The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY COMMITTEE
May 2, 2006

The Committee on Investments and the Investment Advisory Committee met jointly on the above date at the Morgan Center Press Room, Los Angeles campus.

Members present: ***Representing the Committee on Investments***: Regents Parsky, Pattiz, and Wachter; Advisory Member Schreiner
Representing the Investment Advisory Committee: Regent Pattiz, Mr. Fisher, and Mr. Hotchkis; Consultants Behrle, Beim, Child, and Lehmann

In attendance: Secretary Trivette, General Counsel Holst, Interim Treasurer Berggren, and Recording Secretary Nietfeld

The meeting convened at 2:15 p.m. with Committee Vice Chair Wachter presiding. Due to the lack of a quorum, the meeting was held as a briefing session for the members.

1. **READING OF NOTICE OF MEETING**

For the record, it was confirmed that notice was served in accordance with the Bylaws and Standing Orders for a Special Meeting of the Committee on Investments and the Investment Advisory Committee for the purpose of addressing items on the Committees' agenda.

2. **GENERAL ENDOWMENT POOL ASSET ALLOCATION AND BENCHMARKS**

The Interim Treasurer recommended and Richards and Tierney concurred that the asset allocation and benchmarks for the University of California General Endowment Pool, as shown in the attached Investment Policy Statement (IPS), be approved, effective July 1, 2006.

It was recalled that in March 2005 The Regents had directed Treasurer Russ to move the General Endowment Pool (GEP) to a new investment strategy that had higher expected return, lower expected risk, and was more similar to the allocations of peer endowments with which the University competes for faculty and students. Much progress was made, but the implementation was put on hold when Mr. Russ left last July.

At the request of The Regents, the Office of the Treasurer has updated and modified that plan. The Office proposes to continue to increase the allocation to alternatives, but at a measured pace, recognizing the large flows of capital into this area. Realistic targets are proposed for the next 12 months to increase private equity, real estate, and absolute return strategies. The asset allocation will be reviewed annually from this point forward.

Interim Treasurer Berggren displayed a chart which compared the asset allocation of the General Endowment Pool (GEP) with the Big 4: Stanford, Princeton, Harvard, and Yale, noting that the University's asset allocation is substantially different from many peer endowments, with higher investments in public equity and fixed income. Ms. Berggren recalled that changes were made to the endowment during the period from March to July, 2005, which included a reduction in U.S. equity of $786 million and a reduction in fixed income of $358 million. At the same time, investments in non-U.S. equity, emerging markets equity, Absolute Return, and TIPS were increased.

Ms. Berggren outlined the asset allocation process by which the fiduciaries select the level of investment risk and the Treasurer and The Regents' consultant propose asset allocation policies that are consistent with the fiduciaries' chosen risk level. The process involves a series of steps:

- Review the spending and liquidity requirements of the fund;
- Determine what asset classes are appropriate for the fund;
- Obtain a consensus with respect to the major asset class return and volatility for the next three to five years;
- Generate a set of efficient asset mixes for a range of risk levels;
- Model the endowment cash flows over an appropriate horizon; and
- Determine which decision factors are important for the endowment and how to distinguish between investment success and investment failure.

Critical to the endowment allocation process is an understanding of the factors that contribute to endowment growth, which is a function of the expected nominal return, less inflation, less payout, and less student growth, plus contributions. Given this construct, the first question that must be addressed is what level of investment performance will satisfy the University's goal for the endowment. This is determined by modeling endowment growth and spending growth under different levels of risk and return. Given different asset mixes, Ms. Berggren explained that the Treasurer's Office had evaluated the following factors:

- How much can the endowment value per student grow over ten years, on average;
- How much can the endowment value decline after ten years in the ten percent of worst cases;
- How much can spending per student grow over ten years, on average; and
- How much can spending decline after ten years in the ten percent of worst cases.

A portfolio was chosen that melded the tilt between least-risk aversion and the maximum endowment growth.

