

The Regents of the University of California

**COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP**

February 22, 2012

The Committee on Investments met on the above date by teleconference at the following locations: Covell Commons, Los Angeles campus; 1111 Franklin Street, Room 11326, Oakland; 777 South California Avenue, Palo Alto.

Members present: Representing the Committee on Investments: Regents De La Peña, Hallett, Kieffer, Makarechian, Marcus, Schilling, and Wachter; Staff Advisor Smith

Representing the Investment Advisory Group: Members Crane, Fong, Martin, Rogers, and Samuels, Consultants Klosterman and Lehmann

In attendance: Secretary and Chief of Staff Kelman, Associate Secretary Shaw, Chief Investment Officer Berggren, Principal Counsel Quenneville, and Recording Secretary McCarthy

The meeting convened at 1:35 p.m. with Committee Chair Wachter presiding.

1. **PUBLIC COMMENT**

There were no speakers wishing to address the Committee.

2. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of December 13, 2011 were approved, Regents De La Peña, Hallett, Makarechian, Marcus, and Wachter (5) voting "aye."¹

Committee Chair Wachter welcomed Investment Advisory Group Member David Crane and thanked Regent Marcus, who was attending his last meeting, for his service to the Committee.

3. **CONSULTING ACTUARY DISCUSSION OF ACTUARIAL RATE OF RETURN AND IMPACT ON ASSET ALLOCATION**

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

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

Committee Chair Wachter stated that questions about the actuarial rate of return for the University of California Retirement Plan (UCRP) and the rate's effect on issues of asset allocation had arisen at the prior meeting. Chief Investment Officer Berggren stated that Mr. Paul Angelo of the Segal Company (Segal), the Regents' consulting actuary, would explain how the actuarial rate of return, currently 7.5 percent, is derived and how the rate relates to overall investment assumptions. Mr. Angelo stated that the actuarial assumed rate of return is used to value UCRP's liabilities, thus affecting the Plan's accrued liabilities and the University's annual pension costs. He noted that it is important for the Committee to understand the relationship between the assumed rate of return and the Committee's function of determining asset allocation. Mr. Angelo emphasized that the portfolio's asset allocation is the principal driver in the setting of the actuarial assumed rate of return.

Mr. Angelo cautioned that it is a common misconception that the actuarial assumed rate of return is a target and that asset allocations should be changed, possibly taking on additional risk, to meet the assumed rate of return. He stated his view that the Committee should set its asset allocations based on its analysis of risk and return, blind to the assumed rate of return, and that the actuarial assumed rate of return should be determined based on the asset allocation and the actuary's models. Setting the actuarial assumed rate of return follows, rather than precedes, the Committee's asset allocation process.

Mr. Angelo stated that approximately every four years Segal conducts an experience study, which includes consideration of economic assumptions about price inflation, investment return, and salary increases. For example, the July 1, 2007 experience study used an assumed annual salary increase rate of 4.35 percent, including 3.5 percent price inflation, 0.25 percent real wage growth, and 0.6 percent merit pay increases for staff who have served more than 20 years; that study also assumed returns of 7.5 percent, including 3.5 percent price inflation and four percent real return, net of expenses. Segal's 2011 experience study used the same 3.5 percent price inflation, an increased real wage growth of 0.5 percent, and only a 0.3 percent merit increase, for a total salary increase assumption of 4.3 percent. The 2011 study's investment return assumptions were unchanged from its 2007 assumptions.

In order to set the earnings assumption, Segal uses the building-block method, adding a real rate of return for each asset class, weighted by UCRP's asset allocation, to the expected inflation rate. The Segal model includes a risk adjustment. No extra return is added for superior managers, so the returns are indexed returns rather than alpha returns. To determine the real rate of return, Segal surveys ten different investment consulting firms who advise other public retirement systems to obtain their expected real rates of return for various asset classes. Mr. Angelo noted that the real rates of return could be affected by differences in time horizon or variations in the definition of the asset classes. The information from the survey is used as a consensus forecast and can show changes since the past experience study. He pointed out that the capital market assumptions the Committee might use in its analysis could be different from the assumptions of the ten investment firms surveyed by Segal in its process.

