framework for the management of the investments of the University of California Retirement Plan ("UCRP" or the "Plan"). The purpose of a policy statement is to document the investment management process by

- Identifying the key roles and responsibilities relating to the ongoing management of the Plan's assets;
    - Recognize and ameliorate the agency issues among the parties responsible for various aspects of investment management;
- Setting forth an investment structure for the Plan's assets;
    - This structure includes various asset classes and acceptable ranges that, in aggregate, are expected to produce a sufficient investment return over the long term while prudently managing risk;
    - This strategy should provide guidance in all market environments, and should be based on a clear understanding of worst case outcomes;
- Establishing formalized criteria to monitor, evaluate and compare Plan performance results on a regular basis; and
- Encouraging effective communication among all fiduciaries, including external parties engaged to execute investment strategies.

The document is divided into five sections. There are also a number of Appendices, which are integral parts of this document:

1. Investment Goals, Key Responsibilities, and Philosophy

The investment **goals** state the mission of the Plan and its investment program.

a. The mission of the Plan is to provide retirement benefits, as described in the Plan document, to its participants and their beneficiaries.

b. The overall investment goal of the Plan is to maximize the probability of meeting the Plan's liabilities subject to The Regents' funding policy. Other goals include:
    - To maintain the ability to pay all benefits and obligations when due
    - To maintain flexibility in determining the future level of contributions
    - To maximize return within reasonable and prudent levels of risk
    - To preserve the real (i.e. inflation adjusted) purchasing power of assets

Key **responsibilities** in the oversight and management of the Plan are as follows.

c. Under Section 11.02 of the Plan, as adopted by the Board of Regents of the University of California ("The Regents"), The Regents is the designated trustee of the assets of the Plan, which are held in the University of California Retirement Fund ("Retirement Fund"). As trustee, The Regents has full responsibility for investment of the Retirement Fund's assets.

d. Under the authority granted in University Bylaw Sections 10.1.b and 12.5.a, The Regents has appointed a standing Committee on Investments ("Committee"), which is charged with managing investments on behalf of The Regents, which includes the establishment of investment policies for the Plan and oversight of the management of the Plan's assets.

e. Under the Bylaw Section 12.5.c, the Committee is directed to establish a system of custodianship for all securities.

f. Under University Bylaw Section 21.4, The Regents has delegated to the Treasurer general responsibility for all investment matters, including the implementation of investment policies established by the Committee for the Retirement Fund.

g. Under Section 4.01 of the Plan, The Regents will authorize periodic contributions to the Retirement Fund as necessary, to "maintain the Plan on an actuarially sound basis." The Regents policy for funding the Plan is found in Appendix 3.

The **philosophy** for the management of the Retirement Fund assets is as follows.

h. The investment philosophy of the Committee is to create a management process with sufficient flexibility to capture investment opportunities as they may occur, yet maintain reasonable parameters to ensure prudence and care in the execution of the investment program.

i. The Committee seeks a return on investment consistent with levels of investment risk that are prudent and reasonable given medium- to long-term capital market conditions and the investment objectives of the Plan (see part 4 below). While the Committee recognizes the importance of the preservation of capital, it also recognizes that to achieve the Plan's investment objectives requires prudent risk-taking, and that risk is the prerequisite for generating excess investment returns. Therefore the Committee's policy regarding investment risk, consistent with modern portfolio theory, is that risk cannot be eliminated but should be managed, and that fiduciaries have the obligation to utilize risk efficiently. Risk exposures should be identified, measured monitored and tied to responsible parties; and risk should be taken consistent with expectations for return. Further articulation of the Committee's risk policy, including appropriate budgets and ranges for various types of risk are found in Appendix 2.

The **principal risks** that impact the Plan, and the parties responsible for managing them are as follows:

j. *Capital market risk* is the risk that the investment returns (in excess of the risk free rate) associated with the Committee's asset allocation policy are not sufficient to provide the required actuarial return. Responsibility for managing the overall level of capital market risk lies with the Committee.

k. *Investment style risk* is associated with an active management investment program. It is the performance differential between an asset category's market target and the aggregate of the managers' benchmarks within the asset category weighted according to a policy allocation specified by the Treasurer. This risk is an implementation risk and is the responsibility of the Treasurer.

l. *Manager value-added risk* is also associated with an active management investment program. It is the performance differential between the aggregate of the managers' actual (active) portfolios and the aggregate of the managers' benchmarks, both at policy allocation. This risk is an implementation risk and is the responsibility of the Treasurer (and indirectly the investment managers retained by the Treasurer).

m. *Tactical/strategic risk* is the performance differential between (1) policy allocations for the Retirement Fund's asset categories and its investment managers and (2) the actual allocations. This risk is the responsibility of the Treasurer.

n. *Total Active risk* refers to the volatility of the difference between the return of the Retirement Fund policy benchmark (see Appendix 1) and the actual return. It incorporates the aggregate of the risks in (k), (l) and (m) above, and is thus the responsibility of the Treasurer.

o. *Total investment risk* refers to the volatility of the return of the total Retirement Fund assets. It incorporates all elements of investment risk as enumerated above, and is thus the joint responsibility of the Committee and the Treasurer.

p. *Surplus risk* refers to the volatility of the change in the dollar value of Retirement Fund assets versus the change in the dollar value of the Plan's liabilities. The latter represents the ultimate investment objective of the Plan. Because the asset allocation articulates the Committee's risk tolerance, and because The Regents determine the Plan's benefits and liabilities, this risk is the joint responsibility of The Regents and the Committee.

q. *Peer risk* refers to the difference in Retirement Fund performance relative to peer institutions. The Committee acknowledges that similar institutions may have different liabilities and different levels of investment risk. Comparisons of performance with other institutions are meaningful *only* after adjusting for differences in investment policy and risk among peers. This risk is the responsibility of the Committee.

2. Investment Policies

The policies of the investment program establish the investment strategy and guide its implementation.

a. The investment policies of the Retirement Fund shall be based on a financial plan that will consider:
   i. The financial condition of the Plan, i.e., the relationship between the current and projected assets of the Plan and the projected benefit payments
   ii. Future growth of active and retired participants; expected service costs and benefit payments; and inflation and the rate of salary increases (together these are the principal factors determining liability growth)
   iii. The expected long term capital market outlook, including expected volatility of and correlation among various asset classes
   iv. The range of possible investment outcomes associated with different policies
   v. The Committee's risk tolerance, that is, the trade-off between the desire to achieve high returns (and the associated high volatility) and the desire to avoid unacceptable outcomes (and the associated necessity for reduced volatility).

b. The Committee will consider alternative investment policies and will measure their potential impact on the financial condition of the Plan and assess their suitability in meeting the objectives of the Plan.

c. The Committee's financial plan results in a risk budget, that is, an expected amount of volatility associated with a given expected level of investment returns offered by the capital markets including the expected active return.

d. Based on the risk budget, the Committee, with input from the Treasurer and other consultants, will approve a specific allocation of the investments (the asset allocation policy) among the various asset classes considered prudent given the Plan's liability structure, and considering multiple measures of investment and shortfall risk. The asset allocation policy shall be expressed in terms of a normal percentage allocation, and ranges for each asset. These normal weights and ranges are found in Appendix 1. Criteria for including an asset class in the strategic allocation are also in Appendix 1.

e. The asset allocation policy shall be sufficiently diversified to enable the appropriate fiduciary to manage risk without imprudently sacrificing return. The Treasurer is delegated the responsibility of managing total and active risk within the ranges set by the Committee (see Appendices 1 and 2). Within the limits of prudent diversification and established risk budgets, capital market and active risk exposures are fungible, and the Treasurer may allocate risk exposures within and between asset classes in order to optimize return. When necessary, the Treasurer may use appropriate risk management strategies to protect portfolio value.