Interim Treasurer Berggren explained that the most important consideration in the asset allocation process is the expectation for equities to outperform bonds over the long term, known as the "equity risk premium" (ERP). It is typically defined as the expected equity return less the ten-year government bond return. Institutions first estimate the ERP for a full market cycle and then determine short-term factors that may cause differences from the trend. The current estimates are the following:

- Estimated equity return: 7.5% - 9.5%
- 10-Year Government Bond yield: 4.5% - 5.5%
- Equity Risk Premium: 3.0% - 4.0%

Ms. Berggren presented details to support the estimated nominal equity return. A critical piece of the asset allocation equation is the return expectation for each asset class. A chart of capital market expectations for 2006 was presented, which included expected returns, expected risk, and the risk premium. All of these assumptions yield an equity portfolio that is closer to the Big 4 endowments.

Interim Treasurer Berggren presented a list of the proposed policy changes, to be effective July 1, 2006, noting that currently the ranges around three broad categories of investments are plus or minus 10 percent. The Office of the Treasurer is recommending that the range be increased to plus or minus 15 percent in order to provide flexibility to the Treasurer and campus foundations in allocating assets. The proposed policy reduces the allocations to U.S. equity and to fixed income and increases the allocations to all other asset classes. Three new categories have been added: U.S. high yield, international fixed income, and emerging market debt. Absolute Return is proposed to go from 10 percent to 15 percent. The proposed asset allocation produces slightly higher returns with less risk than the current portfolio. Ms. Berggren displayed the recommended benchmarks for the asset classes in the GEP, shown in the attached IPS. At the August meeting, the Office of the Treasurer will recommend any other real asset classes, with additional staffing to execute this strategy.

Mr. Fisher observed that both Harvard and Yale had made early investments in private equity and did well as a result, while others invested much later. He cautioned against moving money towards yesterday's news. He did not believe that the Big 4 should be used as a model for the GEP.

Interim Treasurer Berggren recalled that in the past, UC's General Endowment Pool had not matched the performance of other endowments due to a lack of diversity in the portfolio. She noted that, in expanding the asset allocation to alternative investments, manager selection has been critical.

Regent Wachter commented that the asset allocation plan would need regular review. The immediate goal for private equity is 5 percent of the portfolio, and the long-term goal is 10 percent. At present, the investment totals around 3 percent. He observed that, if it were warranted, the Treasurer could recommend not investing the amount of money required to reach the goal. With respect to the Committee's discussion regarding performance as compared with peer institutions, Regent Wachter suggested that the appropriate benchmark for the endowment is a challenge the Treasurer should consider.

Regent Parsky urged the Committee to think about giving appropriate direction to the Treasurer's staff with respect to increased investments in certain sectors. This relates to the ability to attract personnel capable of reaching the stated investment goals within the asset allocation plan. He noted that it is the Treasurer's responsibility to communicate with the Committee with respect to capabilities within the office. He stressed the difficulty of comparing The Regents' endowment with those of Harvard or Stanford if these institutions operate under a different risk profile and have more resources.

Ms. Berggren emphasized the fact that the Treasurer's Office is able to recruit high-quality people with a great deal of experience in these fields, particularly following the implementation of the incentive plan. In response to a comment by Regent Wachter, Ms. Berggren pointed out that the office uses outside managers when the investment capacity does not exist in house.

Regent Parsky noted that the Interim Treasurer was recommending that the ranges around three broad categories of asset classes, which currently are plus or minus ten percent, be increased to plus or minus 15 percent in order to allow flexibility to the Treasurer and the campus foundations in allocating assets.

Mr. Child observed that the data show that the UC endowment significantly underperforms other endowments greater than $1 billion in ten-year, five-year, three-year, and one-year periods and asked how asset allocations are determined. Regent Parsky confirmed that asset allocation is the responsibility of The Regents, with the advice of outside consultants. Asset allocation decisions must be made in the context both of the risk profile and the fund's objectives. Mr. Child emphasized that performance must also be measured on an absolute basis. Regent Parsky believed that the failure to diversify the portfolio further had been the result of the historic lack of capability in the Treasurer's Office. Interim Treasurer Berggren has been successful in recruiting qualified staff. Mr. Child supported increasing the ranges if the risk profile remains the same.