Mr. Angelo explained that, even though Segal did not change its earnings assumption of 7.5 percent from its experience study of July 2007 to that of July 2011, the combination of the survey of the ten investment firms, investment expenses, and changes in asset allocation, resulted in a decrease in the UCRP portfolio's net expected real rate of return from 5.75 percent to 4.91 percent. Mr. Angelo stated that it has been Segal's experience that many pension funds use an earnings assumption that is substantially lower than the combination of the assumed inflation rate, 3.5 percent in the 2007 study, and the portfolio's net real rate of return, 5.75 percent in 2007. He expressed his opinion that this represents the managing boards' sense of risk aversion, and reluctance to set too high an assumed rate of return.

In Segal's 2007 experience study, the 7.5 percent earnings assumption for UCRP led to a risk adjustment of -1.75 percent, and a confidence level of 74 percent of earning more than the assumed return. In other words, if all the assumptions were accurate, UCRP's earnings were projected to surpass the assumed 7.5 percent return 74 out of 100 times. In Segal's 2011 study, because of the portfolio's lower expected net real rate of return, the same 7.5 percent assumed investment return has become more risky than it was in 2007, with the confidence level dropping to 60 percent, which Mr. Angelo characterized as more typical of other public pension funds. The 2007 confidence level of 74 percent indicated that UCRP was invested more conservatively than most other public pension funds. Mr. Angelo cautioned that the model used by Segal is subjective since no one can predict what a portfolio's earnings will be. He summarized that Segal's study showed that UCRP's 7.5 percent earnings assumption is more risky in 2011 than it was in 2007. He stated that Segal's evaluation is effective in comparing a system to itself over time.

Committee Chair Wachter summarized that, based on the ten managers' expected returns in each asset class, weighted by UCRP's asset allocation, the earnings assumption for UCRP in 2011 was 4.91 percent before inflation, while in 2007 it had been 5.75 percent before inflation. Mr. Angelo agreed.

In response to a question from Committee Chair Wachter, Mr. Angelo summarized that the Committee sets an asset allocation and Segal determines a projected investment return based on that asset allocation and its actuarial assumptions. Segal starts with UCRP's asset allocation combined with the Regents' funding policies and Segal's actuarial assumptions, which are its best estimates of future economic events including investment returns, and then calculates a contribution rate. Mr. Angelo stated that, if UCRP's assumed rate of return, currently 7.5 percent, is incorrect, then the employer contribution rate would have to be adjusted. Segal recommends that the Committee not take Segal's assumptions into account when setting asset allocation. Rather, the Committee should set its asset allocation according to its own analysis and criteria regarding risk, and Segal's role is to inform the Committee of an expected rate of return based on that asset allocation.

Regent Makarechian stated that UCRP has future liabilities that it must meet and assets that will create returns. He asked who determines the rate of return required to meet the Plan's liabilities. Mr. Angelo said that the moving variable is the contribution rate, and

that currently UC has two different contribution rates, one calculated from the actuarial report and the other the real rate of funding, which the Board has been increasing over time. Mr. Angelo said that his report concerned only the actuarial rate. Regent Makarechian stated that if the assumed rate of return is not met, future additional funds would be needed. He asked why the Committee would not change its asset allocations to meet the rate of return needed to fulfill future obligations. He asked who is responsible to advise the Board about changing its asset allocations in that way.

Committee Chair Wachter stated that the contribution rate is not set by the Committee on Investments. The Committee on Investments must determine what asset allocation would yield the highest possible returns, given the level of risk the University is willing to take. In the current investment climate, the University might have to take too much risk in order to earn 7.5 percent. The Committee could decide to allocate more funds to an asset class with higher potential return, but that asset class might carry more risk than is reasonable.

Investment Advisory Group Member Samuels asked for more information about the meaning of the confidence level for UCRP earnings assumptions. Mr. Angelo stated that the confidence level figure is most useful for comparing a given assumption and a given economic environment from one period to the next on a relative basis. He emphasized that the figure is more relative than absolute. Committee Chair Wachter commented that, while the confidence figure was higher in 2007, at that time the stock market was about to enter one of its worst periods.

