The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP
November 12, 2008

The Committee on Investments and the Investment Advisory Group met jointly by teleconference on the above date at the following locations: 1111 Franklin Street, Room 5305, Oakland; 777 S. California Avenue, Palo Alto; 909 Montgomery Street, San Francisco; Covel Commons, Los Angeles Campus; and 2347 N 7600 W, Corinne, Utah.

Members present: Representing the Committee on Investments: Regents Blum, De La Peña, Hotchkis, Makarechian, Marcus, and Wachter; Advisory member Powell
Representing the Investment Advisory Group: Members Fong and Martin; Consultants Gilman and Lehmann

In attendance: Regent Scorza, Secretary and Chief of Staff Griffiths, Associate Secretary Shaw, General Counsel Robinson, Chief Investment Officer Berggren, and Recording Secretary Johns

The meeting convened at 10:30 a.m. with Committee Chair Wachter presiding.

1. **READING OF NOTICE OF MEETING**

For the record, it was confirmed that notice was given in compliance with the Bylaws and Standing Orders for a special meeting of the Committee on Investments to accommodate a scheduling change.

2. **PUBLIC COMMENT**

The following individuals addressed the Committee:

A. Ms. Martha Torres, a UCLA employee of ten years, expressed concern about low wages and discussed her financial challenges as a single mother. She cited the costs of gas, car maintenance, parking, and health insurance as burdens on her and her co-workers.

B. Mr. Patrick Hale, an employee of 18 years at the UCLA Medical Center, noted that the last year of negotiations has been trying. He observed that workers and the University are still far apart in their positions on the contract for service workers. He stated that 90 percent of UC's service workers are eligible for some form of public assistance. He asked the Regents to work with President Yudof to effect change and provide a living wage for UC service workers.

C. Mr. Arnold Meza, a UC Berkeley employee of 20 years, discussed his financial struggles as a single parent with four children, noting that he works two and sometimes three jobs. The idea that working at UC would provide a stable income with a future has encouraged his aspiration for his children to attend UC one day. He expressed the hope that the contract for service workers will be settled soon.

D. Mr. Richard Sandoval, a UCSF employee, expressed concern about the low wages of workers at UCSF and other campuses. He noted the planned resumption of employee contributions to the pension fund. He stated that the University failed in its management of the pension fund during the Dynes presidency and emphasized that UC workers need an ethical wage before they can resume contributions.

E. Mr. Ernesto Encinas, an employee at UC Santa Cruz and member of the American Federation of State, County and Municipal Employees (AFSCME) Local 3299, stated that he cannot afford to live on the low monthly wage he now earns, less than $2,000. He noted his living and child support expenses and stressed that this situation is unfortunate, given that he works for one of the most prestigious institutions of higher learning in the U.S. He criticized salary disparities in the UC system and stated that the University's priorities need to be readjusted.

3. RECOMMENDATION TO CHANGE COMPUTATION METHODOLOGY OF TOTAL FUND POLICY BENCHMARK RETURN

The Regents' general investment consultant, with the concurrence of the Chief Investment Officer, recommended that the computation of the University of California Retirement Plan (UCRP) and the General Endowment Pool (GEP) total fund performance benchmark return, as described in Appendix 1 of the Investment Policy Statements for UCRP and GEP, be amended as described in Attachment 1, effective December 1, 2008.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Mr. Terry Dennison of Mercer Investment Consulting explained that this item proposes a change in the total fund benchmark, particularly in the weight of the alternative investment strategies. The alternative investment strategies are comprised of total return, private equity, and real estate, which are different from traditional asset classes in the time that is required to implement them. The selection of these investments takes longer than the selection of a traditional investment manager. The commitments to this asset class do not represent a transaction that is executed immediately, but a commitment to fund investments when capital is requested by the investment managers. This can result in a slow buildup of active investments toward a long-range target, often over a period of years. During this implementation phase, it is not reasonable to use the full target weight in the total fund benchmark calculation. If the full target weight is 5 percent and the actual invested weight is 0.5 percent, this distorts the total fund benchmark. It is common practice to use the actual invested weight in the total fund calculation and to fill in the missing piece with the domestic equity allocation. This was the University's practice during the implementation phase of the alternative strategies. This implementation phase is now complete. Actual allocations to the alternative investment strategies are now at or above their policy allocations. It is now appropriate to move from the transitional phase and to use the policy weights of the alternative investment strategies in the total fund benchmark calculation in the same manner as other mature asset classes. This has many advantages: it simplifies the calculation of the total fund benchmark, it allows for attribution of the performance impact of over- or underweighting to the alternative investment strategies, and it represents common and best practice at this stage in the investment process. Mercer Investment Consulting recommends a change in the weighting of the alternative investment strategies in the total fund benchmark calculation from their actual weights to their policy weights with an effective date of December 1, 2008.

Committee Chair Wachter asked about the change from actual to policy weight. He presented a hypothetical situation with a policy weight of 5 percent and an actual invested weight of 4 percent, and asked what the reason would be to use 5 percent as a benchmark. He suggested that this would represent use of asset allocation as part of benchmarking. Mr. Dennison responded that, if the policy weight is not used during the buildup phase, the benchmark may be over-impacted by the actual allocation. With 1 percent actually invested and a policy weight of 5 percent, the 1 percent would affect the total fund benchmark five times more than the actual investment is affecting the actual total fund. The proposed approach is a way of phasing in the growth of the alternative investment strategies during the implementation period. Now that actual allocations are at the policy level, the aim of this recommendation is to reflect in the performance attribution the weighting impact of actually being above or below the benchmark, which ultimately becomes a policy decision.

Committee Chair Wachter asked if, in a situation where the allocations of equities and fixed income changed, one would still use the policy weight on any other asset class as a benchmark, or adjust the benchmark based on the weighting at the end of the year or quarter. Mr. Dennison responded that the policy benchmarks would always remain in effect so that the performance attribution has a performance effect attributable to the actual asset allocation decision.

In response to a request by Regent Marcus, Chief Investment Officer Berggren explained that, in the past, the actual allocation for alternatives was considerably less than the benchmark. In order to develop a method of calculation that took into account the actual alternative weight different from the benchmark weight, this was filled in with U.S. equity. The alternative weights in the portfolio are now equal to the actual weights, and the University can avoid a convoluted calculation. In response to a remark by Chairman Blum, Ms. Berggren confirmed that this represents an adjustment to the actual weights rather than the projected weights.

Consultant Lehmann observed that, if the proposed target weight of an allocation is 20 percent, and actual weight turns out to be 25 percent due to appreciation, the difference is attributed to market timing or to how the asset allocation evolves. Changes in weighting for equity are attributed to market timing. The current recommendation seeks to treat alternative investment strategies like other asset classes and to identify their contribution to performance.

Regent Marcus cited the current unusual market volatility and the University's task of maintaining an allocation consistent with guidelines. He anticipated that the University might be forced to modify the allocation to the detriment of its investments. He asked if the alternative and fixed income allocations would have to be readjusted when equities are down, as they now are, and how this could be done without hurting the fund.

Committee Chair Wachter identified Regent Marcus' concern as the important question of what action to take regarding the University's asset allocation in a volatile market. He distinguished this concern from what he deemed the less important question of benchmarking, which is the University's own evaluation of its results, and the focus of the recommendation.

Upon motion duly made and seconded, the Committee approved the recommendation of the Regents' general investment consultant and the Chief Investment Officer and voted to present it to the Board, Regents Blum, De La Peña, Hotchkis, Makarechian, Marcus, and Wachter voting "aye."[1]

4. **APPROVAL OF TREASURER'S FISCAL YEAR 2007-2008 ANNUAL REPORT**

The Chief Investment Officer and Acting Treasurer recommended that the Treasurer's Annual Report for the fiscal year ended June 30, 2008 be accepted and forwarded to the Board.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Upon motion duly made and seconded, the Committee approved the recommendation of the Chief Investment Officer and Acting Treasurer, Regents Blum, De La Peña, Hotchkis, Makarechian, Marcus, and Wachter voting "aye."