Mr. Fisher commented that attention should be focused on the risks associated with losing money rather than on volatility. Managing Director Phillips pointed out that the risk budget represents the total volatility that the Regents are willing to accept. Interim Treasurer Berggren stated that it would be her intention to make a detailed presentation on the risk process at the Committees' next meeting.

Professor Lehmann believed that the Treasurer's Office would be able to meet its diversification goals fairly quickly, at which time the GEP would more resemble a real endowment. He suggested using the full Comparison 8, which includes four public universities, for comparison purposes.

Regent Wachter remarked that having a 30 percent range around a band in some sense renders it meaningless and asked for an articulation of why the ranges should be increased. Interim Treasurer Berggren explained that having greater flexibility would permit the Office to take better advantage of attractive opportunities. Mr. Tom Richards of The Regents' investment consultant, Richards and Tierney, stressed that the Treasurer's Office would exploit these opportunities within the risk budget.

Interim Treasurer Berggren confirmed for Mr. Beim that, under the proposed ranges, it would be permissible to reduce fixed income to 8 percent of the portfolio. Mr. Beim reported that the UC Berkeley Foundation had decided that its allocation to fixed income should never fall below 10 percent, which will always have a deflation hedge characteristic.

Regent Wachter saw the need for reassurance that the investment philosophy was on the right track. Ms. Berggren noted that detailed performance results are presented at each meeting of the Committees.

In response to a question from Mr. Beim regarding investment decisions, Interim Treasurer Berggren explained that there is a senior management group that meets every week to discuss the overall market and the expectations for variables affecting the market and then determine whether changes are needed in the portfolio. The Office relies on advice from Richards and Tierney in this process.

3. **APPROVAL OF TREASURER'S OFFICE ANNUAL INCENTIVE PLAN RECOMMENDED CHANGES TO PERFORMANCE OBJECTIVES FOR FY 2006-07**

The President and Mercer Investment Consulting recommended that the incentive program asset class investment performance objectives be modified as indicated in the attached **Performance Objectives**.

Mr. Tom Lighwoet of Mercer recalled that the Annual Incentive Plan (AIP) for the Office of the Treasurer had been established by The Regents in 2002. The goals were to attract and retain high-quality staff and encourage limited risk taking to provide positive incremental return. It was designed by Mercer Human Resources Consulting, Mercer Investment Consulting, The Regents' investment consultant, the Office of the President Human Resources Department, and the Treasurer. Periodic changes are recommended by the Treasurer and Mercer in consultation with UCOP. The investment objectives are set by The Regents; changes to the plan are recommended by Mercer and approved by The Regents. The baselines for all awards are the investment benchmarks set by The Regents for each asset class and for the total fund. The awards are earned if the investment returns exceed the benchmark by a given increment. Each award is paid out over a three-year period, and they are capped over a certain point to discourage excessive risk taking.

Mr. Lighwoet explained that the recommended changes include performance for three new mandates: High Yield Bonds, Emerging Market Debt, and Global Equity, none of which was part of the original Annual Incentive Plan. It is recommended that, for High Yield Bonds, the target be 65 basis points, with a threshold of 12 basis points above the Merrill Lynch High Yield Cash Pay Index benchmark. If the manager does not exceed 12 basis points, there is no award. This recommendation is consistent with opportunities to add value over investment-grade bonds. For Emerging Market Debt, Mercer is recommending that the target be 125 basis points, with a threshold of 25 basis points above the J.P. Morgan Emerging Market Bond Index "Plus." It is conceivable that negative performance could have a negative impact on the investment officer's incentive award.

In response to a comment by Mr. Fisher, Ms. Berggren observed that paying each award over a three-year period takes into account long-term performance. Mr. Fisher believed that the Office would be better served if the bonuses were based on multiple-year results. Professor Lehmann supported the current system, which he felt provided incentives to perform well each year. Ms. Berggren emphasized the fact that considerable effort was expended by Mercer in developing the Annual Incentive Plan. Mr. Lighwoet observed that in industry both approaches are used. Mr. Fisher suggested that it might be informative to ask the staff in the Treasurer's Office which approach they would prefer.