Regent Kieffer referred to the common concern that, should the assumed rate of return be lowered, then contribution levels would have to be increased. He asked whether the 60 percent confidence level in UCRP's 7.5 percent earnings assumption indicated increasing uncertainty about the attainability of that return. Mr. Angelo agreed, and stated that since the mid-1990s UC's actuarial assumed rate of return has been 7.5 percent, which was conservative relative to other public pension funds for many years. Recently, other public pension funds have been lowering their assumed rates of return. He stated that a case could be made that it would be appropriate to keep UC's actuarial assumed rate of return at 7.5 percent until the time of the next review in three or four years, given that the rest of the industry is only now lowering rates to the level at which UC's rate has been for years.

Investment Advisory Group Member Martin commented that the risk adjustment figure seemed to him to be an artificially inserted number that enabled Segal's analysis to arrive at a 7.5 percent earnings assumption. Mr. Angelo agreed that the confidence level is, by definition, a "plug number," which resulted from Segal's analysis of the effect of maintaining UC's assumed rate of return at 7.5 percent. Committee Chair Wachter expressed his view that the lower confidence level indicates a lower margin for error. He reiterated that the confidence level was higher in 2007, just prior to the financial crisis of 2008.

Regent Makarechian observed that the confidence level figures are actually derived from the ten investments firms' predictions of real rates of return in the various asset classes, but cautioned that the best experts in the field can be wrong. He asked whether the same method of predicting returns in various asset classes was used by comparable institutions and about the reliability of the estimated returns for the asset classes. Mr. Angelo responded that each actuarial firm has its own approach; some firms use their own investment department's estimates, but Segal uses what he characterized as a broader, more independent source. The ten firms surveyed provide investment consulting services to ten other California public sector retirement systems with assets ranging from \$2 billion to \$12 billion.

Investment Advisory Group consultant Klosterman asked whether the ten firms surveyed in the 2011 survey were the same ten firms surveyed in the 2007 study, and whether all the firms' figures were given equal weight. Mr. Angelo responded that, while one of the firms might have changed, the group was substantially the same. Segal weights all the firms' assumptions equally, then takes the average expected real returns for all asset classes and weights them by the asset allocation of UCRP. Mr. Klosterman asked whether the confidence level was based on a Monte Carlo simulation basis on a 15-year time period. Mr. Angelo responded that a Monte Carlo simulation was not used; Segal used a closed-form calculation.

In response to a comment from Regent Marcus, Mr. Angelo stated that the setting of long-term earnings assumptions is done under Actuarial Standards of Practice specifically for the measurement of liabilities.

Investment Advisory Group consultant Lehmann expressed his view that, in calculating the actuarial present value of liabilities, the liabilities would be more like government bonds than like risky assets, and therefore the discount rate should be a number similar to the U.S. Government Bond rate, not 300 basis points (bps) above that. He noted the risk of understating the liabilities and having to catch up with returns in the future. Mr. Angelo responded that there are two fundamentally different ways to set a discount rate for measuring liabilities: the one used by Segal based on the expected return on assets, and the financial economics model, based on the credit quality of the promise. All public sector retirement systems currently calculate based on expected return on assets since that is what offsets the employer contribution.

Investment Advisory Group Member Crane asked for the duration of UCRP's liabilities. Mr. Angelo responded that Segal does not use duration in its calculations, but that he could provide Mr. Crane with that figure. Mr. Crane asked how UCRP's asset allocation, with approximately 20 percent fixed income, compares with that of other funds which Segal advises. Mr. Angelo expressed his opinion that the allocation is fairly representative.