5. **AMENDMENT OF REGENTS' POLICY ON DIVESTMENT OF UNIVERSITY HOLDINGS IN COMPANIES WITH BUSINESS OPERATIONS IN SUDAN**

The Chief Investment Officer recommended that the Policy on Divestment of University Holdings in Companies with Business Operations in Sudan be amended, as shown in Attachment 2, to again permit purchase of four of the companies previously targeted for disinvestment: Tatneft, Videocon, Nam Fatt, and Sudatel.

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

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[1] Roll call vote required by Bagley-Keene Open Meeting Act §11123(b)(1)(D) for all meetings held by teleconference.

Chief Investment Officer Berggren explained that the Committee approved a thorough review of the Sudan policy in 2005. A task force was formed which identified a number of companies that should be excluded from the UC portfolio, based on certain criteria. Certain members of this task force have since left the University and are part of a group devoted exclusively to this issue. They have asked the Regents to remove some of the previously targeted companies from the list. The recommendation seeks approval to remove these companies from the list so the University can start investing in them.

Chairman Blum expressed concern about removing companies from the list. He referred to the events in Darfur as a dark moment in modern history.

Regent Scorza explained that there are four companies on the University's divestment list which are no longer investing in Sudan. The intention of the amendment is to update the list. It will remove these four companies, allowing the University to invest in them. Regent Scorza suggested replacing them with other companies investing in Sudan.

Regent Scorza informed the Committee of a recommendation, submitted late, to add other companies to the list of companies which are now investing in Sudan. He suggested that, if the cost of adding these companies to the list is prohibitive, the University might consider shareholder engagement to address how these companies are investing in Sudan.

In response to a question asked by Chairman Blum, Regent Scorza responded that PetroChina Company Ltd. would still be targeted for divestment. Nam Fatt and Sudatel would be targeted for engagement; Tatneft and Videocon would be targeted for non-action.

In response to Regent Scorza's interest in adding other companies to the list for divestment, Regent Marcus suggested that he return to the Committee with proposed additions at a future meeting.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer's recommendation and voted to present it to the Board, Regents Blum, De La Peña, Hotchkis, Makarechian, Marcus, and Wachter voting "aye."

6. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meeting of September 17, 2008 were approved, Regents Blum, De La Peña, Hotchkis, Makarechian, Marcus, and Wachter voting "aye."

7. **THIRD QUARTER 2008 AND FISCAL YEAR-TO-DATE INVESTMENT PERFORMANCE SUMMARY**

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Chief Investment Officer Berggren began by noting that the University of California Retirement Plan (UCRP) and the General Endowment Pool (GEP) experienced 10 percent declines for the quarter, but positive returns for the 3-, 5-, and 10-year periods. The negative relative performance of the GEP in the quarter was wholly due to the absolute return portfolio. Ms. Berggren explained that the absolute return portfolio benchmark is Treasury bills plus 450 basis points, an almost impossible benchmark to meet in current market conditions. Twenty percent of the portfolio, times a differential of approximately 11 percent, accounts for the entire relative negative performance in the GEP.

In response to remarks made by Committee Chair Wachter, Ms. Berggren noted that the issue of the absolute return benchmark will be investigated in depth and reported on at a future meeting. She then turned to the Short Term Investment Pool (STIP) portfolio, which has had an excellent absolute and relative performance over this time period. She referred to current issues involving short-term investment funds, such as the shutdown of Commonfund. Participating institutions are only allowed to withdraw 26 percent of their investments from Commonfund for university operating expenses; they cannot withdraw most of their money until 2010.

The September quarter was difficult for global markets. It included the decline of major financial institutions, deleveraging, and increases in short-term financing costs. As the financial sector decline worsened, the equity market plummeted, credit spreads widened, the London Interbank Offered Rate (LIBOR) rose more than it has historically, and many money market funds experienced a decline in value below one dollar per share. Core fixed income in the UCRP was down 70 basis points in the quarter. It was the best-performing asset class. All equity returns were affected by the global slowdown in growth, widespread deleveraging, and expectations of worse earnings and write-downs. Although fixed income performed better than equities, it was affected by the forced selling by hedge funds.

In response to a question asked by Regent Hotchkis, Ms. Berggren responded that the overall portfolio in October is probably down approximately 15 percent. She anticipated that the situation will get worse. She pointed out that the absolute return portfolio is down by 10.49 percent and attributed this to extraordinary equity volatility, value dislocation in all sectors, and deleveraging. A major problem was debt and loan deterioration.

Consultant Lehmann pointed out the positive returns relative to the benchmark. Ms. Berggren noted that the one asset class where returns relative to the benchmark have been negative is U.S. equity. A group of managers was chosen three years ago. The

University has reexamined its strategy and eliminated thirteen managers in the U.S. equity portfolio. It has been difficult for outside managers to outperform the benchmark.

Ms. Berggren then turned to asset allocation in the UCRP, noting that all asset classes were within policy ranges. U.S. equity was underweight by 300 basis points; fixed income was overweight by 300 basis points.

Regent Hotchkis asked how much of the equity allocation is passively managed. Ms. Berggren responded that passive U.S. equity is approximately 80 percent of the total. The University has hired a new equity manager and has reconsidered this portfolio. The active portion of the portfolio was significantly reduced in September.

Ms. Berggren then called attention to the reduction of active risk in the UCRP portfolio by 37 basis points, possibly an all-time low. Factor exposures in the portfolio included a negative orientation toward high yield and large value, and a positive orientation toward credit, mid value, small growth, and non-U.S. bonds. Only two factors contributed to risk: large value and EASEA (Europe, Australasia, and Southeast Asia equities). She briefly reviewed the fixed income portfolio. Duration and average quality were more or less equal to the benchmark. The core fixed-income quality summary showed that over 76 percent of this portfolio was rated A or above; 58 percent of the portfolio was rated AAA. Sector allocation and attribution analysis showed an active return in the government sector of -118 basis points, while mortgages, which constitute about 31 percent of the portfolio, contributed approximately 360 basis points. The net return for the portfolio was 16 basis points.

Ms. Berggren continued with the style exposure of the active U.S. equity portfolio for UCRP and GEP. The portfolio had less currency exposure, more growth orientation, and many larger companies than the benchmark, as well as more volatility and less yield. Sector exposures were neutral, with the exception of consumer non-cyclicals and utilities, which had a negative orientation. In the active non-U.S. equity portfolio, the dividend yield, price-earnings ratio, price-book ratio, and market capitalization were almost identical to the benchmark. In risk measures, sector, country, and currency exposures contributed most of the active risk in the portfolio. In regional exposures, the portfolio was underweight in Japan and Canada. In sector exposures, the portfolio was underweight in finance.

Ms. Berggren concluded with the private equity portfolio. From 1978 to 2007, the portfolio has had a weighted average excess return over the benchmark of 9.66 percent, and a 2.0 multiple of cost. The 10-year total annualized return on the UCRP has been 18.24 percent. She attributed much of this positive return to venture capital and noted that, due to a lawsuit brought by a professor, the University is now excluded from two venture firms that produced good returns.

Investment Advisory Group Member Martin noted concerns about recent vintage buyout funds which are between 2 and 5 years into the investing process. Some of UC’s peer institutions are selling their partnership interest on the secondary market. Mr. Martin suggested that this may be a good time to purchase such funds.

Ms. Berggren responded that a number of institutions have a large proportion of their assets in illiquid securities. Private equity is now in a period of less-than-heady returns, and private equity portfolios are generating the most in management fees. This has led to secondary sales of portfolios. Institutions may now find the liquid market more attractive. The University has not invested in many megafunds, where Ms. Berggren anticipated the largest problems will arise. UC did not begin its buyout program until 2002.

In response to a question asked by Mr. Martin, Ms. Berggren responded that the University has a very small position in Cerberus Capital Management.

Chairman Blum believed it was good that the University does not have much exposure to large funds. He cited the large number of leveraged buyouts now facing covenant violations.