f. The Committee will approve performance benchmarks for each asset class, based on a pre-approved set of criteria, which are found in Appendix 1, and will approve overall investment guidelines for each asset class, which are found in Appendix 7

g. The Plan assets shall at all times avoid the use of leverage. Leverage is defined as the exposure to assets or risk factors in excess of the amount of capital as measured by current market value. An exception is that leverage may be used in Real Estate and Absolute Return strategies, per the limits and guidelines set forth in Appendix 7.

h. The Treasurer will implement the asset allocation policy as approved by the Committee. The Treasurer will select investment professionals ("managers") with demonstrated experience and expertise who will be responsible for managing specific portfolios consistent with the Guidelines in Appendix 6. Each investment manager will function under a formal contract that delineates its responsibilities, investment style and process, performance expectations, administrative requirements, and compensation. Where appropriate, each manager's contract will include a benchmark and range of probable outcomes relative to that benchmark. The Treasurer shall establish and implement procedures for the selection, monitoring, evaluation, and termination of investment managers, which are found in Appendix 6.

i. The Treasurer will allocate funds across managers to develop the most efficient investment structure, within the constraints of the prudence requirement, for each asset class, and will monitor whether the aggregate characteristics of all portfolios in an asset class comply with the investment guidelines for that class. The Treasurer will determine a policy allocation for each manager to be used in the evaluation of the active management program.

j. The Treasurer shall establish and implement procedures to provide efficient management of liquidity (including timely payment of benefits) for the Plan.

k. The Treasurer shall be responsible for administering the investments of the Retirement Fund at the lowest possible cost, being careful to avoid sacrificing quality. These costs include, but are not limited to, management and custodial fees, consulting fees, transaction costs and other administrative costs chargeable to the Retirement Fund. The Treasurer may establish directed brokerage arrangements with the custodian for the Retirement Fund or other qualified third parties in order to reduce overall commissions cost for the Retirement Fund.

l. The Treasurer may participate in securities lending programs, as a means to augment income, with the custodian or other qualified third parties. Cash collateral received from borrowers will be invested by the Treasurer or the lending agent, in a short term investment pool, in accordance with guidelines established by the Treasurer. Current guidelines are included in Appendix 7.

m. The Committee considers the active voting of proxies an integral part of the investment process. Proxy voting will occur in accordance with the Proxy Voting Policy found in Appendix 5.

n. The investment program shall at all times comply with existing and future applicable state and federal laws and regulations and the prudence requirement.

o. All transactions undertaken on behalf of the Retirement Fund will be undertaken solely in the interests of Plan participants and their beneficiaries.

3. Fiduciary Oversight Procedures

The procedures for the management of the Retirement Fund's assets outline the specific responsibilities of the Committee and other fiduciaries.

a. The Committee, in investing Retirement Fund assets shall 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.

b. The Committee will exercise its fiduciary responsibilities in regard to the investment program in accordance with the provisions of the Plan document and University Bylaws.

c. The Committee shall review the asset allocation policy, asset class guidelines, and current capital market assumptions at least annually to ensure that the current asset mix can reasonably be expected to achieve the long-term goals of the Plan.

d. The Committee will review the Plan's updated actuarial valuation and financial projection annually, including the recommended Funding Policy for each year.

e. The Committee may appoint investment consultants to review investment performance of the Retirement Fund in whole or with respect to specific asset classes, to assist in the development of the Retirement Fund's investment policies and asset allocation, to monitor and report on investment risks, and to provide independent assessment of investments proposed by the Treasurer.

f. The Committee has appointed a standing Investment Advisory Committee ("IAC") of selected Regents, investment professionals, faculty, and UC Foundation members to provide input to the Committee on decisions and assist in oversight of the Treasurer. The Chair of the Committee shall also be the Chair of the IAC.

g. The investments of the Retirement Fund shall be reviewed no less than quarterly to assess whether policy guidelines continue to be appropriate and are met. The Committee shall monitor investment risk, as well as monitor investment returns on an absolute and benchmark relative basis.

h. The Treasurer shall prepare quarterly and annual reports to the Committee and The Regents on the investment program, including
   i. The achievement of overall performance objectives
   ii. The type and amount of risk taken to achieve those objectives
   iii. Attribution of returns to various investment decisions and risks
   iv. Adherence to budgets set for total and active risk
   v. Compliance with policy guidelines, particularly asset allocation policy, and
   vi. The costs of managing the Retirement Fund's assets

i. Investment performance results shall be calculated and verified at least monthly by an external, independent performance consultant.

j. The Treasurer, in conjunction with the various investment consultants, will monitor the investment managers for compliance with their investment guidelines, achievement of specific objectives, and individual risk exposures.

k. The Treasurer shall monitor the conduct of the custodian of the Retirement Fund.

l. The Treasurer shall adopt the CFA Institute Code of Ethics and Standards of Professional Conduct for all employees of the Office of the Treasurer and relevant consultants and managers. These are found at http://www.cfainstitute.org/pdf/standards/english_code.pdf and incorporated by reference. The Treasurer shall develop and enforce other ethics guidelines for the Office of the Treasurer as needed, consistent with other University policies and guidelines.

m. The Committee will review this Policy from time to time to determine if modifications are necessary or desirable.

4. Performance Objectives

Performance objectives shall be established for the total Retirement Fund, asset class composites and individual manager portfolios. These objectives will be incorporated in the quarterly reviews of the Retirement Fund's performance.

The investment strategy articulated in the asset allocation policy found in Appendix 1 has been developed in the context of long-term capital market expectations, as well as multi-year projections of actuarial liabilities. Accordingly, the investment objectives and strategies emphasize a long-term outlook, and interim performance fluctuations will be viewed with the corresponding perspective. The Committee acknowledges that over short time periods (i.e. one quarter, one year, and even three to five year time periods), returns will vary from performance objectives and the investment policy thus serves as a buffer against ill-considered action.

There are three principal factors that affect a pension fund's financial status: 1) contributions, 2) benefit payments and 3) investment performance. Only the latter is dependent upon the investment policy and guidelines contained herein. However, the levels of Committee risk tolerance will take into account all three factors. At certain levels of funded status, it could be impossible for the investments to achieve the necessary performance to meet the promised liabilities. The result is that either benefits have to be reduced, contributions increased or risk tolerance changed.

Rates of return will be calculated based on a time-weighted rate of return formula as recommended by the CFA Institute. Returns will be calculated by the performance consultant and will be reported net of all fees and costs.

The performance of the overall Retirement Fund will be measured relative to:

- Actuarial rate of interest
- Funded status
- Inflation
- Policy benchmarks

a. The Retirement Fund total return objective should be at least equal to the Plan's actuarial rate of return over a five-year investment horizon.
   - This objective is to achieve a rate of return equal to or greater than the Plan's actuarial interest rate. If the Plan's assets grow at a rate equal to or greater than the actuarial rate, the Plan's funding condition will be maintained. Earning a lower return will generally result in increased levels of contributions. (Maintaining the Plan's funded status is conditioned, in part, on the successful implementation of a prudent funding policy.)

b. Funded status should be in excess of 100%.
   - This objective is to maintain a status of full funding, meaning that the Plan's assets are at least as great as the Plan's liabilities, both as measured by actuarially acceptable methodologies. Full funding provides a higher level of assurance that all promised benefits can be paid from existing assets and expected investment returns. (The ability to maintain full funding is conditioned, in part, on the successful implementation of a prudent funding policy.)

c. Total Retirement Fund return should exceed the Consumer Price Index over a five-year investment horizon.
   - This objective is to achieve a positive return above inflation. The Plan's liabilities are sensitive to inflation, as benefits are partially determined by future salaries. Failing to achieve the targeted real (i.e., purchasing power) return may also increase future contributions.

d. Total Retirement Fund return should match or exceed the total Retirement Fund weighted benchmark return, net of all fees and expenses over a three to five-year time period. See Appendix 1 for the composition and calculation of the Retirement Fund policy weighted benchmark.
   - This objective is to match or exceed a passively managed fund with a similar asset mix, net of all fees and expenses. The value added above the policy benchmark measures the effectiveness of the Treasurer's implementation and management decisions. The policy benchmark should also be adjusted for the costs of passive investing.