Mr. Crane asked whether the real return for the U.S. equity asset class of 6.75 percent based on Segal's survey of ten investment advisory firms corresponds to a nominal return of 10.9 percent. Mr. Angelo responded that the nominal returns of each investment

advisor less the inflation assumption of that advisor yielded the advisor's projected real return. Mr. Crane said that the real return would be added to the 3.5 percent inflation assumption and the 65 bps investment expense assumption, yielding nominal returns of 10.9 percent for U.S. equities and 14.57 percent for private equities. Mr. Angelo said the risk adjustment would also have to be deducted. Mr. Crane stated that the resulting nominal return for U.S. equities would be ten percent. Mr. Angelo agreed.

Mr. Crane asked for clarification regarding who sets the investment return assumption. Mr. Angelo responded that, first, the Committee on Investments sets the asset allocation, then Segal uses that asset allocation along with other information to calculate an investment return assumption, which it recommends to the Committee on Finance, which can adopt the recommendation or not. Mr. Crane said that would mean that the Committee on Investments is in charge of the investment return assumption, and, if that is true, the Committee must know the duration of UCRP's liabilities. Mr. Angelo stated that, in the normal application of this model, he would be concerned about cash flow rather than duration. In other words, as long as the asset allocation is managed in such a way so that cash flow requirements are met, duration would not be a material concern.

Committee Chair Wachter stated that issues of the actuarial assumed rate of return, including questions about the duration of liabilities and cash flow requirements, are of such importance to merit a future Committee session.

4. **FOURTH QUARTER 2011 AND FISCAL YEAR TO DATE INVESTMENT PERFORMANCE SUMMARY**

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

Chief Investment Officer Berggren stated that the market was very volatile in 2011 because of many issues, both domestic and global. For the year, the Russell 3000 Index was flat; non-U.S. equities did not perform well, with the MSCI World ex-U.S. Index down 12.1 percent and the MSCI Emerging Markets Index off 18.4 percent. Fixed income performed very well for the year in the lower risk environment. In the fourth quarter, risk assets did well, with a 12.1 percent increase in the Russell 3000 Index.

Turning to UC portfolio performance, Ms. Berggren stated that the UC Entity gained 4.2 percent for the year, with the UC Retirement Plan (UCRP) gaining five percent and the General Endowment Pool (GEP) rising 3.9 percent. Six-month returns were the opposite of the fourth quarter's returns; the fourth quarter did not recoup the losses of the first part of 2011.

Regarding asset class performance, Ms. Berggren reported that all asset classes had positive returns for the quarter, with the exception of private equity whose returns are reported with a one-quarter lag and thus reflect the prior quarter's public markets. With

respect to relative performance, all asset classes had positive performance with the exception of real estate, which was negative for the quarter.

Turning to asset allocation, Ms. Berggren stated that UCRP was underweight in core fixed income, Treasury Inflation-Protected Securities (TIPS), and absolute return or hedge funds. The GEP was underweight in TIPS and hedge funds. In the UCRP, private equity was the principal reason for the negative 16 basis points (bps) attributable to asset allocation, since private equity was overweight and its performance was negative. In security selection, absolute return contributed 16 bps to performance in the UCRP. In the GEP with its higher asset allocation to absolute return, security selection in absolute return contributed 64 bps to performance.

Investment Advisory Group Member Samuels asked for an interpretation of the returns of the private equity asset class. Ms. Berggren said that private equity returns were the posted net asset values of the managers in the previous quarter plus any adjustments such as distributions and capital calls that have occurred in the current quarter. Mr. Samuels asked whether the returns take into account the J curve effect. Ms. Berggren stated that the J curve effect would currently be fairly large, since many of the portfolio's commitments have been made during the past three to four years.

5. **INVESTMENT CONSULTANT REVIEW OF MANAGER SELECTION IN PUBLIC EQUITY, PRIVATE EQUITY, AND ABSOLUTE RETURN STRATEGIES**

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

Chief Investment Officer Berggren recalled that, in response to a request at the prior meeting, Mr. Terry Dennison of Mercer Investment Consulting (Mercer) was asked to perform an independent evaluation of the Chief Investment Officer's manager selection in public equity, private equity, and absolute return strategies asset classes. Mr. Dennison stated that his firm's review was intended to provide an independent consultant's analysis of UC staff's ability to select managers. Three different consulting firms provided input. Mercer reviewed the public equity program; Cambridge Associates reviewed the private equity program; Albourne Partners Limited (Albourne) reviewed the absolute return strategies program.