Ms. Berggren concurred and stated that the University has examined individual companies in its portfolio and assigned a rating to each company and fund and determined where there is vulnerability. Vulnerable companies and funds are only a small proportion of the portfolio. She stressed the need to work down to the fundamentals of companies, since some were highly leveraged.

Chairman Blum noted that some debt obligations now have returns well above 20 percent and asked if the University is exploring this investment option.

Ms. Berggren responded that the University has a high yield asset allocation and is cognitive of the fundamentals. This area is becoming more attractive to investors, but requires caution in the selection of individual fixed income securities.

Consultant Lehmann suggested that the University keep track of the funds in which the University no longer invests, following the lawsuit by Professor Emeritus Charles Schwartz. He suggested that this be reported at every meeting, to show the consequences of that lawsuit.

8. REVIEW OF ASSET ALLOCATION AND REBALANCING DURING RECENT MARKET EVENTS

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Chief Investment Officer Berggren began her presentation with an outline of the University’s rebalancing policy. She recalled that actual asset weights periodically differ from policy asset weights. This can be the result of market changes or portfolio performance. Significant movements from asset class policy weights will alter the expected return and risk of the University’s investments. The Committee has authorized the Office of the Treasurer to rebalance when necessary to ensure compliance with the University's investment policy.

The intention is to rebalance weights in a timely and cost-effective manner. With approval of the Committee Chair, the Office of the Treasurer may delay rebalancing, if this is in the best interest of UC's funds. Results of rebalancing need to be reported to the Committee on a quarterly basis.

Ms. Berggren discussed asset targets for the University of California Retirement Plan (UCRP) as of October 1, 2008. The current policy target for equity was 62.5 percent, with a lower bound of 55.5 percent and an upper bound of 69.5 percent, a range in effect of ± 7 percent. The current policy target for fixed income was 27 percent, with a lower bound of 22 percent and an upper bound of 32 percent. The target for alternatives was 10.5 percent, with a lower bound of 5.5 percent and an upper bound of 15.5 percent. Asset targets for the General Endowment Pool (GEP) were 44 percent for equity, 20.5 percent for fixed income, and 35.5 percent for alternatives.

Between September 30 and October 10, U.S. equities were down 22.7 percent, international developed equity was down 15.7 percent, emerging market equity was down 21.3 percent, and global equity was down 19.5 percent. The UCRP portfolio was down 13.7 percent; the GEP was down 12.4 percent, both significantly less than the benchmark.

As a result of that market performance, the equity underweight in the UCRP was 4.1 percent relative to current policy on September 30 and moved to 9.1 percent by October 10. In the same period, fixed income moved from an overweight of 2.3 percent to 5.3 percent. In the GEP, the equity underweight went from 4.1 percent to 9.3 percent; the fixed income overweight went from 4.9 percent to 5.7 percent.

On October 14, 2008, a conference call was held with the Committee Chair, Chairman Blum, and President Yudof to discuss the asset allocation of the UCRP. The October market movements had caused the public equity and fixed income to fall outside their approved ranges. The total equity underweight of 9.1 percent exceeded the underweight of 7 percent. The total fixed income overweight of 5.9 percent was above the upper bound of 5 percent. As a result of the call, rebalancing back to these ranges has been delayed until signs of economic stability become apparent. The ranges are widened temporarily to ± 10 percent. If asset weights fall outside these new ranges, the University will need authorization from the Committee Chair for an exception, or it will rebalance.

Regent Marcus asked if there has been consultation with all the University's advisors on these issues. Ms. Berggren responded that there has been extensive review with the advisors. Subsequent to the meeting, the University decided to reduce its UCRP underweight in equity and its overweight in fixed income. The University added $500 million to equity and $150 million to alternatives, selling fixed income to do this. Ms. Berggren emphasized that UC is one of the few institutions that pays significant pension benefits on a monthly basis. The University must rebalance its portfolio every month to pay pension benefits, which affects performance. In the GEP, the University sold

$165 million in fixed income and bought $150 million in equity, based on longer-term expectations in the equity market. The University still wishes to be underweighted in equities.

Ms. Berggren concluded with an overview of decision-making in the Office of the Treasurer. A senior management group meets weekly to review the portfolio, performance, and asset allocation. She enumerated important systemic risk factors that are taken into account in considering asset weight changes, including the level of the London Interbank Offered Rate (LIBOR), credit spreads, an increase in commercial paper issuance, volatility, retail investment patterns, and deleveraging and hedge fund redemptions. Important economic risk factors include equity valuations, inflation, unemployment, and business confidence.

Committee Chair Wachter referred to the October 14 call during which it was recommended that the ranges for equity and fixed income be widened to 10 percent. He cited the unusual current conditions and opined that the Office of the Treasurer needs the discretion to respond appropriately to these conditions. The University’s intention is to rebalance when it makes sense to do so. He suggested that, if the Chief Investment Officer were considering a major rebalancing, she would return to the Committee to discuss it. He asked if the Committee members were comfortable with the ranges of ten percent, with granting discretion to the Office of the Treasurer to decide when to rebalance, and with the condition that, in the event of major rebalancing, Ms. Berggren would communicate this to the Committee.

Investment Advisory Group Member Martin advised patience and stated that the University should not rush to rebalance. While current valuations are some of the best seen in decades, forced selling is pushing valuations lower than any normal economic argument would warrant. He suggested that deleveraging and redemptions will continue to occur over the next 90 days, through January 2009, but will not stop before the end of the year. He anticipated that, in the future, this time will be seen as one of the best times to invest in equities, but this must be accomplished in a measured way. He stated that major rebalancing should be done in consultation with the leadership, not only the staff.

Regent Marcus stated that the University should treat the UCRP differently than the GEP. He cited the current chaotic conditions and stated that the University should consider a different asset allocation. He opined that the Committee should discuss a new allocation before determining the appropriate delegation of authority.

Committee Chair Wachter recalled that the Chief Investment Officer, after consulting Regents, has decided not to rebalance at this point. She has been given as much discretion as she needs, but if the market falls even more, she may need more discretion, in which case she will come to the Committee. The Chief Investment Officer will come to the Committee for authorization for a major rebalancing. Committee Chair Wachter asked Regent Marcus if he was advocating that the University dramatically reduce its exposure to everything possible except fixed income, which would mean selling most of the University’s stock.

Regent Marcus responded in the negative. He expressed agreement with the delegation of authority and requested a healthy discussion on asset allocation in the current volatile market. He emphasized that the current market is a new world where the University cannot continue doing its business as usual.

Committee Chair Wachter disagreed with Regent Marcus' assessment of the University's response to the volatile market. He referred to the following presentation on risk assessment of market volatility.

General Counsel Robinson opined that the delegation of authority to the Chief Investment Officer should be documented in a written and more specific form. He suggested that there should be a definition of major rebalancing versus minor rebalancing. He stated that he would work separately with the Office of the Treasurer on this.

Committee Chair Wachter noted that there are situations in which he would like the Chief Investment Officer to come to the Committee for approval, such as in the case of major allocation changes.

Mr. Robinson expressed his understanding that the Chief Investment Officer has authority to seek interim action from a specified group of Regents, and stated that he will examine the issue.

Committee Chair Wachter expressed confidence in the expertise of the Office of the Treasurer. He stated that he would not like to authorize a rebalancing action himself, but would like this to be authorized by a small team which includes the Chairman and President, or by the full Committee, or some portion of it.

Consultant Lehmann suggested as a criterion the 21-day volatility index in any asset class. When it rises above historical norms, there are two possible approaches. One is to lower the allocation, which has not been UC policy. The other is to widen ranges automatically when the volatility band widens.

9. **RISK ASSESSMENT OF MARKET VOLATILITY**

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Senior Managing Director Phillips began his remarks on market volatility by observing that, during the last 3,700 trading days, there have been 14 days with returns lower than 4 percentage points. Eight of these 14 days have occurred in the last two months. There have been 10 days when entry day prices moved more than 10 percent; 9 of these days occurred in the last two months.