Additional metrics with respect to risk are found in the Risk Policy Appendix 2.

5. Asset Class and Manager Guidelines

The general guidelines that apply to all Managers are:

a. Subject to constraints and restrictions imposed by the manager guidelines, all decisions regarding sector and security selection, portfolio construction, and timing of purchases and sales are delegated to the investment manager.
b. The purchase of securities issued by tobacco companies is prohibited in separately managed accounts. The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Russell, MSCI) and communicate this list to investment managers annually or whenever changes occur. The Committee recognizes that the establishment of social investing restrictions limits investment opportunities and should be accompanied by adjusting performance evaluation standards appropriately.
c. The direct purchase of property owned or a security issued by the University, its subsidiaries and affiliates, is prohibited, as are the purchase of non-negotiable securities.
d. The use of derivative securities or contracts to leverage the portfolio, or for speculation, is prohibited. Acceptable and prohibited uses of derivatives are found in the derivatives policy in Appendix 4.
e. Transactions that involve a broker acting as a "principal," where such broker or an affiliate is also the investment manager, who is making the transaction, are prohibited.
f. Transactions shall be executed at the lowest possible total cost, which includes commissions, efficiency of execution, and market impact.
g. Any investment or action with respect to an investment not expressly allowed is prohibited, unless presented to and approved prospectively by the Committee. All guidelines must be adhered to; however, if from time to time a manager shall deem an exception to the guidelines appropriate, the Treasurer shall seek review and approval by the Committee to make such an exception.

Managers are required to inform the Treasurer of significant matters pertaining to the investment of Retirement Fund assets, including at a minimum, substantive changes in investment strategy and portfolio structure; significant changes in ownership, organizational structure, financial condition or professional staffing; litigation or violation of securities regulations; significant account losses or growth of new business.

Managers are required to submit periodic reports to the Treasurer summarizing investment activity and strategy, as per Appendix 6 and individual guidelines. Managers are required to reconcile investment returns with the custodian each month.

Specific guidelines for each major asset class will be found in Appendix 7. Manager guidelines will contain specific provisions to ensure that performance objectives and risk exposures are consistent with their particular mandate, which may be a style or subset of their larger asset class. However, all individual manager guidelines will be consistent with broad asset class guidelines.

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INVESTMENT POLICY STATEMENT

APPENDIX 1

ASSET ALLOCATION, PERFORMANCE BENCHMARKS, AND REBALANCING POLICY

Based on the risk budget for the Retirement Fund, the Committee has adopted the following asset allocation policy, including asset class weights and ranges, benchmarks for each asset class, and the benchmark for the total Retirement Fund.
Criteria for including an asset class in the strategic policy include:

- widely recognized and accepted among institutional investors
- has low correlation with other accepted asset classes
- has a meaningful performance history
- involves a unique set of investors

The "Interim Allocation" recognizes the current underinvestment in illiquid asset classes (private equity and real estate) and the corresponding need to set rebalancing ranges around this effective policy allocation until such time as policy weights in these classes are achieved. The allowable ranges for each asset class and in total have been chosen to be consistent with budgets and ranges for total and active risk (see below).

A. Strategic Asset Allocation and Ranges

	Policy	Interim	Allowable Ranges	
	Allocation	Allocation	Minimum	Maximum
U.S. Equity	50%	56%	see below (public equity)	
Non-U.S. Equity	7	7	see below (public equity)	
Fixed Income	28	30	see below (public fixed inc.)	
TIPS	5	5	see below (public fixed inc.)	
Private Equity	5	2	1%	7%
Real Estate	5	0	0	7
Liquidity	0	0	0	10
	100%	100%		
Ranges for Publicly Traded Asset Classes				
All Public Equity	N/A	63%	53%	73%
All Public Fixed Income	N/A	35	25	45

B. Asset Class Performance Benchmarks

The Committee has adopted the following performance benchmarks for each asset class. Criteria for selection of a benchmark include:

- Unambiguous: the names and weights of securities comprising the benchmark are clearly delineated
- Investable: the option is to forego active management and simply replicate the benchmark
- Measurable: it is possible to readily calculate the benchmark's return on a reasonably frequent basis
- Appropriate: the benchmark is consistent with The Regents' investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period

Asset Class	Benchmark
U.S. Equity	Russell 3000 Tobacco Free Index
Non-U.S. Equity	MSCI All Country World Index ex-U.S.
Fixed Income	Citigroup Large Pension Fund Index
TIPS	Lehman Brothers TIPS Index
Private Equity	N/A (see below)
Real Estate	Public: Wilshire REIT Index
	Private: NCREIF Property Index

Notes on asset class benchmarks:
1. US Equity: The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Russell, MSCI) and communicate this list to investment managers annually or whenever changes occur.
2. Private Equity: *Long term* portfolio returns will be compared to investable public equity alternatives as well as non-investable peer group indices. There is no appropriate market benchmark to use for *short term* performance evaluation or decision making.
3. The returns of each component of the total fund benchmark shall be reduced by the monthly cost of passively investing in that asset class. This cost shall be estimated by The Regents' generalist consultant.

C. Total Retirement Fund Performance Benchmark

This is the composition of the total Fund performance benchmark referred to in the Investment Policy Statement, Part 4(d). The percentages below add to 100%.

Percentage	Benchmark
58% - [note A]	× Russell 3000 Tobacco Free Index
7%	× MSCI All Country World Index ex-U.S.
30% - [note B]	× Citigroup Large Pension Fund Index
5%	× Lehman Brothers TIPS Index
Actual Weight [P.E.]	× Actual return of private equity portfolio
Actual Weight [public R.E.]	× Wilshire REIT Index
Actual Weight [private R.E.]	× NCREIF Property Index

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[note A]	Actual P.E. Weight + 0.6 x Actual Total R.E. Weight
[note B]	0.4 x Actual Total R.E. Weight

Notes on Total Fund benchmark:
1. The benchmark for private equity is replaced by the private equity portfolio's actual performance. This has the effect of neutralizing the active performance of this class for purposes of total fund performance evaluation.
2. The total fund benchmark contains the actual weights of Private Equity and Real Estate, rather than their policy weights. This is in recognition of the difficulty in quickly increasing or decreasing allocations in these illiquid asset classes. The difference between policy and actual weight is added to the US equity and US bonds percentages, as shown. Thus the percentage to US Equity = 50% + 5% (private equity) + 60% x 5% (real estate) = 58%, and the percentage to Fixed Income = 28% + 40% x 5% (real estate) = 30%.
3. The returns of each component of the total fund benchmark shall be reduced by the monthly cost of passively investing in that asset class. This cost shall be estimated by The Regents' generalist consultant.

D. Rebalancing Policy

There will be periodic deviations in actual asset weights from the policy asset weights specified above. Causes for periodic deviations are market movements, cash flows, and varying portfolio performance. Significant movements from the asset class policy weights will alter the intended expected return and risk of the Fund. Accordingly, the Committee authorizes the Treasurer to rebalance the Fund when necessary to ensure adherence to the Investment Policy.

The Treasurer will monitor the actual asset allocation at least monthly. The Committee directs the Treasurer to take all actions necessary, within the requirement to act prudently, to rebalance assets to within the policy ranges in a timely and cost effective manner when actual weights are outside the prescribed ranges. The Treasurer may utilize derivative contracts to rebalance the portfolio

The Treasurer shall assess and manage the trade-off between the cost of rebalancing and the active risk associated with the deviation from policy asset weights. With approval from the Chair of the Committee, the Treasurer may delay a rebalancing program when the Treasurer believes the delay is in the best interest of the Plan. Results of rebalancing will be reported to the Committee at quarterly meetings.