Regarding the private equity program, Mr. Dennison pointed out several challenges the program faces. The University has been denied access to the top venture capital funds as a result of a 2003 lawsuit. Buyout funds were not added to the portfolio until 2003, and most of those assets are still in the J curve phase. Cambridge Associates found the Chief Investment Officer's internal staff to be performing at a very high professional level, despite the fact that they have more limited opportunities than other endowment managers have.

Turning to the absolute return strategies, Mr. Dennison stated that the portfolio's allocation to hedge funds was recent compared to its peers', resulting in limited access to top hedge funds, many of which are no longer accepting new investors. Competition for top hedge funds has increased as they have become a more mainstream asset class for institutional investors. Albourne found the internal staff of the Chief Investment Officer to be highly capable and thorough.

In the public equity asset class, there had been a transition period of staff turnover following a four-year period of poor equity performance. In the subsequent three-year period, the new staff have completely restructured the portfolio. Mercer found the public equity internal staff to be outstanding.

Regent Kieffer asked about the 2003 lawsuit. Ms. Berggren stated that the lawsuit involved transparency of information relating to the University's investments in private equity. The lawsuit resulted in the University's being required to report publicly all data associated with the private equity firms. While subsequent legislation limited the amount of information the private equity firms were required to give the University, the publicity associated with the lawsuit limited UC's ability to continue to invest with top venture capital firms. Private equity had been one of the University's top-performing asset classes.

Investment Advisory Group Member Samuels expressed his opinion that the letters reporting results of the reviews from Cambridge Associates, Albourne, and Mercer, while full of general praise, had very little detail about the factual basis for their conclusions and methods of comparison. Committee Chair Wachter responded that the investment returns of the Chief Investment Officer and her staff can always be easily compared to the asset class benchmarks, and that the Committee continually evaluates performance in that way.

Investment Advisory Group Member Martin expressed confidence in the opinion of Cambridge Associates, given the firm's 30 years of experience in evaluating hundreds of venture capital and buyout firms. Cambridge is skilled in judging the quality of investment teams, and their assessment of the staff of the Chief Investment Officer, while it may be somewhat subjective, carries a great deal of credibility. Committee Chair Wachter stated that, in the past 15 years, UC has had two periods of poor performance in equity investments. He expressed his view that changes had been made to address these prior problems, along with additional changes more recently in the equity division.

6. **ASSET ALLOCATION REVIEW FOR THE GENERAL ENDOWMENT POOL**

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

Chief Investment Officer Berggren stated that the investment goal of the General Endowment Pool (GEP) is to achieve a positive return greater than inflation and the payout rate. Inflows must equal outflows over time. She explained that outflows consist

of the payout rate, currently 4.75 percent annually, core inflation, currently two percent, and education inflation, which over time has been an incremental 3.3 percent. Gifts to the GEP have averaged 1.75 percent of total assets annually over a five-year period. A nominal investment return of eight percent is required for the GEP to break even in real terms.

Regent Makarechian asked what the 4.75 percent payout rate equals in dollar amounts. Ms. Berggren stated that she would supply that figure.

Ms. Berggren commented that, in order to increase investment returns, more investment risk would have to be taken. An increased allocation to private equity would have the potential for higher returns, but Ms. Berggren cautioned that illiquid assets carry higher risk. She showed a graph demonstrating that asset classes with higher potential returns also have higher potential for loss during market downturns.

Ms. Berggren displayed a chart showing that the endowment funds of peer universities have significantly higher allocations to alternatives than the GEP does. The GEP has the highest allocation to public equity among the group, the second highest to bonds, the lowest allocation to alternatives, and a relatively low allocation to real estate and private equity. The GEP has a median allocation to marketable alternatives, which are hedge funds. The GEP has had a lower allocation to non-marketable assets, primarily because UC had no representation in those asset classes until 2007 or 2008. Until that time, the GEP had no investments in real estate or private equity.