Mr. Phillips explained that volatility estimates are ranges of possible outcomes. In most times, volatility forecasts are good predictors of expected losses, but conditions this year are out of the ordinary. The University of California Retirement Plan (UCRP) return and volatility track the market. He recalled that market exposure is necessary to earn the required return to fund the University's pension plan.

Mr. Phillips discussed a chart of capital market assumptions. He pointed out the assumption for U.S. equity of a 14.5 percent standard deviation for an annual period. In most normal times, returns will fall within a band of 14.5 percent around the expected return. This and other assumptions are based on historical experience and knowledge of market dynamics for each asset class.

In response to a question asked by Regent Marcus, Committee Chair Wachter explained that the 14.5 percent figure represents a standard deviation; two-thirds of the time returns will fall within this band, above or below the expected return. If the expected return is 7 percent, the assumption would be that two-thirds of the time, returns will be between approximately -7 percent and 21 percent.

Mr. Phillips pointed out that the ranges in the chart are not predictions for next year, but good predictions for the next 10 to 20 years, an appropriate time frame for UCRP and GEP investment. These estimates are used in asset allocation policy and portfolio construction. He then discussed a chart showing the range of monthly realized returns, by asset classes, between January 1970 and September 2008. The range of returns over this 30-year period shows that equity returns have greater volatility than fixed income returns, with a higher possibility of loss.

Mr. Phillips discussed cumulative returns for major markets. Over the last five to six years, since the end of 2002, capital markets have rewarded risk taking. This was fueled by low interest rates and easy credit for institutions and home owners. Most of these gains were erased in the last year. On a chart showing S&P 500 annual returns between 1926 and October 2008, he called attention to the average return of 11.7 percent. The year-to-date return, -34.5 percent, is the third lowest return in this long historical period. This year's rapid decline is unusual.

Market volatility is at a multi-year high. A chart tracking three different measures of volatility and daily returns since 1994 displayed a sharp jump up to 80 percent at the far right, the present. In response to a question asked by Committee Chair Wachter, Mr. Phillips explained that historical volatility is measured in standard deviation. One of the three measures, the VIX index, uses points derived from option prices and meant to be understood in a way similar to standard deviation. Volatility of 80 percent means that, in this kind of market, the range of possible returns is plus or minus 80 percent annually.

Mr. Phillips referred to an earlier comment by Consultant Lehmann and stated that a reason for wider policy ranges is this increase in volatility. The policy ranges for the UCRP and GEP were set based on the relatively stable level of volatility before this year.

Mr. Phillips then discussed a chart showing the best, worst, and median of all consecutive 12 month period returns for several asset classes from 1970 to September 2008. He pointed out that the worst one percent of annual returns have been very close to the -2 standard deviation estimate for each of these asset classes. The best one percent of annual returns have mostly been higher than the +2 standard deviation estimate. He interpreted this to mean that the University's volatility estimates are not bad on the downside, but not so good on the upside. The next chart displayed the same information, but added the twelve-month period that ended in October 2008. Actual returns were significantly greater than two standard deviations, due to unusual and unpredictable market events.

In response to a question asked by Committee Chair Wachter, Mr. Phillips explained that, in normal times, two standard deviations would represent approximately 99 percent of returns. The current situation is clearly unusual. He then discussed a chart showing how UCRP returns have tracked market returns from 1987 to 2008. This is because the UCRP is exposed to the same equity and bond markets as the benchmark. Over time, the return has been higher than required. Mr. Phillips emphasized that, without market exposure, it would be impossible for the UCRP to reach the required 7.5 percent return. He regretted that there is no investment known to the University that can produce a constant 7.5 percent return. He concluded with a chart showing rolling volatility for the UCRP; the fund volatility is comparable to benchmark volatility, especially over the last five years.

Mr. Phillips posed the question of appropriate action in extreme volatility, the question of whether the University should radically change its policy or if the policy in place is designed for periods like this.

Committee Chair Wachter noted the current lack of contributions to the UCRP. He opined that, if there were contributions, the current situation would be a lesser problem. According to the University's actuary, if the UCRP does not earn 7.5 percent annually, UC will not be able to make its payments over the long term. Committee Chair Wachter assumed that this 7.5 percent is blended in the UCRP. He observed that, if a portion of the UCRP is less risky, in fixed income, this places a burden on the rest of the portfolio to be more aggressive. If, 19 years ago, when contributions to the UCRP were suspended, the University had placed all its investments in fixed income, it would now be in serious trouble.

Regent Marcus opined that in these uncertain, volatile times, the University should move toward an allocation with the highest yield and lowest volatility until market conditions return in which the University can take the standard deviation risk again. He emphasized that a discussion about 7.5 percent earnings has little meaning when the UCRP has lost 30 percent of its value this year. He argued that the University should seriously consider making a major move, gradually, not radically, into the lowest volatility and highest returns and should substantially reduce its exposure to high volatility.

Committee Chair Wachter stated that Regent Marcus' suggestion would be appropriate if the economy were entering a depression. If one assumes that there will not be a depression, the information presented to the Committee can be interpreted differently and warrants a different course of action. Committee Chair Wachter stressed that the high degree of volatility is unusual.

Consultant Lehmann referred to the Great Depression and cited figures for the largest monthly returns, positive and negative, for the decade of the 1930s. Of the 48 biggest down markets historically, half of them were monthly returns in 1931 to 1940. Of the biggest 48 up markets, 16, or one-third of them also occurred then. Periods of high volatility include significant movements both up and down. Pulling out of a volatile market would require precise timing.

Committee Chair Wachter pointed out that the stock market and the economy do not move in tandem. There can be a situation of a bad economy and a well-performing stock market, or vice versa. Missing the ten best or worst days can have a significant effect on a portfolio. He cited opinions expressed by Warren Buffett and others in favor of equities, based on the view that in ten years, the market will be higher than it is today, and that it is a mistake to maintain cash assets.

Regent Marcus emphasized his position as the fiduciary of a pension fund and the Committee's primary responsibility to preserve funds before its secondary task of seeking yield. He urged the Committee to think about this problem in a different way.

Consultant Lehmann cautioned that, if the University invested in bonds to insure the UCRP, the UCRP would run out of funds in eight or nine years for the current retirees.

Regent Marcus stated that, if the UCRP goes down another 40 percent, it will run out of funds in two years.

Committee Chair Wachter noted that the University, fortunately, has very little invested in real estate. He focused on what he saw as one piece of good news. Through the accidents of history, 90 percent of the UC portfolio is liquid. He asked the Committee for suggestions on how to make this investment decision, which he acknowledged is also an emotional decision.

Investment Advisory Group Member Fong stated that the objective of asset allocation is not to preserve capital but to achieve investment objectives at minimum risk. The needs of UC's funds are long-term needs. This requires risk exposure over the long term to achieve the funding requirement. Because there are outflows from the UCRP, the asset allocation must meet liquidity needs in the form of actual short-term cash equivalents. Mr. Fong advised the University to think about asset allocation for the long term and about the funding requirements to be achieved with asset allocation.

Mr. Terry Dennison, the Regents' investment consultant, opined that the University should consider how markets work. In the short term, markets effectively vote based on how people view the future. Markets typically discount the future. The current level of decline in the market indicates that people are factoring in a terrible scenario. The market is now assuming a much worse economic environment than is visible today. Of the post-

World War II declines in the market, the 1973-1974 period is being cited as similar to the present, a time when the market lost between 40 percent and 45 percent of its value. Mr. Dennison countered that this period was in fact very different from the present. The 1973-1974 market did not have today's volatility. He described it as a grind, with daily losses of an eighth and a quarter. The market sank 40 percent not in a few days, but over a grinding two-year period. The current market is extremely volatile; Mr. Dennison described it as extreme momentum in no direction. There are many days with inter-day volatility of over 1,000 points on the Dow Jones index, and days approaching close-over-close declines of 1,000 points. On the issue of timing, he recalled the experience of a smaller decline in 2002 from a high point in 1999-early 2000. At that time, some of Mr. Dennison's clients became more conservative and in fact gave up their chance of recovering their losses. He observed that the asset allocation that gets one into a hole is the allocation that most likely will get one out again. The danger of making a market timing decision is the need to be right twice, right about when to get out of the market and when to get back in. He cautioned against getting out of the market when it hits bottom and not getting in again until it is too late to recover losses with the following rise. The University should be thoughtful about its investments and avoid obvious risks.