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APPENDIX 2

RISK MANAGEMENT POLICY

RISK PHILOSOPHY

In its broadest sense, risk refers to the unpredictability of future asset value, and specifically, the chance that assets may decrease, as well as increase, in value. Investment principles and practical experience both support the notion that expected returns are proportional to market risk taken. The Committee recognizes that the assumption of risk is necessary to meet Plan objectives; that is, there are no "risk free" assets, which are sufficient to generate the Plan's required rate of return. (Even if future benefit payments were known with certainty [and they are *not*], and surplus risk could be eliminated by an appropriate mix of nominal and inflation protected bonds, such a policy would result in unacceptably larger funding costs to the University and to Plan participants). Thus Plan risk management does not require the elimination of risk, but the balancing of risk and expected return. Risk in itself is intrinsically neither good nor bad; it is a resource used to generate investment returns. The Committee recognizes that "The essence of investment management is the management of risks, not the management of returns."

RISK POLICY

The Committee's policy regarding investment risk, consistent with modern portfolio theory, is that risk cannot be eliminated but should be managed. That is, plan fiduciaries are responsible for understanding the risks in various investment strategies, ensuring that they are properly compensated for these risks, and measuring and monitoring them continually. In particular, the level of risk taken should be consistent with the return objectives of the Plan.

Fiduciaries set the framework for risk management through the investment policy and guidelines, the strategic asset allocation, and the benchmarks used for performance objectives. However, tolerance for risk (alternatively, aversion to risk) may also be expressed in the form of various metrics for risk (volatility) and acceptable budgets and ranges for those metrics. Where appropriate, the Committee shall define these metrics and budgets for risk and establish acceptable ranges for them (see below).

The Treasurer is responsible for managing both total and active risk and must implement procedures and safeguards so that the combined risk exposures of all portfolios in the aggregate are kept within limits established by the Committee (see definitions in section 1 of the IPS above). Further, within limits of prudent diversification and risk budgets, total and active risk exposures are fungible, that is the Treasurer may allocate risk exposures within and between asset classes in order to optimize return.

Although the management of investment portfolios may be outsourced, investment oversight and risk management are primary fiduciary duties of the Committee that are delegated to and performed by the Treasurer. The Treasurer shall report on risk exposures and the values of the several risk measures to the Committee, either quarterly or annually as required below.

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RISK METRICS AND BUDGETS

There are different types of risk important at each level of plan investment management and thus different risk metrics are appropriate at each level.

- Plan level
  - Surplus Risk (insufficient assets to meet liabilities)
  - Measures risk of inappropriate investment policy and strategy
- Asset class level
  - Total Investment Risk (volatility of total return)
  - Measures risk of ineffective implementation of strategy
- Portfolio level
  - Active Risk or "Tracking Error" (volatility of deviation from style or benchmark)
  - Measures risk of unintended exposures or inadequate diversification

- **Surplus risk**

There are several risk measures which focus on surplus risk. The Treasurer shall report on these measures to the Committee periodically. However, no objective levels will be set for these metrics due to the separation of responsibility for investment management and funding policy. Thus results will be presented for information and use in policy reviews.

  - **Metric**: Funded Ratio, defined as the ratio of plan assets to liabilities. Plan assets shall be measured at current market value as well as using actuarially smoothing. Liabilities shall be measured as the actuarial accrued liability (AAL). Liabilities, and hence this metric, are formally re-estimated only annually, but should be reviewed quarterly (change in liabilities estimated using liability duration and change in bond yields, as well as accruals for service cost and benefits paid).
  - Longer term measures of forecast surplus risk shall be presented annually, in conjunction with asset liability and asset allocation reviews
    - The funded ratio projected over a ten year forecast period, using an actuarial model of assets and liabilities
    - The expected shortfall, defined as the expected loss experienced in worst case market scenarios

- **Retirement Fund Total Investment risk**

The basis for the risk budget at the total asset level is the Policy benchmark, or neutral position. Thus the risk budget starts with the risk of the benchmark index. Assuming an expected benefit from active management, the impact of deviations from the benchmark is added to the benchmark risk to derive the total risk budget. The Treasurer shall report on this metric to the Committee quarterly.

  - **Metric**: Retirement Fund Total Investment Risk, defined as the annualized standard deviation of the monthly plan returns, exponentially weighted over the previous 12 months. Benchmark Risk (i.e., the Capital Market risk of the strategic asset allocation) is measured similarly (using returns on the policy benchmark).
  - **Budget**: Retirement Fund Total Investment Risk shall be maintained at a level equal to Benchmark Risk plus an allowance for Active Risk (see below). For this purpose,

"risk" means variance (square of the standard deviation) and "plus" means addition of variances. Thus the budget for total risk is the square root of the sum of the squares of the benchmark risk budget and the active risk budget

- **Range**: If Retirement Fund Total Investment Risk is greater (less) than 20% above (below) the budgeted level at any quarterly measurement date, the Treasurer will take appropriate steps to reduce (increase) total Retirement Fund risk to its budget level, including but not limited to rebalancing asset class weights within allowable ranges. (For example, if the risk budget is 12%, the allowable range is +/- 2.4% [20% x 12%].)

- **Retirement Fund Active Risk**

There is no neutral or natural budget for active risk. The budget for active risk is determined to be consistent with the tolerance for active risk and the expectation to earn active return due to market inefficiencies and/or investment skill. This budget for active risk includes all of the following types of variation from policy:

1. Temporary asset weights different from strategic policy, but within the allowed ranges [Tactical/strategic risk]
2. Aggregate manager benchmarks different than asset class benchmark [Investment style risk]
3. Aggregate active manager risks [Manager value-added risk], including
    - Aggregate portfolio systematic exposures different from the benchmark
    - Aggregate portfolio security selection decisions

The Treasurer shall report on this metric to the Committee quarterly.

- **Metric**: Tracking Error, defined as annualized standard deviation of the difference between monthly Retirement Fund returns and monthly policy benchmark returns, exponentially weighted over the previous 12 months
- **Budget**: Tracking Error shall be maintained at a level of 3.0% annual standard deviation. It is understood that this budget will change when
    - asset allocation changes, or
    - there is a change in risk tolerance
- **Range**: If Tracking Error is greater (less) than 1.0% (one percentage point) above (below) the budget level at any quarterly measurement date, the Treasurer will take appropriate steps to reduce (increase) tracking error to its budget level, including but not limited to rebalancing asset class and/or manager weights within allowable ranges.

Both Total Investment Risk and Active Risk for the Retirement Fund shall be computed without the impact of Private Equity (for this calculation, it will be assumed that the Total Fund benchmark has no private equity component).

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APPENDIX 3

FUNDING POLICY

The Regents' funding policy for the Plan has been to establish annual contributions as a percentage of payroll by using the Entry Age Normal actuarial funding method. In fiscal year 1990-91, The Regents adopted a full funding policy. Under this policy, The Regents suspended contributions to the Plan when plan assets, defined as the smaller of

- Market value, or
- Actuarial value

exceed Plan liabilities, defined as the lesser of

- Actuarial accrued liability plus normal cost, or
- 150% of current liability plus normal cost.

This policy is consistent with Internal Revenue Code section 412. Also as part of this policy, The Regents redirected employee contributions to the Plan to a mandatory Defined Contribution Plan, according to the same formula as then existed.

There are three principal factors that affect a pension fund's financial status: 1) contributions, 2) benefit payments and 3) investment performance. Only the latter is dependent upon the investment policy and guidelines contained herein. However, the level of Committee risk tolerance will take into account all three factors. At certain levels of funded status, it could be impossible for the investments to achieve the necessary performance to meet the promised liabilities. The result is that either benefits have to be reduced, contributions increased or risk tolerance changed.