Returning to the recommendation, Mr. Lighwoet reported that, for Global Equity, the performance objective is the MSCI World Tobacco Free Index Net. The recommended threshold is 15 basis points above the benchmark, and the target is 85 basis points. This is consistent with opportunities to add value over passive developed market equities.

Mercer is recommending that the target for Emerging Market Equity be reduced by 25 basis points due to reduced opportunities in this asset class.

Mr. Lighwoet continued that there are two combined mandates, comprising multiple asset classes, for which it is appropriate to develop standards. These combined mandates are the responsibility of managing directors within the Treasurer's Office. The performance objective will be based on the objectives of the underlying assets, combined at policy weights. The combined mandates for equity are the following: U.S. equities, Non-U.S. equities (developed), emerging market equity, and global equity. The recommended target is 80 basis points, with a threshold of 15 basis points. The combined mandates for fixed income are U.S. core fixed, high-yield, Non-U.S. (developed), emerging market debt, and income funds. The target will be set at 40 basis points.

Mr. Lighwoet explained that the total entity performance standards will be changed to reflect the changed scope of active management. Targets for entity performance will be based upon the following factors:

- Mix of assets classes within total fund

- Desired asset class performance and risk
- Amount of assets that are actively managed

As all three of these factors changed during the past fiscal year, it is recommended that the target be increased from 25 basis points to 30 basis to be consistent with the original standards for risk-return trade off. The entity targets will be reviewed annually for changes in any of these factors; the present recommendations apply only to fiscal year 2006-07.

4. **APPROVAL OF INVESTMENT POLICY STATEMENT FOR THE UC RETIREMENT SAVINGS PROGRAM**

The Interim Treasurer recommended and Richards and Tierney concurred that the attached Investment Policy Statement for the UC Retirement Savings Program be approved, effective immediately upon approval.

Managing Director Phillips recalled that over the past two years, the Treasurer had consolidated and updated the investment policies and guidelines for the UC Retirement Plan (UCRP) and the General Endowment Pool (GEP). A similar document relating to the University's combined Defined Contribution plans has been prepared which is consistent with the modified fiduciary structure approved by The Regents in May 2005, which named the Treasurer as primary fiduciary for investment matters and the Associate Vice President, Human Resources and Benefits, as the primary fiduciary for administrative matters.

Under this structure, the Regents, as ultimate fiduciaries, approve overall investment policy and oversight procedures and delegate to the Treasurer the establishment of investment guidelines for the core options offered to plan participants, as well as the management of those assets. The policy statement is similar in spirit and structure to the UCRP and GEP policies and has been reviewed by Richards and Tierney and the Office of the General Counsel.

Appendix 4 of the Investment Policy Statement, which was distributed to the Committees for information, contains the core option investment guidelines. These guidelines may be changed as needed by the Treasurer.

5. **REGENTS' INVESTMENT POLICY WITH RESPECT TO UC CAMPUS FOUNDATIONS**

The following draft Investment Policy Statement for UC Campus Foundations was distributed to the Committees:

- Annual review, including:

  - ○ Asset allocation relative to their policy
  - ○ Performance by asset class and relative to their benchmarks
  - ○ Note: this is now facilitated by State Street's consolidated quarterly report

- Approve each foundation's investment policy

  - ○ One time only – possibly delegate policy review to Treasurer's Office
  - ○ Policy should include at a minimum:
    - ■ Asset allocation target percentages
    - ■ Ranges for each asset class
    - ■ Policy benchmarks for each asset class and in total
  - ○ Should state that they will follow GEP policies and investment guidelines, or if not, state differences

- Formal review of foundation's asset allocation policy if it is significantly different from The Regents'

  - ○ If foundation's target weights are outside the ranges set for the GEP, the foundation needs to explain and request approval by The Regents of its strategy
  - ○ Such approval needs to be sought on an annual basis as long as the exception continues.

