

The Regents of the University of California

**COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP**

February 26, 2013

The Committee on Investments met on the above date by teleconference at the following locations: James West Alumni Center, Los Angeles campus; 1111 Franklin Street, Lobby 1, Oakland; Environment, Health and Safety Building, University Center 401, San Diego campus; 1376 Nanjing Xi Lu, Shanghai, China.

Members present: Representing the Committee on Investments: Regents Kieffer, Makarechian, Mendelson, Wachter, and Zettel; Advisory members Jacob and Schultz
 Representing the Investment Advisory Group: Members Lehmann, Martin, Rogers, and Chief Financial Officer Taylor, Consultant Klosterman

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

The meeting convened at 1:45 p.m. with Regent Makarechian presiding.

1. **PUBLIC COMMENT**

There were no speakers wishing to address the Committee.

2. **FOURTH QUARTER 2012 AND FISCAL YEAR 2012-13 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 (CIO) Berggren summarized investment performance for the quarter ending December 31, 2012 and for the 2012-13 fiscal year to date. Global equity markets rebounded strongly in 2012, reflecting a reduction of macro-level risk. U.S. and non-U.S. developed equity markets rose 16 percent; emerging markets rose 18 percent. For the December quarter, U.S. equities were flat, facing an expectation of decline in the rate of revenue and earnings growth, and uncertainties about the outcome of the U.S. presidential election and the “fiscal cliff,” a combination of expiring tax cuts and across-the-board government spending cuts scheduled to take effect on December 31, 2012. Fixed income did very well, a result of the injection of liquidity by the Federal Reserve Board and other central banks. Non-U.S. bonds, high yield bonds, and emerging market debt enjoyed strong gains. Results for all portfolios were strong for the 2012 calendar year, but modest in the December 2012 quarter, consistent with market performance. The

UC Entity, the aggregate assets managed by the Office of the CIO, rose 11.5 percent in 2012, and 2.1 percent for the 2012 fourth quarter. Active portfolio management was crucial to the gains. The UC Retirement Plan (UCRP) rose 13.7 percent in 2012, and 2.5 percent for the fourth quarter, reflecting the fact that a large portion of that portfolio is in equities, which performed very well, and a modest portion in fixed income, which also performed well, but not as well as equities.

Discussing performance by asset class, Ms. Berggren stated that all asset classes had good absolute and relative performance in 2012. For the fourth quarter, the best performing asset classes were non-U.S. developed equities, emerging market equities, and public real estate, all up six percent for the quarter. U.S. high yield debt, emerging market debt, and private equity rose three percent for the quarter. For the 2012 calendar year, U.S. equity and non-U.S. developed equity rose 17 percent; emerging markets rose 20 percent, U.S. high yield debt rose 16 percent; emerging market debt rose more than 16 percent. Public real estate, the best-performing asset class, rose 28 percent in the 2012 calendar year. Within the U.S. equity asset class, the portfolio's large-cap managers and some small-cap managers performed particularly well in the December quarter. In non-U.S. developed equities, selection of industrial and technology stocks was outstanding. In emerging market equities, consumer and financial stocks performed well. In the absolute return asset class, emerging market, relative value, and event-driven stocks were responsible for gains.

Turning to asset allocation, Ms. Berggren reported that the UCRP and the General Endowment Pool (GEP) portfolios were overweight in two asset classes that performed best: non-U.S. developed equities and emerging market equities. The portfolios were underweight in fixed income, which did not perform as well.

Describing asset class contribution to excess return in UCRP, Ms. Berggren said that U.S. equities added 13 basis points (bps), non-U.S. developed equities four bps, emerging market equities eight bps, core bonds 28 bps, and absolute return 35 bps, for a total excess return of 99 bps. She displayed a chart showing the respective contributions of asset allocation and security selection to the total excess return. Asset allocation resulted in excess returns in U.S. equities, core bonds, and Treasury Inflation-Protected Securities (TIPS). Security selection made a significant contribution to excess return in many asset classes, including U.S. equities, non-U.S. developed equities, emerging market equities, core bonds, TIPS, absolute return, and private real estate. In sum, asset allocation contributed 15 bps of excess return and security selection contributed 84 bps. Ms. Berggren stated that these results demonstrate the skill level of the asset class managers and the benefit of her office's asset allocation relative to policy. Compared with other pension funds, the UCRP portfolio performance ranked first for the past two quarters and was at the 22nd percentile for the past two- and four-year periods, and at the 35th percentile for the past five-year period.

Discussing performance attribution in the GEP, Ms. Berggren said that the absolute return asset class contributed the most to excess returns in the December quarter. Asset allocation contributed little to excess returns in the GEP.

Investment Advisory Group Member Rogers expressed his view that the performance of UC's portfolios should be compared with those of other large universities' endowment funds over \$5 billion. He expressed concern about the performance of UC investments. Mr. Rogers submitted information he had obtained directly from 17 universities with endowments larger than \$5 billion regarding their endowment investment returns for one- and ten-year periods.

Investment Advisory Group Member Lehmann stated that UC's endowment fund had a lower weight in alternative investments than some other universities' endowment funds, reflecting UC's lower risk tolerance, which would generally result in lower volatility and better performance than other endowments in some markets. He expressed his view that it would be inappropriate for the endowment of a public university such as UC to be invested similarly to endowments of private universities.