Mr. Dennison emphasized that there are now opportunities the University should consider, such as high-yield bonds, which are now outperforming Treasury bonds, even if half the bonds in the market were to fail. Going into what could be a severe recession, there may be opportunities for high yield. Mr. Dennison advised against a wholesale move to becoming more conservative. After the losses the University has already experienced, this would be injurious to the UCRP. If the University becomes more conservative and moves to an asset allocation which is not likely to produce the actuarial assumption, it will not only have to reinstitute contributions, but these contributions will become enormous to prevent the fund from evaporating.

Committee Chair Wachter observed that, if the current situation turns into a bad recession, but ultimately recovers in the future, it will have been a bad decision to do as Regent Marcus suggested. If conditions evolve into something resembling the Great Depression of the 1930s, it will have been a good decision. He advised consideration of the opinions expressed by the Committee and to allow the Office of the Treasurer to propose changes, such as a reduction of asset allocation.

Regent Marcus clarified that he does not advocate radical change. He suggested that the Chief Investment Officer and a small group should examine various allocations in the cyclical history of industry. He urged the University to examine its portfolio thoroughly and stated that inaction is not possible in such an exceptional situation.

Committee Chair Wachter countered that the Office of the Treasurer continually examines and studies the portfolio.

Regent Marcus suggested that the Office of the Treasurer study the asset allocations of the ten best-performing endowments in the U.S.

Chief Investment Officer Berggren responded that her office is aware of these allocations and studies them. She emphasized that 70 percent of these allocations are either illiquid or non-liquid. These allocations were made 15 years ago. It is not possible to make this kind of asset allocation today and produce similar results in the future.

Regent Marcus stated that some entities lost less because of a different allocation policy. Ms. Berggren responded that these entities had unmarked assets which could be kept at cost and marked up when desired. These are allocations with which the Regents have indicated they are not comfortable. She stressed that the University has monthly obligations of $160 million, which do not allow for this kind of allocations.

In response to remarks made by Regent Marcus, Committee Chair Wachter urged him to contact Ms. Berggren separately for information on the University's allocations and to bring any suggestions he might have to the Committee Chair or to Chairman Blum.

Regent Hotchkis expressed concern with Regent Marcus' recommendation.

10. **ABSOLUTE RETURN STRATEGIES PROGRAM REVIEW**

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Managing Director Choi informed the Committee that she oversees the University's hedge fund program. In April 2008 the University's absolute return program passed its five-year mark. It has 25 managers across 30 funds. The market value of the program is $2.3 billion. It represents 21.9 percent of the General Endowment Pool (GEP) and 3.2 percent of the University of California Retirement Plan (UCRP).

Bank failures, government intervention, and 20-year highs in volatility in 2008 had significant consequences for the hedge fund industry. Deleveraging became the major general concern. There was a great deal of forced liquidity due to higher margin requirements, reduced availability of financing, and high levels of investor redemptions. The need for liquidity forced managers to sell off assets, which crystallized their losses. They will benefit less from any equity rallies in the short term, as they are holding more cash. There was a risk reversal in the third quarter. Safer parts of the capital structure were sold off to a greater extent than lower-quality assets. Ms. Choi anticipated that managers will continue to go out of business during these challenging times. Many managers have decided to freeze redemptions or to raise gates on their investors. She noted that some basic strategies were seriously hampered, such as short selling, the convertible arbitrage strategy, and the fixed income arbitrage strategy. In the last two areas there have been losses of 30 percent to 50 percent in the last two months.

In spite of the current challenges, Ms. Choi opined that the University should not change its hedge fund strategies. On a trailing five-year and three-year basis, the UC absolute return portfolio has outperformed most equity market indices, and at much lower risk. Focusing on the period of turmoil, Ms. Choi noted that, until July 1, 2008, UC managers preserved capital. The absolute return portfolio was almost flat when the S&P 500 index was down 12 percent. Almost the entire drawdown occurred in the third quarter and in October. In risk management, she noted that UC suffered very little during the Lehman Brothers bankruptcy. The University avoided investing with managers who had clear mismatches in their assets and liabilities, had no direct exposure to any convertible arbitrage or fixed income arbitrage managers, and kept its leverage low. The portfolio was kept liquid. Fifty percent of the portfolio is available for redemption next quarter, and 70 percent is available over the next 12 months.

Ms. Choi then turned to a chart showing performance on a trailing 12-month basis. The portfolio has moved into negative territory but is still performing substantially better than the S&P 500 and the MSCI World indices. She expressed disappointment with the performance this quarter, but noted that the University is remaining focused on factors within its control, including manager and strategy diversification, low leverage, and low net exposure to the equity markets. She noted that the absolute return program will seek opportunities in 2009 in global macro, distressed, natural resources, and long/short equity manager strategies. She opined that the University's risk management process would position it to take advantage of future opportunities.

Investment Advisory Group Member Martin recalled a presentation on the absolute return program, a year or two earlier, which described two strategies. One was geared toward a fixed income, uncorrelated, low volatility product; another was a high volatility strategy geared to accepting more risk and producing more return. He asked if these strategies are still in place. Ms. Choi responded that the program attempts to maintain a balance between high and low volatility. However, during the last quarter, the two almost correlated. She recalled that many of UC's credit managers are in bank loans. In October there was an outstanding sell-off in performing loans. Bonds were performing at 60 percent of par. Both parts of the portfolio suffered equally.

11. FIXED INCOME PROGRAM REVIEW

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Senior Managing Director Wedding briefly noted that the total fixed income asset allocation in the University of California Retirement Plan (UCRP) is 27 percent. He outlined the third quarter assets under management, by type of asset and the fund where they are held. Core holdings are government securities, collateralized mortgages, credit, and investment-grade corporate securities. They are held not only in the UCRP and the General Endowment Pool (GEP), but also in the Short Term Investment Pool (STIP), the Savings Fund, and in the Total Return Investment Pool (TRIP). Total core holdings are just over $19 billion. Non-core securities include Treasury Inflation-Protected Securities (TIPS), domestic high yield, emerging market, and non-dollar government bonds. Total non-core securities are $6.5 billion. The total fixed income assets overall are almost $26 billion.

Mr. Wedding briefly reviewed the fixed income benchmarks used for the actively managed total return funds. For the core UCRP, the Citigroup Large Pension Fund index is used. The Lehman Aggregate index is used for the core GEP and bond fund. For the high yield fund, the Merrill Lynch Cash Pay Domestic High Yield benchmark is used. The JP Morgan EMBI+ index is used for emerging markets, but the University is moving to a new index.

The STIP and Savings Fund are not total return funds. They are managed to maximize the income return and are benchmarked with the Merrill Lynch Two-Year Treasury income index. Passively managed total return funds include TIPS, managed internally, and non-dollar government bonds, managed externally.

In core portfolios, the fixed income program recently increased its underweight in government securities. It is overweight in credit and collateralized sectors. The UCRP index weights are 40 percent government securities, 30 percent credit, and 30 percent collateralized securities. The current portfolio is underweight in government securities by about 10 percent, with a 30 percent weight rather than 40 percent. He recalled that the University recently sold fixed income securities and bought public and private equity; much of the funding for this came from the government sector.

He discussed the yield to maturity for the three core sectors, the credit sector, the mortgage-backed or collateralized sector, and Treasury securities. In September and October, yields on corporate bonds increased significantly. Mr. Wedding pointed out that this spread between credit-bearing corporate instruments and Treasury securities is the largest in the post-World War II period. There are opportunities, but security selection is of the utmost importance.