Definitions:

1. Actuarial value of assets: the value of investments belonging to a retirement plan, as used by the actuary for the purpose of making contributions to the plan. Typically, the actuary calculates a smoothed value to reduce the impact on contributions of market volatility.
2. Market value of assets: the value of investments belonging to a retirement plan, valued at current market prices in accordance with generally accepted accounting principles
3. Actuarial accrued liability: the accumulated value of normal costs allocated to the years before the valuation date (for both current employees, terminated employees with vested benefits, and retirees)
4. Current liability: the actuarial present value of accumulated plan benefits
5. Normal cost: the portion of actuarial present value of plan benefits and expenses which is allocated to the current year by the actuarial cost method

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APPENDIX 4

DERIVATIVES POLICY

1. INTRODUCTION
The purpose of these Guidelines is to establish permitted (and prohibited) uses of derivatives, to establish procedures for managing risks related to derivative securities, and for monitoring and reporting their use in The Regents' investment portfolios [1].

2. DEFINITION AND SCOPE
A derivative is a contract or security whose value is *derived* from another security or risk factor[2]. 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[3].

This Policy covers only futures, options, swaps, and their combinations. 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 leverage
- Monitoring and measuring risk, and limits on economic exposures
- Investment manager[4] internal controls and defined procedures for managing risk

The following policies govern the use of derivative securities in Regents' investment portfolios:

1. All derivative strategies are *prohibited unless specifically allowed in writing* as part of an investment manager's guidelines[5]. In the latter case, those guidelines must be consistent with the policies stated herein.
2. Use of derivatives to create leverage or for speculation is prohibited.
3. Permitted applications for derivatives include (a) efficient substitutes for physical securities and (b) managing risk by hedging existing exposures, 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. Therefore the risk of derivatives – and their acceptability as investments - should be measured by their impact on the portfolio, not in isolation.
5. The Treasurer shall implement procedures to ensure (a) that the purpose, use, and risks of derivative strategies are well understood and consistent with overall investment objectives,

(b) that risks taken are prudent and maintained within acceptable limits, (c) that expected return is commensurate with risk taken, (d) that their potential impact on the value of The Regents' assets is measured periodically, and (e) compliance with these Guidelines (see below).

4. USE OF DERIVATIVES

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

- As efficient substitutes for physical securities during portfolio rebalancing, asset allocation, transition management, and portfolio 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
- 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

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
- 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)
- 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 (without changing a portfolio's investment strategy) using foreign exchange forwards, futures, or options. Such hedging is limited to (a) offsetting existing positions, or (b) offsetting anticipated near term portfolio rebalancing.

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
- 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 ETF's or futures
- Enhancing return by substituting an exposure in the cash market with a similar derivative exposure
- Hedging anticipated market moves (without changing a portfolio's investment strategy) 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 (without changing a portfolio's investment strategy) using foreign exchange forwards, futures, or options. Such hedging is limited to (a) offsetting existing positions, or (b) offsetting anticipated near term portfolio rebalancing.

5. AUTHORITY TO USE DERIVATIVES

The Treasurer will determine whether the Plan's investment managers may employ particular permitted strategies. After determining that the purpose falls within these Guidelines, and that the investment manager has adequate controls and procedures to monitor and measure risk, the managers' investment guidelines will be modified to permit use of those strategies.
The Treasurer 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 can 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 elevating 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 Regents' guidelines and answer reasonable requests for reporting derivative positions and their risk characteristics

An appropriate senior member of the Treasurer's Office will conduct the necessary due diligence and make a recommendation to the Treasurer concerning the scope of the derivative strategies permitted and any required amendment(s) to the manager's investment guidelines.

6. PERMITTED INSTRUMENTS

6A. The following derivative types are permitted under this Policy, subject to the conditions and restrictions noted above

- Bond 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
- Collateralized Mortgage Obligations (CMOs), including MBS Interest Only (IO) strips and Principal Only (PO) strips
- Inverse Floaters
- Credit Default Swaps (CDS)

6B. The following derivative types and strategies are not permitted

- Structured and levered notes in which the structure is designed to mask underlying risk factor(s) which would not be permissible under one or more Regents' guidelines
- Derivative positions creating economic leverage
- Derivatives used for speculative purposes

As markets evolve and new derivative instruments are developed, the Treasurer may propose to the Committee the usage of additional derivatives not listed above, on a case-by-case basis. As of the date of adoption, it should be understood that derivative types not explicitly described herein are *not permitted*.

7. LIMITATIONS, CONTROLS, AND RESTRICTIONS

7A. Portfolio Rebalancing / Asset Allocation and Equity Portfolio Management:

- 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. Foreign Exchange Transactions

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

7C. Fixed Income Portfolio Management

- The Treasurer may impose 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 Treasurer will implement procedures for periodic monitoring of derivative strategies. Investment managers will be required to provide the following to the Treasurer's Office:

- Month end position report of derivatives
  - Report will include impact on portfolio, using metrics determined by the Treasurer's Office
  - For core fixed income managers only, report will include contribution to portfolio effective duration and effective convexity
- Quarterly statement of compliance with these Guidelines

- 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 Treasurer's Office for portfolio rebalancing or asset allocation, the Operations and Trading functions will provide the following to the Treasurer

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

The Treasurer'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)
- Quarterly summary report of manager quarterly reports (for core fixed income managers only)
- Monthly reports of risk model results (for core 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
    - In particular, 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 in Treasurer's Office) including the results of stress tests on all derivative securities

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

Based on a review of these reports, new developments in derivative markets, and overall manager performance within guidelines, the Treasurer may recommend revisions to this Policy from time to time.

FOOTNOTES

1) This discussion is limited to the use of derivatives in investment portfolios. Other uses appropriate for a treasury function are not addressed (e.g., hedging interest rate exposure of University issued debt in the municipal bond market). See also note (4).
2) More formally, a derivative is a bilateral contract or payment exchange agreement whose value derives from the value of an underlying asset, reference rate, or index.
3) It is assumed that the fundamental characteristics, uses, and valuation of futures and options are understood.
4) The term investment manager, as used in this policy, does not differentiate between portfolios directly managed by the Office of the Treasurer and external investment firms

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INVESTMENT POLICY STATEMENT

5) Not all derivative strategies may be appropriate for all types of investment portfolios (pension, savings, endowment, and foundations). As part of the authority to use derivatives [see section 5], the Treasurer will determine whether a particular strategy is appropriate for a given investment mandate.

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APPENDIX 5

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 these guidelines 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 Treasurer's Office 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 Treasurer's Office 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 Treasurer's Office Proxy Guidelines conflict with those of SSGA, those of the Treasurer's Office 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 Regents' holdings on an annual basis.
7. For all shares in external managers' portfolios, the Treasurer will appoint a third party organization, such as Institutional Shareholder Services (ISS), to vote all proxies in accordance with the Treasurer's Office Guidelines, and to provide a written summary of all proxy votes on all Regents' holdings on an annual basis.
8. The Regents may review and revise the Guidelines at any time.

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APPENDIX 5 - EXHIBIT I

OFFICE OF THE TREASURER 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 Treasurer's Office 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 Treasurer's Office 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: restoration of limited preemptive rights. Normally good for shareholders, the Treasurer's Office recommends a vote in favor.
D. Confidential Voting Issues. The Treasurer's Office 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 Treasurer's Office 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 Treasurer's Office recommends a vote against supermajority proposals of 85 percent or more.
G. Golden Parachutes: The Treasurer's Office recommends a vote against these incentives for management, as they are usually overly rich rewards for executives upon a takeover of the company.

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 are 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

INVESTMENT MANAGER
SELECTION, OVERSIGHT, REVIEW, AND TERMINATION

When selecting investment managers, the Treasurer 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 Treasurer 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 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 items specifically required by the appropriate Guidelines

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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 Treasurer 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 proxy voting, 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, an inquiry will be prompted should any investment manager not meet the established performance objectives, including:

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

Additionally, the Treasurer 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 Treasurer 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 Treasurer 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. It is a judgment that depends on the Treasurer's confidence in the investment firm to perform in the future.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
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APPENDIX 7
Asset Class Guidelines

- 7A) Domestic Equity Guidelines
- 7B) Non US Equity Guidelines
- 7C) Fixed Income Guidelines
- 7D) STIP Guidelines [for cash balances held by Plan]
- 7E) Private Equity Guidelines
- 7F) Real Estate Guidelines
- 7G) Absolute Return Strategies Guidelines [for possible future use in Plan]
- 7H) Reinvestment of Cash Collateral from Securities Lending Program

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APPENDIX 7A

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 UCRP ("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").