Investment Advisory Group Member Crane expressed his view that the GEP and the University of California Retirement Plan (UCRP) are completely different. The GEP has no liabilities and volatility should not be a major concern. On the other hand, the UCRP has a short duration and a negative cash flow. He stated his opinion that the UCRP is invested in the way that the GEP should be invested, and vice versa.

Ms. Berggren stated that the asset allocation in the UCRP is quite different from that of the GEP. For instance, the long-term target in the GEP for alternatives is 45 percent; in the UCRP, the target for alternatives is only 26 percent. Mr. Crane pointed out that the GEP has a large allocation to public equity, as well as a 17 percent allocation to bonds. He asked why the endowment, with no duration of liabilities, would have such a large allocation to lower yielding, more liquid assets. Ms. Berggren responded that most of the fixed income allocation is credit. Also, approximately half of the endowment is comprised of funds functioning as endowments (FFEs); those funds could be withdrawn at any time and therefore liquidity has to be considered. She stated that the Committee has determined the level of risk it views as appropriate for the portfolio. Committee Chair Wachter stated that the Committee has moved the GEP's asset allocation more into alternatives and private equity over the past eight or nine years. While he agreed with Mr. Crane that, in theory, the Committee should be willing to take more risk and a longer-term perspective, he added that, in the real world, people care about volatility. Ms. Berggren commented that, in the private equity and real estate asset classes, there are commitments to be paid in the future and the portfolio must be managed in such a way

that these obligations can be met. She recalled that a number of hedge funds “gated” during the financial crisis of 2008, meaning that investors could not withdraw their money.

Investment Advisory Group Member Martin said that there is limited capacity in some asset classes. Because of the size of UC’s portfolios, it may not be possible to quickly increase asset allocation using top-tier managers.

Regent Makarechian asked whether the investment returns corresponding to the various peer universities’ asset allocations could be determined. Ms. Berggren responded this would be difficult to assess accurately, since some universities began investing in alternatives 15 or 20 years prior, and are now far beyond the time when their returns would be lowered by the J curve effect. If UC changed its GEP asset allocation at the current time to 43 percent in private equity or private real estate, UC’s returns would be negative for the next few years. The investment returns of the various institutions are not comparable because they invested in their assets at different times. Regent Kieffer agreed that investments in alternatives can take several years to generate higher returns. Committee Chair Wachter expressed his view that, if the Committee decided to increase asset allocation to alternatives because it concludes that the investment will improve the portfolio’s returns over 20 years, it should not be dissuaded because of possible short-term depressed returns. Regent Kieffer agreed that a long-term perspective is appropriate.

Ms. Berggren stated that the ten-year returns in private equity for endowment funds of five peer universities ranged from -6.3 percent to ten percent. The GEP ten-year return in private equity was a competitive 7.4 percent, even without the same access and considering its relatively recent entry into the asset class. The one-year returns for hedge funds among five peer universities’ endowments ranged from seven to 14 percent; the 2011 GEP return in the hedge fund asset class was 12.3 percent. Regent Kieffer noted that it can be misleading to look at one-year returns.

Regarding GEP’s asset allocation, Ms. Berggren recommended maintaining the long-term allocation to private equity at nine percent, real estate at 7.5 percent, and real assets at three percent. She recommended increasing the allocation to absolute return strategies from two percent to five percent. She also advised restructuring the absolute return strategies, or hedge fund, portfolio to a higher risk and higher return profile. This would be accomplished by identifying certain managers of smaller funds with potentially higher returns and using a higher proportion of those managers in the GEP than in the UCRP. She explained this would be like having two separate pools, and the risk could be adjusted to appropriate levels in each portfolio, with the GEP carrying the higher level of risk. She stated that her office believes this would increase performance in the GEP. Regent Makarechian asked whether GEP’s current allocation in real estate of 5.2 percent would be increased to the long-term goal of 7.5 percent. Ms. Berggren answered in the affirmative.

Mr. Martin expressed his support for dividing the absolute return strategies into two different categories, since there are two different reasons for investing in hedge funds, one being their low correlation to equity markets, and the other to increase performance.