Mr. Wedding then discussed risks relative to the benchmark in the core government sector. The University has a small duration short. The interest rate sensitivity in its portfolio is slightly lower than the benchmark. This is because the University believes that the easing by the Federal Reserve is almost complete; the federal funds rate is now at 1 percent. Mr. Wedding anticipated a massive increase in Treasury issuance; it may double in the next fiscal year. By a conservative estimate, there may be a trillion-dollar deficit. The deluge of supply will have an effect on Treasury yields and relative value. The University has some GSE subordinated debt. This is effectively guaranteed by the U.S. Treasury. Recently, the University has begun to purchase TIPS tactically. They are very inexpensive. After two years, TIPS are forecasting outright deflation. Mr. Wedding described this as a depression-style scenario, consistent with a 15 percent unemployment rate, and stated that the University does not concur with it. Longer-term TIPS are not as drastically mispriced, but are attractive on the basis of valuation.

In response to questions asked by Committee Chair Wachter, Mr. Wedding anticipated a negative CPI in the next quarter or two, citing the drop in energy prices. When that situation settles, further deflation seems unlikely.

In response to a question asked by Committee Chair Wachter, Mr. Wedding responded that a two-year Treasury security now provides a 1.5 percent yield. Real yields on TIPS are now higher than the nominal yields.

Mr. Wedding then discussed the strategy in the credit sector. The University considers the financial crisis still very serious, but improving. The injection of capital by the Treasury into financial institutions has helped to ease dislocations in the funding market. However, the real economy is weakening quickly.

Chief Investment Officer Berggren recalled that the University's high credit-rated securities have become depressed in the last weeks.

Mr. Wedding concurred that in September and October, some outstanding companies had yields of 10 percent or 15 percent to maturity.

Given this situation, the credit portfolio is defensively positioned. Financials are improving, but the portfolio is still underweight in the financial sector, consumer cyclicals and retailers, while it is overweight in defensive sectors, such as utilities and consumer non-cyclicals. This defensive position is being maintained with the view that the worst part of the deteriorating economy is being experienced right now.

In the collateralized sector, Mr. Wedding emphasized the 30-year fixed rate for conforming loans as a benchmark for the health of the mortgage-backed market. There would be good results if this rate went down to 5 percent. It currently is at 6 percent, and if it does not go down, there will continue to be problems in the mortgage market. Mr. Wedding suggested that the U.S. government could address this situation by having the Treasury purchase conforming loans or pass-through securities directly from Fannie Mae and Freddie Mac, but it has not done so.

The program continues to have a material position in non-agency securities. The vast majority of these continue to be rated AAA. There have been no missed principal or coupon payments. Mr. Wedding clarified that these non-agency securities are not guaranteed or insured by Fannie Mae and Freddie Mac, and that the University may experience losses.

The high yield allocation as a whole is benchmarked against the Merrill Lynch High Yield Cash Pay index. An internally managed subset is benchmarked against a higher quality sub-index, the BB-B index. Against this sub-index, the internally managed high yield is overweight in BBB and BB-rated securities, and underweight in B-rated securities. The University has a better credit quality profile than its index.

The program is defensively positioned in emerging markets. It is underweight in Argentina, Venezuela, and Ecuador, the three riskiest credits and the three most likely to default. The program is overweight in Brazil.

Mr. Wedding concluded by calling attention to signs of healing in the financial system as a whole. The government actions in October have been helpful. Unfortunately, the real economy is accelerating downward and may not recover until 2010. Consequently, positioning in all sectors of the fixed income allocation is defensive. The program is mindful of the fact that the price discovery process is broken in many markets. It is difficult to determine reliable prices.

Investment Advisory Group Member Martin observed that one cannot rely on rating agencies in measuring credit quality. He asked how the fixed income program determines if a rating is accurate or decides to make its own determination of credit quality. Mr. Wedding responded that, on the collateralized side, the program models the behavior of securities it owns under various stressful situations, using rather severe scenarios. He emphasized that the University owns high-quality collateral, which has mostly been rated AAA.

Mr. Martin asked about due diligence on the underlying collateral. Mr. Wedding observed that, in the case of non-agency securities, the University can examine all its securities down to the individual loan level. Modeling has taken recent default and delinquency experience into account in its extrapolations. On the corporate side, the program is very selective and tests revenues on every issuer it owns.

Mr. Martin asked about foreign bond and currency exposure. He suggested that, given the size and complexity of the program, not only in fixed income but also in equities, the University should have some foreign currency expertise as part of its portfolio core competencies. This expertise might be brought in through consulting. Mr. Martin emphasized the importance of this topic, pointing out that currency movements have been large and fairly predictable.

Ms. Berggren responded that there is a relevant project currently under way. The Office of the Treasurer has been carrying on discussions with long-term experts in that area and plans on bringing this into the portfolio.

12. SECURITIES LENDING PROGRAM REVIEW

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Associate Chief Investment Officer Stanton informed the Committee that, as of September 30, 2008, the securities lending program had a total $61.2 billion invested in assets; of that amount, $16.1 billion was out on loan, as of June 30. The program uses State Street as its lending agent. State Street is also the University's custodial bank. While many institutions allow their lending agent to make all decisions, the University is actively involved in this process.

Mr. Stanton explained that securities lending is a transaction in which the owner of securities agrees to lend those securities to a borrower in exchange for cash collateral or government securities. Collateral ranges from 102 percent to 105 percent of the market value of the securities that are lent. Collateral is adjusted daily as the market value changes. Borrowers of securities are typically large banks and broker/dealers who use the securities to facilitate day-to-day market making, as well as for arbitrage or risk management strategies. Incremental income or spread is generated for the owner or lender by investing the cash collateral in high quality, short-term investments. The income is typically split between the owner of the assets and the lending agent. The objective is to generate consistent incremental income from the collateral while maintaining safety of principal.

Most lenders are large mutual funds, public and private pension funds, endowments, commercial banks, central banks, corporations, and insurance companies. The facilitators are normally custodial banks, other commercial banks, and broker/dealers. The borrowers are typically broker/dealers, banks, hedge funds, and other institutional investors.

Mr. Stanton observed that, among lendable assets, some appear to be in demand at all times. These include Treasuries, corporate bonds, international equities, American Depositary Receipts (ADRs), and Small Cap U.S. equities. Securities that are not lendable are commercial paper, municipal bonds, variable rate demand notes, auction securities, and shares of mutual funds.

In the lending process, the lending agent initiates a loan with a broker, terms are negotiated, and the lending agent receives cash collateral. The collateral is invested in a separate cash pool with guidelines approved by the Regents. Mr. Stanton pointed out that many programs invest in the lending agent's commingled fund, where the lending agent controls the investment guidelines. In the case of UC, the University sets, monitors, and adjusts the investment guidelines. He described the University's program as more conservative than most others. After cash collateral is received, it is moved to the broker. There is daily mark to market. At the end of the loan, the security and the cash collateral are returned.

Mr. Stanton briefly reviewed revenue components. In an example, the lending agent lends securities and receives cash collateral on behalf of the client above market value, at 102 percent. The lending agent pays the borrower a rebate, which can be greater or smaller depending on the demand for the security. The federal funds rate is generally the pricing mechanism for the loans. In this example, the borrower receives the federal funds rate minus 15 basis points. The lending agent invests the cash collateral, which earns a return. In the example, the cash earns 25 basis points above the federal funds rate, which produces a gross spread of 40 basis points. The University's fee split with the lending agent provides 90 percent to the University and 10 percent to the lending agent.

Mr. Stanton outlined some risk management concerns. One important risk is broker default, the risk that the broker is unable to return the securities. The credit committee of the University's lending agent reviews all brokers. The University can decline to engage brokers with which it is uncomfortable, and controls the percentage lent out to any one broker at any one time. Most lending agents offer indemnification against broker default.

Recently, two major investment brokers, Bear Stearns and Lehman Brothers, went into default. All of the University's securities were returned, or the cash collateral was used to purchase securities on the University's behalf, so that the UC program sustained no losses.