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 Treasurer will monitor whether the aggregate of all externally managed portfolios adheres to these Guidelines, and in particular achieves the overall performance and risk objectives stated below. In addition, each Manager shall have written guidelines, which will detail its strategy, performance objectives, permitted investments, and restrictions. The Treasurer 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 Objective

The Objective of the Program is to meet or exceed the return of the Benchmark, measured over a three year horizon, 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 in a range of 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 at all times comply with applicable State and Federal laws and regulations and the prudence requirement.
- Managers shall at all times act solely in the interest of the UC System's participants and beneficiaries.
- Implementation of this Program shall comply at all times with the Plan's Investment policies.

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 short term fixed income securities held by Managers for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian and equitized by the Treasurer using appropriate index futures 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. It may also invest in stocks that are traded over-the-counter and in other equity-related securities and private placements. In addition, short-term fixed income securities are permitted subject to the limitations noted above.

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies. The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Russell, MSCI) and communicate this list to investment managers annually or whenever changes occur.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Lend securities
- Purchase commodities
- Purchase fixed income securities, other than short-term securities as limited above
- Buy party-in-interest securities
- Buy lettered, legend, or other restricted stock, except for 144A securities, which are permitted
- Buy or sell options or futures
- Buy or write swaps or equity linked notes
- Employ leverage in the portfolio through borrowing

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk and will exhibit portfolio characteristics similar to the Benchmark. The Treasurer is responsible for managing aggregate risk exposures. The following limitations apply:

- The Program's beta with respect to the Benchmark will be in a range of 0.90 to 1.10, as measured over the most recent 12 month period.
- The aggregate holdings of any security may not exceed 5% of that security's outstanding shares.

It is also expected that each Manager's portfolio 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 portfolios may be more concentrated than is appropriate for the Program's aggregate investments.

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

f. Managing Cash Flows

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

3. Evaluation and Review

a. Policy and Guideline Review

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

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

4. Reporting

On a quarterly basis, the Treasurer 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 Treasurer'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 Treasurer 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. Other Definitions

a. 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.
b. Forecast annualized tracking error: the forecast standard deviation of monthly 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.
c. Cash equivalents: cash or fixed income securities with a maturity of less than one year and a quality rating of at least AA or equivalent.
d. Equitizing cash: the process of purchasing equity derivatives for the purpose of maintaining equity exposure.
e. Derivatives: securities whose value is completely determined by the value of an underlying security. For purposes of these Guidelines, derivatives are used to replicate a benchmark index performance, and include CFTC exchange traded index futures and Exchange Traded Funds (ETF's), such as SPDRs or iShares.
f. Leverage: using borrowed funds or derivative instruments to increase exposure to a security or portfolio of securities in excess of the amount of capital owned
g. 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.
h. Beta: the sensitivity of a portfolio to a benchmark, computed by regressing portfolio returns on benchmark 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, the portfolio increases or decreases by 1.2% (alternately, 0.8%)

i. 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).

j. Management costs and fees: for the purpose of the Objective in Part 1, costs and fees shall refer only to those costs directly incurred by the Treasurer's Office, either directly for this asset class or general office expenses allocated to it. It shall not include other University overhead or allocated indirect costs.

k. 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.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7B

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 Non U.S. Equity allocation of the UCRP ("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 companies which exceeds the return on the world ex-US equity market, measured by the MSCI All Country World ex-US Index ("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 Treasurer will monitor whether the aggregate of all externally managed portfolios adheres to these Guidelines, and in particular achieves the overall performance and risk objectives stated below. In addition, each Manager shall have written guidelines, which will detail its strategy, performance objectives, permitted investments, and restrictions. The Treasurer 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 Objective

The Objective of the Program is to meet or exceed the return of the Benchmark, measured over a three year horizon, net of all costs and fees. Each Manager will have a unique performance 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 in a range of 350 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.

e. Currency Risk

The Committee accepts that as a US dollar denominated investor, investing in Non US 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 Treasurer 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 Treasurer'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 at all times comply with applicable State and Federal laws and regulations and the prudence requirement.
- Managers shall at all times act solely in the interests of the Plan's participants and beneficiaries.
- Implementation of this Program shall comply at all times with the Plan's Investment Guidelines.

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 short term fixed income securities held by Managers for the purpose of facilitating cash flows or portfolio transactions will be swept daily by the custodian and equitized by the Treasurer or designated overlay manager using appropriate index futures 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 outside the United States, or which derive the majority of their sales and earnings from countries outside the United States. It may also invest in stocks that are traded over-the-counter and in other equity-related securities and private placements. In addition, short-term fixed income securities are permitted subject to the limitations noted above.

Managers may use currency futures, forward contracts, or options to manage currency risk and hedge existing equity exposures.

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies, within separately managed accounts. The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Russell, MSCI) and communicate this list to investment managers annually or whenever changes occur.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Lend securities
- Purchase commodities
- Purchase fixed income securities, other than short-term securities as limited above
- Buy party-in-interest securities
- Buy lettered, legend, or other restricted stock, except for 144A securities, which are permitted
- Buy or sell options or futures
- Buy or write swaps or equity linked notes
- Employ leverage in the portfolio through borrowing

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk and will exhibit portfolio characteristics similar to the Benchmark. The Treasurer 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 be in a range of 0.90 to 1.10, as measured over the most recent 12 month period.
- The aggregate holdings of any security may not exceed 5% of that security's outstanding shares.

It is also expected that each Manager's portfolio 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 Treasurer at the Manager's discretion when best execution is available.

f. Managing Cash Flows

The Treasurer 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.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

3. Evaluation and Review

a. Policy and Guideline Review

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

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

4. Reporting

On a quarterly basis, the Treasurer shall provide the following reports to the Committee:

a. A performance attribution explaining differences in sector or 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 Treasurer'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 Treasurer 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. Other Definitions

a. 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.

b. Forecast annualized tracking error: the forecast standard deviation of monthly 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.
c. Cash equivalents: cash or fixed income securities with a maturity of less than one year and a quality rating of at least AA or equivalent.
d. Equitizing cash: the process of purchasing equity derivatives for the purpose of maintaining equity exposure.
e. Derivatives: securities whose value is completely determined by the value of an underlying security. For purposes of these Guidelines, derivatives are used to replicate a benchmark index performance, and include CFTC exchange traded index futures and Exchange Traded Funds (ETF's), such as SPDRs or iShares.
f. Leverage: using borrowed funds or derivative instruments to increase exposure to a security or portfolio of securities in excess of the amount of capital owned.
g. 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, allocation among countries or geographical regions.
h. Beta: the sensitivity of a portfolio to a benchmark, computed by regressing portfolio returns on benchmark 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, the portfolio increases or decreases by 1.2% (alternately, 0.8%).
i. 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.
j. 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.
k. Unhedged benchmark: a benchmark in which the underlying securities' returns are translated from their local currency back to US dollars at each measurement date.
l. Separately managed account: an account entirely owned by The Regents, for which investment policies and guidelines are determined jointly by The Regents and the manager.
m. 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).
n. Management costs and fees: for the purpose of the Objective in Part 1, costs and fees shall refer only to those costs directly incurred by the Treasurer's Office, either directly for this asset class or general office expenses allocated to it. It shall not include other University overhead or allocated indirect costs.