- If a foundation makes changes to is policy (asset allocation percentages and/or benchmarks, this must be communicated to The Regents, The Regents' general consultant (Richards and Tierney), and State Street (performance reporting).

General Counsel Holst commented the fiduciary responsibility for UC's campus foundations is shared by The Regents and the trustees of the foundations. It would therefore be in order for The Regents to adopt a policy that is applicable to the foundations.

Regent Wachter explained that he had raised the issue as a result of his concern about The Regents' responsibility for the investments of the foundations in light of the fact that each foundation may have a different investment philosophy. The intention is to set guidelines and then to determine whether the foundations are operating within these guidelines. There would be no attempt to influence foundation investment decisions. The foundations that are not operating within the guidelines will need to seek an exception. Regent Wachter recalled that the UCLA Foundation had made a detailed presentation to the Committees on how it is currently out of compliance with the asset allocation plan.

General Counsel Holst agreed that it was important that the Regents' attention be addressed to this issue, noting that it was one that had been discussed over the past 25 years. One aspect of the issue is the fact that the foundations are using the University's name in their fundraising efforts. The Regents recently adopted a resolution indemnifying the foundation trustees with respect to their activities on behalf of the University.

Regent Wachter felt that it would be valuable if the foundations were to compare their performance with The Regents, each other, and peer institutions. In so doing, it would be helpful if the same benchmarks were used. He suggested that the next steps should include a meeting with foundation representatives, prior to which they should meet with the Office of the Treasurer to understand how the policy will be implemented.

Interim Treasurer Berggren believed that it was important to understand whether the foundations are in compliance with the current asset allocation and where they stand with respect to the long-term goals.

5. **QUARTERLY INVESTMENT PERFORMANCE SUMMARY**

In accordance with the Schedule of Reports, the Quarterly and Fiscal Year Report on Investment Performance for the second quarter 2006 was submitted for discussion. Interim Treasurer Berggren reported that the performance had generated 350 basis points over the last quarter for the University of California Retirement Plan.

6. **ABSOLUTE RETURN STRATEGIES PORTFOLIO STRATEGY**

Investment Officer Choi began her presentation on Absolute Return strategies by providing a program overview as of March 31, 2006. The program inception date was March 31, 2003. The program has 13 managers and a market value of $506 million. The annualized program return since inception has been 8.7 percent, as compared to the benchmark return of 6.1 percent. The current allocation to Absolute Return within the General Endowment Pool is 8.7 percent, with an interim target allocation of 10 percent. The Treasurer's Office intends to propose that the GEP's exposure to Absolute Return be increased to an interim target allocation of 15 percent, as this is a realistic target to allow staff at Albourne to continue their thorough investment process. To allow for the inclusion of strategies that involve higher volatility and higher returns, the Treasurer's Office proposed to split the allocation into two separate pools, a low volatility program and a high volatility program. A low volatility program should exhibit the following attributes:

- Annualized volatility under 5 percent
- Low correlation to the equity markets
- Consistent positive returns
- Capital preservation during down equity markets

The qualities of a high volatility program are as follows:

- Annualized volatility closer to 10 percent
- A higher correlation to the equity markets
- Higher alpha on a beta-adjusted basis
- Returns comparable to the equity indices over the long term, but with less volatility

The combined program should have approximately 25 manager and a portfolio volatility between 5 percent and 10 percent. As more risk is introduced into the portfolio, drawdowns should be expected periodically.

Ms. Choi displayed a chart showing the current portfolio exposures, noting that the majority of the investment is in low volatility strategies. The focus over the near future will be on the high volatility program in order to balance the future portfolio exposures at 50 percent low volatility and 50 percent high volatility. To reflect the current plans for the program, it is proposed to increase the target allocation in the GEP from 10 percent to 15 percent and change the performance benchmark back to the original value of T Bills + 4.5 percent to reflect the new risk/reward profile of the portfolio.