There is also operational risk. Mr. Stanton pointed out that contracts clearly define the roles and responsibilities of the various agents. There is an established communication link between the University and its lending agent, which has communication lines with the brokers. There are electronic links which indicate what is being loaned and what has been returned. Mr. Stanton described this as a dynamic, active process. The University receives daily reports from its lending agent.

The investment/credit risk is the risk of default in the cash investment pool. When the institution accepts guidelines for the cash investment, if there is a default, the institution, not the lending agent, bears the risk of the default. For this reason, the University segregates its assets in a separate pool and controls and periodically reviews its investment guidelines. The University also maintains high levels of liquidity in order to avoid the need to liquidate securities in a volatile market. All investments must meet certain investment rating guidelines at the time of purchase. Office of the Treasurer staff reviews the University's lending agents, examining credits they purchase in their portfolio. Portfolio holdings are reviewed weekly and the University has discussions with its lending agents about the securities.

Finally, Mr. Stanton touched on interest rate risk, the risk that changes in interest rates could affect longer-term loans and investments. This risk can be reduced by matching loans with similar duration. This is monitored by Office of the Treasurer staff.

Investment Advisory Group Member Martin observed that, in a situation of high market volatility, the movement in the value of a security can be far greater than 2 percent to 5 percent. Although cost can be recovered, if the counterparty defaults and goes bankrupt, the institution is left with an opportunity cost which is the upside lost on the securities that were not returned. He asked for Mr. Stanton's assessment of this situation.

Mr. Stanton noted that the 102 percent and 105 percent figures he discussed have been the industry norm. The rate is negotiated by the lender each day and can change. The University monitors this daily, based on credit quality and loans being made. If there is a significant change in the market during the day, there is an immediate mark to market the following morning.

Consultant Lehmann recalled that the management fee paid to State Street, inclusive of securities lending, was negative. About three years ago, it was -1/8 of a basis point. He asked if this is still the case.

Mr. Stanton responded that the University earns significantly more on securities lending than the fee it pays to State Street, but it does not net this against expenses. Income from securities from a particular portfolio is returned to that portfolio.

13. **INVESTMENT CONSULTANT REVIEW OF UNIVERSITY OF CALIFORNIA CAMPUS FOUNDATIONS SECOND QUARTER AND FISCAL YEAR 2008 PERFORMANCE REPORT**

[Background material was mailed to the Committee in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Mr. Terry Dennison of Mercer Investment Consulting informed the Committee that Mercer has reviewed and approved the June 30, 2008 State Street report on the UC campus foundations. He called attention to a synopsis of the total returns and the returns relative to their policy benchmarks. The returns are generally consistent with the asset allocations; Mr. Dennison stated that there are no performance issues that should be brought to the attention of the Regents. He noted that there was a difference in performance in the first and second quarters. The performance in the second quarter was much better. There are also differences between the campus foundations. The UCLA, UC Berkeley, and UC San Francisco foundations underperformed in the first quarter but experienced a rebound. The UC Irvine and UC Riverside foundations had positive relative performance for both periods, while UC Santa Barbara had a negative performance for both periods.

Turning to policy conformance, Mr. Dennison pointed out that all seven of the foundations that do not have their assets invested in the General Endowment Pool are now outside the asset allocation guidelines which were applicable at the end of the second quarter. This was due to some narrowing of the ranges by the Committee. He opined that it is appropriate for the Committee to grant the campus foundations an exemption for this, and encouraged the University to adjust guidelines so that these deviations do not persist.

The meeting adjourned at 1:15 p.m.

Attest:

Secretary and Chief of Staff

Attachment 1

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

INVESTMENT POLICY STATEMENT

Originally approved September 17, 2008~~March 19, 2008~~
This version dated November 12, 2008~~September 17, 2008~~

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 1
Effective: December 1, 2008~~October 1, 2008~~
Replaces Version Effective: October 1, 2008~~July 1, 2008:~~

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 Current Policy 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 long-term 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 Appendix 2).

A. Strategic Asset Allocation and Ranges

	Long-Term Target Allocation	Current Policy Allocation	Allowable Ranges Minimum	Allowable Ranges Maximum
U.S. Equity	23%	34.5%	29	39
Developed Non US Equity	22	22	19	25
Emerging Mkt Equity	5	4	1	7
Global Equity	5	2	0	5
US Fixed Income	12	12	9	15
High Yield Fixed Income	3	3	0	6
Non USD Fixed Income	3	3	0	6
Emerging Mkt Fixed Income	3	3	0	6
TIPS	6	6	3	9
Private Equity	6	4	1	7
Real Estate	7	3	0	6
Absolute Return Strategy	5	3.5	0	6
Liquidity	0	0	0	10
	100%	100%		
Combined Public Equity	55	62.5	55	69
Combined Fixed Income	27	27	22	32
Combined Alternatives	18	10.5	5	15

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

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 Committee's investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period
- Reflects Current Investment Opinion: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction

Asset Class	**Benchmark**
U.S. Equity	Russell 3000 Tobacco Free Index
Developed Non US Equity	MSCI World ex-US (Net Dividends) Tobacco Free
Emerging Mkt Equity	MSCI Emerging Market Free (Net Dividends)
Global Equity	MSCI All Country World Index Net – IMI – Tobacco Free
Fixed Income	Citigroup Large Pension Fund Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index
Non USD Fixed Income	Citigroup World Government Bond Index ex-US
Emg Mkt Fixed Income	33% times JP Morgan Emerging Market Bond Index – Global Diversified, plus 67% times the JP Morgan Global Bond Index – Emerging Markets – Global Diversified
TIPS	Lehman Brothers TIPS Index
Absolute Return Strategy	1 Month T Bill + 450 bp
Private Equity	N/A (see below note 2)
Real Estate	Public: 50% times the FTSE EPRA NAREIT US Index plus 50% times the FTSE EPRA NAREIT Global ex-US Index Private (core strategies): NCREIF Property Index Private (non-core strategies): N/A (see below note 3)

Notes on asset class benchmarks:
1. Global 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 and 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. Private Real Estate (non-core strategies only): similar to Private Equity

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

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
~~45% - [A]~~34.5	× Russell 3000 Tobacco Free Index
22%	× MSCI World ex-US (Net Dividends) Tobacco Free
4%	× MSCI Emerging Market Free (Net Dividends)
2%	× MSCI All Country World Index Net – IMI – Tobacco Free
12%.	× Citigroup Large Pension Fund Index
3%	× Merrill Lynch High Yield Cash Pay Index
3%	× Citigroup World Government Bond Index ex-US
3%	× 33% times JP Morgan Emerging Market Bond Index – Global Diversified, plus 67% times the JP Morgan Global Bond Index – Emerging Markets – Global Diversified
6%	× Lehman Brothers TIPS Index
~~Actual Weight [A.R.]~~3.5%	× 1 Month T Bill + 450 bp
~~Actual Weight [P.E.]~~4%	× Actual return of private equity portfolio
3%	× Aggregate Real Estate benchmark (see section B, with components weighted by their actual weights within the total real estate portfolio)
~~Actual Weight [public R.E.]~~	~~× 50% times the FTSE EPRA NAREIT US Index plus 50% times the FTSE EPRA NAREIT Global ex-US Index~~
~~Actual Weight [core private R.E.]~~	~~× NCREIF Property Index (lagged 3 Months)~~
~~Actual Weight [non-core private R.E.]~~	~~× Actual return of private real estate portfolio~~

~~*where*~~
~~[A] = Actual A.R. Weight + Actual P.E. Weight + 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 Absolute Returns, 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 percentage, as shown. Thus the percentage to US Equity = 34.5% + 3.5% (abs. return) + 4% (private equity) + 3% (real estate) = 45%.~~

2~~3~~. The calculation of the total fund benchmark will assume a monthly rebalancing methodology.

3~~4~~. In the event of a significant change in asset allocation, The Regents' generalist consultant may specify an alternative weighting scheme to be used during a transition period.