Ms. Berggren stated that the absolute return strategies asset class was originally added to the portfolio as a hedge. Her office has built a staff with expertise across almost every asset class and Ms. Berggren expressed confidence in the ability of her team to find appropriate managers for the absolute return strategies asset class.

Mr. Crane asked whether Ms. Berggren would choose this allocation for the absolute return strategies asset class in the GEP if she knew investment results would not be evaluated for ten years. Ms. Berggren stated she would stand by her current recommendation, which would provide growth in the portfolio, satisfy liquidity needs, and provide some risk protection.

Regent Makarechian asked how the liquidity requirements are set. Ms. Berggren stated that the GEP must provide 4.75 percent annually to the campuses. The GEP has a much longer-term horizon than the UCRP, and the GEP does not have the same liabilities as the UCRP. The UCRP has current monthly outflows of \$140 million, and must have the liquidity to pay those pension benefits. For the GEP, Ms. Berggren emphasized the need to achieve an investment return of eight percent in order to meet the 4.75 percent payout to the campuses. She advised that her recommended asset allocation would be the best way to ensure an eight percent long-term return, given potential market volatility and the projections for returns of various asset classes.

Regent Kieffer asked why the Chief Investment Officer recommended maintaining the same allocation to private equity, rather than increasing the allocation. Ms. Berggren responded that increasing allocation to absolute return would provide the same level of return and would allow more flexibility in terms of liquidity.

Committee Chair Wachter asked Ms. Berggren to provide more detail at the next Committee meeting regarding her GEP asset allocation recommendations to maintain long-term targets to illiquid alternatives and to increase allocation to absolute return strategies from two percent to five percent, as well as more detail about implementation of the proposed changes. He also requested more detail about her recommendation to restructure the absolute return strategies portfolio to a higher risk and higher expected return profile.

7. **INVESTMENT CONSULTANT REVIEW OF UC CAMPUS FOUNDATIONS
THIRD QUARTER 2011 PERFORMANCE REPORT**

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

Mr. Terry Dennison of Mercer Investment Consulting reported that Mercer found no material items, or significant risk or return issues that needed to be brought to the Committee's attention.

Committee Chair Wachter introduced student observer Nandan Das. Mr. Das stated that he had asked both the University of California Student Association and the UC San

Diego Graduate Student Association for students' opinions regarding UC holding investment assets with more risk in exchange for higher long-term growth potential. He reported that neither of the associations felt students had adequate information about the tangible effects of different investment strategies. Mr. Das suggested that the Committee request an informational paper on the practical consequences to students of various possible investment returns. He noted that students would be naturally concerned about potential volatility in the University's investment returns, particularly during this difficult economic period.

Mr. Das expressed caution about basing the assumed annual rate of return on the rates used by other public retirement systems or expectations of investment consultants. He stated that there would probably be years during which the 7.5 percent assumed rate of return would not be met, and other years in which the rate would be exceeded. He expressed his view of the importance of understanding what effect volatility would have on the student experience at UC. While the expenses of the defined benefit retirement plan are set, investment return to the plan is dependent on market forces. He suggested discussing what level of investment return would be what he characterized as a "breaking point" for the system.

Committee Chair Wachter suggested that Mr. Das discuss the possible content of his proposed informational paper with Chief Investment Officer Berggren. Prior to the financial crisis of 2008, the UCRP was overfunded. Regent Kieffer stated that such a report could be helpful to students as well as other UC constituent groups. He noted that the system can be injured significantly before breaking, and that must be considered when thinking of the long-term future of the University. Regent Makarechian pointed out that the Committee on Finance is responsible for determining the effects of the UCRP funding.

Committee Chair Wachter stated that the past four or five years have been very challenging for all investors. He thanked members of the Committee and the Investment Advisory Group for their contributions. Committee Chair Wachter thanked Regent Marcus for his years of service to the Committee. Regent Marcus commended the work of Committee Chair Wachter, the Chief Investment Officer, and her staff.

The meeting adjourned at 3:20 p.m.

Attest:

Secretary and Chief of Staff