Item 603

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7C

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 Fixed Income allocation of the UCRP ("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").

b. Investment Strategy

The Program shall be implemented by the Treasurer's Office internal fixed income staff ("Core Strategy"), and may be supplemented by hiring multiple external investment managers (Core 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 Treasurer 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 Treasurer 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 Objective of the Program is to meet or exceed the return of the Benchmark, measured over a three-year horizon, 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 in the range of 150 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.

e. Other Constraints and Considerations

- Managers shall at all times comply with applicable State and Federal laws and regulations and the prudence requirement.
- Managers shall at all times act solely in the interest of the Plan's participants and beneficiaries.
- Implementation of this Program shall comply at all times with the Plan's Investment Guidelines.

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 and their derivative securities, subject to restrictions noted below in section 2c.
The following security classes may be held outright and under resale agreement

- 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
- Short term fixed income instruments (having a maturity 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

    i. Short Term Investment Pool (STIP), managed by the Treasurer

- 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

The Program may purchase securities on a when-issued basis or for forward delivery.

c. Restrictions

The Managers may **not**

- Purchase securities of tobacco related companies. The Treasurer will determine what constitutes a tobacco company based on standard industry classification of the major index providers (e.g., Lehman, Citigroup) and communicate this list to investment managers annually or whenever changes occur.
- 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 (other than preferred stock) or commodities
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Buy or write structured ("levered") notes (see definitions, section 5)
- Use derivatives to leverage the portfolio.
- 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 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 both major NRSRO's
        - Standard & Poor's (BBB-)
        - Moody's (Baa3)

  - Commercial Paper must have a rating of at least A-1 or P-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 either Moody's or Standard & Poor's
  - Except for securities issued by the US Treasury or its Agencies, 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 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 Treasurer.
- **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.]

It is also expected that each Manager's portfolio be appropriately diversified, within limits established in its guidelines and relative to its performance objectives, to control risk 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 Treasurer at the Manager's discretion when best execution is available.

<u>f. Managing Cash Flows</u>

Managers may use CFTC exchange traded derivatives (including but not limited to index futures and ETF's) 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

<u>a. Policy and Guideline Review</u>

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

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

4. Reporting

On a quarterly basis, the Treasurer 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 Treasurer'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 Treasurer 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. Other Definitions

a. 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.
b. Forecast annualized tracking error: the forecast standard deviation of monthly 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.
c. Cash equivalents: cash or fixed income securities with a maturity of less than one year and a quality rating of at least AA or equivalent.

d. Derivatives: securities whose value is completely determined by the value of an underlying security. For purposes of these Guidelines, derivatives include the securities listed in section 2b.

e. Leverage: using borrowed funds or derivative instruments to increase exposure to a security or portfolio of securities in excess of the amount of capital owned

f. Portfolio characteristics: attributes of a portfolio of securities, including but not limited to, sector weights, effective duration, credit quality.

g. 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.

h. 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.

i. Credit default swap (CDS): a security 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.

j. Eurodollar deposits: deposits issued in US dollars of foreign banks and foreign branches of US banks.

k. NRSRO: Nationally recognized statistical rating agency, such as Moody's or Standard and Poor's.

l. 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.

m. Counterparty: One party to a trade legally bound to make a good delivery or a good payment.

n. CMBS: Commercial mortgage backed securities.

o. CDO, CLO, CBO: Collateralized Debt, Loan, and Bond obligations, respectively.

p. CMO: Collateralized mortgage obligation (MBS derivative with unique structured risk and return characteristics).

q. REMIC: Real estate mortgage investment conduit (CMO variety)

r. IO, PO: Interest only and Principal only strips (CMO variety).

s. Management costs and fees: for the purpose of the Objective in Part 1, costs and fees shall refer only to those costs directly incurred by the Treasurer's Office, either directly for this asset class or general office expenses allocated to it. It shall not include other University overhead or allocated indirect costs.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7D

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 an income from investments in short duration US dollar denominated bonds which exceeds the income return on a constant maturity two (2) year Treasury note ("Benchmark").

c. Investment Strategy

The Program shall be implemented by the Treasurer's Office internal fixed income staff ("Manager"). The Treasurer will monitor the Program's adherence to these Guidelines.

d. Performance Objectives

The Objective of the Program is to meet or exceed the return of the benchmark, measured over a three-year horizon, net of all costs and fees.

e. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be in the range of 75 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.

f. Other Constraints and Considerations

- Managers shall at all times comply with applicable State and Federal laws and regulations and the prudence requirement.

- Manager shall at all times act solely in the interest of the Plan's participants and beneficiaries.
- Implementation of this Program shall comply at all times with the Plan's Investment Guidelines.

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.

- 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
- Short term fixed income instruments (having maturity of less than 13 months)
  1. US Treasury and Agency bills and notes
  2. Certificates of deposit
  3. Bankers acceptances
  4. Commercial paper
  5. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
  6. Eurodollar CD's, TD's, and commercial paper
  7. US and Eurodollar floating rate notes
  8. Money market funds managed by the custodian

The Program may purchase securities on a when-issued basis or for forward delivery.

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
- 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
- Buy or write structured ("levered") notes (see definitions, section 5)
- Leverage the portfolio using derivatives
- 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 both major NRSRO's
        - Standard & Poor's (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 either Moody's or Standard & Poor's
    - No more than 5% of the Program's allocation to commercial paper may be invested in any single issuer.
    - Except for securities issued by the US Treasury or its Agencies, 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
    - 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 Treasurer.

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 Treasurer at the Manager's discretion when best execution is available.

3. Evaluation and Review

a. Policy and Guideline Review

The Treasurer 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 Treasurer 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 Treasurer 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. Other Definitions

a. 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.
b. Forecast annualized tracking error: the forecast standard deviation of monthly 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.
c. Cash equivalents: cash or fixed income securities with a maturity of less than two years and a quality rating of at least AA or equivalent.
d. Derivatives: securities whose value is completely determined by the value of an underlying security, such as futures, options, and swaps.
e. Leverage: using borrowed funds or derivative instruments to increase exposure to a security or portfolio of securities in excess of the amount of capital owned.
f. 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.

g. Eurodollar deposits: deposits issued in US dollars of foreign banks and foreign branches of US banks.

h. NRSRO: Nationally recognized statistical rating agency, such as Moody's or Standard and Poor's.

i. 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.

j. Counterparty: One party to a trade legally bound to make a good delivery or a good payment.

k. Management costs and fees: for the purpose of the Objective in Part 1, costs and fees shall refer only to those costs directly incurred by the Treasurer's Office, either directly for this asset class or general office expenses allocated to it. It shall not include other University overhead or allocated indirect costs.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7E

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 that exceeds the Russell 3000 Index return by 3 percent per year.

Portfolio Guidelines:
1. Permissible investments include partnerships that invest in U.S venture capital, U.S. buyouts, and non-U.S. private equity.

2. Co-investment and direct investments are not permitted at this time.

3. Fund-of-funds partnerships are permitted, and the commitment to any individual fund-of-funds partnership is recommended not to exceed 35 percent of the total capital raised by the partnership. The maximum of 35 percent represents the ownership percentage of the partnership at each closing.

4. The policy allocation to U.S. buyouts is 50 percent of the private equity portfolio with a minimum allocation of 30 percent and maximum allocation of 70 percent. U.S. buyouts are broadly defined as leveraged buyouts, growth capital buyouts, special situations, restructuring, and mezzanine funds. Real estate funds are not included.

5. The policy allocation to U.S. venture capital is 50 percent of the private equity portfolio with a minimum allocation of 30 percent and maximum allocation of 70 percent. U.S. venture capital includes early, middle, and late stage private investments in new high growth businesses.

6. The policy allocation to non-U.S. private equity is 0 percent of the private equity portfolio with a maximum allocation of 10 percent. Non-U.S. private equity includes private equity and venture capital partnerships operating in Europe, Asia, and Latin America.

7. No single partnership commitment 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 approved target commitment for the current (one) year.