D. Rebalancing Policy

There will be periodic deviations in actual asset weights from the long-term/current 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 Investment 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 (in accordance with Appendix 4) 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.

Attachment 1

UNIVERSITY OF CALIFORNIA
GENERAL ENDOWMENT POOL

INVESTMENT POLICY STATEMENT

Originally approved September 17, 2008~~March 19, 2008~~
This version dated November 12, 2008~~September 17, 2008~~

UNIVERSITY OF CALIFORNIA GENERAL ENDOWMENT POOL
INVESTMENT POLICY STATEMENT

APPENDIX 1
Effective: ~~October~~ December 1, 2008
Replaces Version Effective: October 1, 2008~~July 1, 2008~~

ASSET ALLOCATION, PERFORMANCE BENCHMARKS, AND REBALANCING POLICY

Based on the risk budget for the GEP, 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 GEP.

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 Current Policy Allocation recognizes the current under-investment 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 long-term 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.

A. Strategic Asset Allocation and Ranges

	Long-Term Target Allocation	Current Policy Allocation	Allowable Ranges Minimum	Allowable Ranges Maximum
U.S. Equity	18%	19%	14	24
Developed Non US Equity	17	18	15	21
Emerging Mkt Equity	5	5	2	8
Global Equity	5	2	0	5
US Fixed Income	5	8	5	11
High Yield Fixed Income	2.5	3	0	6
Non USD Fixed Income	2.5	2.5	0	6
Emerging Mkt Fixed Income	2.5	3	0	6
TIPS	2.5	4	1	7
Absolute Return	23.5	23.5	20	26
Private Equity	9	7	4	10
Real Estate	7.5	5	2	8
Liquidity	0	0	0	10
	100%	100%		
Combined Public Equity	45	44	37	51
Combined Fixed Income	15	20.5	15	25
Combined Alternatives	40	35.5	30	40

* Alternatives category including, but not limited to: Real Estate, Private Equity, and Absolute Return Strategies

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 Committee's investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period
- Reflecting Current Investment Opinion: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction

Asset Class	Benchmark
U.S. Equity	Russell 3000 Tobacco Free Index
Non US Eq. Devel.	MSCI World ex-US Net Tobacco Free
Emerging Mkt Eq	MSCI Emerging Market Free Net
Global Equity	MSCI All Country World Index Net – IMI – Tobacco Free
Fixed Income	Lehman Aggregate Bond Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index
Non USD Fixed Income	Citigroup World Government Bond Index ex-US
Emg Mkt Fixed Income	33% times JP Morgan Emerging Market Bond Index – Global Diversified, plus 67% times the JP Morgan Global Bond Index – Emerging Markets – Global Diversified
TIPS	Lehman TIPS Index
Absolute Return	1 Month T-Bill + 450 bp
Private Equity	N/A (see below note 1)
Real Estate	Public: 50% times the FTSE EPRA NAREIT US Index return plus 50% times the FTSE EPRA NAREIT Global ex-US Index return Private (core strategies): NCREIF Property Index, lagged 3 months Private (non-core strategies): N/A (see below note 2)

Notes on asset class benchmarks:
1. 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.
2. Private Real Estate (non-core strategies only): similar to Private Equity

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C. Total GEP Performance Benchmark

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

Percentage	Benchmark
~~54.5% - [A]~~19%	× Russell 3000 Tobacco Free Index
18%	× MSCI World ex-US Net Tobacco Free
5%	× MSCI Emerging Market Free Net
2%	× MSCI All Country World Index Net – IMI – Tobacco Free
8%	× Lehman Aggregate Bond Index
3%	× Merrill Lynch High Yield Cash Pay Index
2.5%	× Citigroup World Government Bond Index ex-US
3%	× 33% times JP Morgan Emerging Market Bond Index – Global Diversified, plus 67% times the JP Morgan Global Bond Index – Emerging Markets – Global Diversified
4%	× Lehman TIPS Index
~~Actual Weight [A.R.]~~23.5%	× 1 Month T Bill + 450 bp
~~Actual Weight [P.E.]~~7%	× Actual return of private equity portfolio
~~Actual Weight [public R.E.]~~5%	× Aggregate Real Estate benchmark (see section B, with components weighted by their actual weights within the total real estate portfolio)
	~~× 50% times the FTSE EPRA NAREIT US Index return plus 50% times the FTSE EPRA NAREIT Global ex-US Index return~~
~~Actual Weight [core private R.E.]~~	~~× NCREIF Property Index, lagged one quarter~~
~~Actual Weight [non-core private R.E.]~~	~~× Actual return of private real estate portfolio~~

~~*where*~~
~~[A] = Actual A.R. Weight + Actual P.E. Weight + 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 Absolute Return Strategies, 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 percentage, as shown. Thus the percentage to US Equity = 19% + 23.5% (absolute return) + 7% (private equity) + 5% (real estate) = 54.5%.~~

~~3~~2. The calculation of the Total Fund benchmark will assume a monthly rebalancing methodology.

~~4~~3. In the event of a significant change in asset allocation, The Regents' generalist consultant may specify an alternative weighting scheme to be used during a transition period.

D. Rebalancing Policy

There will be periodic deviations in actual asset weights from the long-term/current 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 GEP. Accordingly, the Investment Committee authorizes the Treasurer to rebalance the GEP 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 [in accordance with Appendix 4] 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 GEP. Results of rebalancing will be reported to the Committee at quarterly meetings.

Attachment 2

AMENDED TEXT OF POLICY
Additions shown by underscoring; deletions shown by strikethrough

DIVESTMENT OF UNIVERSITY HOLDINGS IN COMPANIES WITH BUSINESS OPERATIONS IN SUDAN

In light of The Regents' decision of November 2005 to adopt a policy of divestment from a foreign government only when the United States government declares that a foreign regime is committing acts of genocide and The Regents' findings that the U.S. government has determined that there is ongoing genocide in the Darfur region of Sudan, it was recommended that The Regents:

A. Divest all shares of the following nine companies: Bharat Heavy Electricals Ltd., China Petroleum and Chemical Corp. (Sinopec), ~~Nam Fatt Co. Bhd.,~~ Oil & Natural Gas Co. Ltd., PECD Bhd., PetroChina Company Ltd., ~~Sudan Telecom Co. Ltd. (Sudatel), Tatneft OAO, and Videocon Industries Ltd.,~~ held within separately managed equity portfolios of the University of California Retirement Plan (UCRP) and the General Endowment Pool (GEP). The proposed policy would apply to both indexed and actively managed, publicly-traded equity portfolios

B. Prohibit future purchase of shares in the above ~~nine~~ <u>five</u> companies until such time as the Office of the Treasurer reports to the Committee on Investment that either there is compelling information that a company has materially improved its operation and is no longer thought to be contributing to the suffering in the Darfur region of Sudan, or that the situation in the Darfur region has improved to such a point that the prohibition on investment is no longer thought to be in the best interests of the people of Sudan.

C. Condition implementation of the proposed divestment policy upon enactment by the California legislature and signature by the Governor of legislation providing indemnification for past, present, and future individual Regents, and the University, its officers, agents, and employees, for all costs and defense of any claim arising from the decision to divest.

D. Instruct the Office of the Treasurer to contact the management of several other companies identified by the Sudan Divestment Study Group to ask them to ensure that their business operations in Sudan, while providing beneficial effects for the people of Sudan, do not inadvertently contribute to the campaign of genocide.

E. Instruct the Office of the Treasurer to report on the status of this policy to the Committee on Investments as part of the annual review of the Investment Policies for the UCRP and GEP.

F. Divest all shares held in the nine companies within an 18-month period commencing once indemnification legislation has been enacted.

G. Communicate the decision to divest shares held in the nine companies to the managers of commingled accounts in which assets of the UCRP and GEP are invested, with a request that they consider the University's stand on this issue as they make their investment decisions.

H. Communicate the decision to divest shares held in the nine companies to the Investment Committees of the Campus Foundations so that they may consider adopting similar policies for their Funds.