7. **PRIVATE EQUITY BENCHMARKS AND PERFORMANCE EVALUATION**

Mr. Richards explained that the Treasurer, like most private equity investors, uses an industry standard and professionally mandated metric: the internal rate of return (IRR) of a fund. A fund's IRR may be meaningfully compared to other investments initiated in the same "vintage year," and such peer group data are tracked by the industry. In addition, the compensation of the private equity group is based on the difference between the Program IRR and the peer group results.

Although the IRR is the preferred performance metric, IRRs cannot be aggregated into a total plan composite, nor can vintage year peer group IRRs be combined in an aggregate fund benchmark. The only available quarterly metric, the time-weighted return, is an imperfect measure of performance, because it does not show change in economic value, but only the effect of cash flows.

In November 2004, Richards and Tierney recommended, and The Regents approved, the following solution. The time-weighted quarterly return of the private equity program shall be included in the total plan return, and the same value shall be included in lieu of the benchmark in the total plan aggregate benchmark. Thus the total plan, compared to its aggregate benchmark, shows no impact of private equity performance. This results in less distortion and more informative reports than trying to force a performance objective (such as exceeding the public equity market return by 3 percent per year) in an aggregate benchmark. Therefore, Richards and Tierney recommends no change to the existing policy.

The consequence of specifying an inappropriate PE benchmark uncorrelated with PE short-term performance will cause significant and misleading distortions in the evaluation of the total fund's value-added performance. Specifying actual private equity performance as the PE benchmark in a total fund evaluation eliminates potential evaluation distortions and allows a fair and ongoing evaluation of the total fund performance. Fund and peer group IRR's are used for staff evaluation and compensation.

8. UC RETIREMENT PLAN ASSET ALLOCATION AND TRANSITION UPDATE

It was recalled that in November 2005 The Regents approved a new asset allocation plan for the UCRP. Marketable equity increased by 5.2 percent to 70 percent, with a 7.7 percent decrease in U.S. equity and a 12.9 percent increase in Non-U.S. equity. Marketable fixed income decreased by 5.2 percent to 28 percent. The new policy has led to an improved risk-return trade off, and all objectives have been met with respect to the portfolio. Interim Treasurer Berggren outlined the next steps, which will occur during May and June 2006, which will include increased funding of Non-U.S. developed equity managers, new Emerging Market equity managers, and new Global Equity managers. Richards and Tierney will specify alternative benchmark weights to be used during the transition period, consistent with The Regents' investment policy and the recent transition of the General Endowment Pool. The new benchmarks will be effective July 1, 2006.

9. QUARTERLY REPORT OF UC CAMPUS FOUNDATION INVESTMENT PERFORMANCE

Assistant Treasurer Stanton observed that, as the endowment assets of the UC foundations grow, The Regents needs to be able to report performance results that are independently confirmed and consistent with the methodology used to report the performance for the GEP. As a matter of policy, this is an important element in the oversight responsibilities of both The Regents and the foundations. The Regents asked the Treasurer to coordinate with the foundations and their custodian banks to provide The Regents with quarterly Investment Performance Summary Reports on each foundation's investments, in the same format as is provided to the Committee on Investments and the Investment Advisory Committee by the Treasurer. The draft performance report for all UC foundations as of December 31, 2005, was distributed to the Committees in advance of the meeting. The reports were prepared by State Street Bank, The Regents' custodial bank and performance provider. Mr. Stanton briefly presented the report for the UC Berkeley Foundation, which provides the market value for each asset and the returns for the recent quarter and the fiscal year-to-date. The report also shows any assets that are managed by the Treasurer for the foundation, as well as assets by the three major categories of public equity, public fixed income, and alternative investments. The report shows the current foundation policy allocation, the variance from foundation and GEP policy range; all of the asset classes for Berkeley are in compliance with the policy ranges. Turning to the UC Davis Foundation portfolio, Mr. Stanton explained that all of the foundation's funds are managed by the Treasurer. Richards and Tierney will bring to the attention of the Regents any issues regarding performance or compliance.

The meeting adjourned at 4:15 p.m.

Attest:

Secretary