8. Investment in multiple funds of the same general partner is permitted. However, the total commitment to partnerships with the same general partner, at the time of commitment, can not exceed 15 percent of the approved three year private equity allocation defined as current book

value plus unfunded commitments plus approved commitment level for the current year and two subsequent years.

9. The commitment to any individual partnership is recommended not to exceed 20 percent of the total capital raised by the partnership. The maximum of 20 percent represents the ownership percentage of the partnership at each closing. Notwithstanding these limitations, commitments to any fund-of-funds partnership are recommended not to exceed 35 percent of the total capital raised by the partnership.

10. The private equity portfolio should be diversified across time as well. At the time the budget is set, no more than 30 percent of the approved private equity asset target allocation can be committed to partnerships in any one year.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7F

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.

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

Strategic Allocations		
Strategy	**Allocation**	**Range**
Core Real Estate	50%	30%-60%
REITs (Real Estate Investment Trusts)	10%	5%-20%
Enhanced Strategies	25%	10%-35%
High Return Strategies	15%	0%-25%
Total	100%	

Core Real Estate, Enhanced Strategies, and High Return Strategies are combined below under the heading "Private Real Estate". REITs are referred to in the section "Public Real Estate"

Investment Guidelines – Private

1. The benchmark for evaluating investment performance for Private Real Estate managers is the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index. The portfolio return is expected to meet or exceed this benchmark, after deducting all costs and expenses.
2. Investments shall be in limited liability investment vehicles such as limited partnerships, limited liability corporations, private REITs and other pooled investment funds.
3. Investments shall be primarily equity-oriented, but may also include debt instruments secured by real estate with equity-like returns.

4. Specific property types in the portfolio shall be within the following ranges:

Property Diversification Guidelines	
Property Type	**Range**
Office	20%-50%
Apartments	15%-35%
Industrial	15%-35%
Retail	10%-30%
Other	up to 10%

5. Investments in the U.S. shall be diversified by geographic location with no one metropolitan area exceeding 10% of the portfolio.
6. Investments outside the U.S. may not represent more than 10% of the private real estate portfolio and must be diversified by type and geographic location.
7. The Regents' investment in any one fund shall not exceed 20% of the total capital being raised for that investment.
8. No more than 10% of the program's assets shall be invested with a single core manager and no more than 5% of the program's assets shall be invested with a single non-core (Enhanced or High Return) manager.
9. The Regents' outstanding investment(s) with any given sponsor, or related sponsors, may not exceed 15% of that sponsor, or related sponsors', total real estate equity under management.
10. In order to properly align the interest 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%.
11. Leverage at the portfolio level shall not exceed 50% of the market value of the assets. All leverage shall be non-recourse to the Retirement Fund.

Investment Guidelines – Public

1. The benchmark for evaluating investment performance for REIT managers is the Dow Jones-Wilshire REIT Index. The portfolio return is expected to meet or exceed this benchmark, after deducting all costs and expenses.
2. At least 90% of the portfolio assets must be invested in securities included in the benchmark index. No more than 10% of the portfolio may be invested in non US companies.
3. No property type may exceed two times that property type's weight in the benchmark index.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

4. The weighting of any individual security cannot exceed more than two times its weight in the benchmark index.
5. The Retirement Fund's investments in any given security may not exceed 4.5% of the equity capitalization of that security at the end of any quarter.
6. No investment with any single manager can represent more than 25% of the public real estate portfolio.
7. No investment with any single manager may exceed 25% of that manager's total assets under management.

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

Item 603

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7G

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 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 a return that exceeds one-month Treasury bills by 4.5% per year. The AR portfolio should also provide diversification benefits to the overall portfolio by offering returns that have low correlation to the performance of other asset classes.

Portfolio Guidelines
1. Permissible investments include funds that invest primarily in long/short or market neutral equity, convertible bond arbitrage, distressed securities, and risk arbitrage strategies.

2. Investments may be made in funds that manage single or multiple strategies.

3. Fund-of-funds investments are permitted.

4. Policy allocations and ranges for the strategies are:

	Policy	**Range**
Long/short equity	30%	0-70%
Market neutral equity	10%	0-25%
Convertible bond arbitrage	20%	0-50%
Risk arbitrage	20%	0-50%
Distressed securities	20%	0-50%

5. No investment with any single manager can represent more than 25% of the AR portfolio.

6. No investment with any single manager may exceed 25% of that manager's total assets under management.

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 7H

INVESTMENT OF CASH COLLATERAL
INVESTMENT GUIDELINES

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

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

The following guidelines govern investments held by the Fund.

(I) <u>Investment Management</u>

1. U.S. Government -U.S. Treasury bills, notes and bonds, and other obligations issued by the U.S. Government, its agencies or sponsored agencies.
    a. Maturity may not exceed five years.

2. Corporate Debt Obligations (including commercial paper, floating rate notes and master demand notes, and excluding asset-backed commercial paper, mortgage backed securities and letter of credit backed commercial paper).
    a. Issuer must have a short-term debt rating not lower than Al and P1 and the issuer must have a minimum long-term debt rating not lower than A2/A. In. the event the issuer is only rated in either the long-term or the short-term area the issuer shall have a rating not lower than the rating required above for such area.
    b. The Fund may hold no more than 5% of its assets in Corporate Debt Obligations issued by a single issuer and its affiliates.
    c. The Fund will not hold corporate debt obligations issued by securities broker/dealers or their parent companies, except where issued by parent or holding companies with diversified business holdings wherein businesses other than securities brokerage and dealers represent a majority of their activities.
    d. Maturity may not exceed two years.

3. Domestic or London Eurodollar Certificates of Deposit; Yankee Certificates of Deposit; London Time Deposits; and bankers acceptances issued by U.S. banks, foreign branches of U.S. banks, or U.S. branches of foreign banks, which are subject to state or federal banking regulations in the U.S., or London branches of foreign banks.
    a. Nassau and Grand Cayman Time deposit centers are permitted but are limited to a maximum 5% of the portfolio's assets at time of purchase and maturity shall not exceed 7 days.

b. All banks must have minimum assets of $5 billion and a short-term debt rating not lower than Al and P1 and a long-term debt rating not lower than A2/A. In the event the issuer is only rated in either the long-term or the short-term area the issuer shall have a rating not lower than the rating required above for such area.
c. Not more than 5% of the Fund's holdings may be invested in instruments issued by a single U.S. or foreign bank and its affiliates.
d. Maturity may not exceed 190 days except when matched against term loans, which may not exceed one year. Day count will commence (measured) from settlement date using conventional market cash, regular or spot settlement.

4. U.S. dollar denominated supranational and sovereign debt obligations.
    a. Issuing sovereign entity must have a long-term debt rating not lower than A.

5. Repurchase agreements.
    a. All counter-parties must have executed a written repurchase agreement.
    b. All repurchase transactions must be fully collateralized by securities issued by the U.S. government or its agencies (including mortgage backed securities issued by GNMA, FHLMC, or FNMA).
    c. All counterparties shall have a long-term debt rating not lower than A2/A.
    d. The Fund must take possession of collateral either directly or through an independent third-party custodian.

6. Shares in registered money market mutual funds governed by SEC Rule 2a-7, which by definition maintains a constant dollar value and is restricted to investments in top tier rated securities.
    a. No more than 5% of the Fund may be invested in any single money market mutual fund, nor may the Fund own more than 5% of the net asset value of a single money market fund.

7. Asset Backed Securities, rated AAA, collateralized by auto or credit card receivables.
    a. Maximum average life for Asset Backed Securities is 3 years.
    b. Asset Backed Securities are limited to a maximum of 25% of the portfolio at time of purchase.

(II) Liquidity and Investment Maturity

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

1. No investment of securities lending cash collateral shall be made, directly or

indirectly, in commercial paper or other obligations of Manager or its parent company or any of its affiliates or in any derivative instrument with respect to which State Street or any affiliate is a counterparty.

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

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

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

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

6. Floating rate investments must not exceed 50% of the portfolio at time of purchase.