Investment Advisory Group Member Martin stated that comparing ten-year investment results would be inappropriate, since UC's investment portfolio had changed dramatically over those ten years.

[Committee Chair Wachter assumed the chairmanship.]

Committee Chair Wachter said a comparison of investment returns for periods of one to seven years would be helpful, but a comparison of ten-year returns would not be appropriate since UC's portfolios had changed significantly. Mr. Rogers said he had submitted recommendations to the Committee of ways to improve investment results.

Regent Kieffer stated that this discussion should be continued when all the information is available. He expressed his view that it is appropriate for UC to take a more conservative investment approach than some private universities. Committee Chair Wachter stated that it would be helpful to compare investment performance and reasons for differences in performance. He added that UC's investment policies have been moving in the direction recommended by Mr. Rogers. Committee Chair Wachter noted that there can be large variations in performance from quarter to quarter.

3. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of September 25, 2012 were approved, Regents Kieffer, Makarechian, Mendelson, Wachter, and Zettel (5) voting "aye."¹

4. **UNIVERSITY OF CALIFORNIA RETIREMENT PLAN ASSET ALLOCATION REVIEW AND RECOMMENDATIONS**

The Chief Investment Officer and the Regents' General Investment Consultant recommended that the amendments to Appendix One of the University of California

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

Retirement Plan Investment Policy Statement be adopted as shown in Attachment 1, effective April 1, 2013.

[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 (CIO) Berggren explained that there are three pillars that determine the health of a defined benefit plan: benefit policy, funding policy, and investment policy. Investment policy involves the risk parameters for asset allocation and reflects the preferred asset allocation of the Regents. This recommendation proposed to update asset allocations of the UC Retirement Plan (UCRP) in light of current economic and market conditions. Ms. Berggren expressed her view that the economic outlook was uncertain in the near-term and that asset markets would remain volatile. She recommended an asset allocation that allowed flexibility in light of liquidity issues that arose in 2007-08 and the recession in 2008.

Ms. Berggren described how her office determined its recommended asset allocation by analyzing the performance of various allocations in four different economic scenarios. An optimization technique was used to find the allocation that would yield the highest return in each of the scenarios and across all scenarios. The proposed policy was examined to ensure that it would improve expected performance and downside protection versus the current policy.

Ms. Berggren detailed the proposed changes to long-term policy weights. U.S. and non-U.S. developed equities would be reduced from 41.5 percent to 28.5 percent. Emerging market equities would be increased from seven percent to 11 percent. Fixed income would be reduced from 25 percent to 20 percent. Liquid alternatives would be increased from 8.5 percent to 22.5 percent; allocation to illiquid alternatives would remain the same. Committee Chair Wachter characterized the proposed changes as significant.

Regent Kieffer requested clarification of the rationale for the proposed changes, particularly the reduced allocation to developed equities. Committee Chair Wachter stated that the allocation would shift from purely long equities into more flexible, managed accounts that could be either long or short. Regent Kieffer asked what would be included in the liquid alternative asset class. Ms. Berggren explained that liquid alternatives include opportunistic equity, absolute return or hedge funds, and cross asset allocation. Cross asset allocation is a strategy of selecting managers with the ability to manage many asset classes; such managers could choose those investments with the best opportunity for returns from across these various asset classes. A strategic alliance with these managers would allow the Office of the CIO to take advantage of the due diligence performed by the strategic partners and their expertise. Committee Chair Wachter explained that the six percent increased allocation to the cross asset class would be taken from the developed equities asset class; in the cross asset class, funds could be invested in vehicles that are not equities. In response to a question from Regent Kieffer, Ms. Berggren confirmed that the underlying assets would be liquid and that her office could discontinue investing with a cross asset manager at any time. Investment Advisory

Group Member Martin added that managers in the cross asset class could be more flexible and dynamic in their security selection and strategy. Ms. Berggren stated that UCRP was one of the first institutional pension funds to use this strategy. She explained that her office performed extensive analyses of the capabilities of ten or 11 different managers and chose three on the basis of which managers could give her office the best insights into investments offering the highest risk-adjusted excess returns. Committee Chair Wachter asked whether, in general, the increased allocation to the cross asset class was more or less risky than an allocation to U.S. and non-U.S. developed equities. Senior Managing Director Jesse Phillips responded that the risk level would be approximately the same because the managers in the cross asset class would target the same risk exposures that UC has in its overall asset allocation. They would invest in a combination of equities and bonds similar to UC's existing asset allocation. These managers would use more dynamic techniques that would actually reduce risk by increasing the flexibility to change asset classes if needed.

Regent Makarechian asked for a clarification of the basis of the four economic scenarios used by the Office of the CIO to develop its recommended asset allocation. Mr. Phillips explained that his office considered economies of the U.S., the developed world outside of the U.S., and the emerging and developing world. The four economic scenarios are based on different assumptions of the level of economic growth in each region relative to its trend. The optimistic scenario is based on at- or above-trend growth in all three regions. At the current time, Mr. Phillips said it is commonly anticipated that Europe would be in a recession in the upcoming year. Realistic projections anticipate that U.S. and emerging markets would experience trend growth, with Europe and Japan continuing to experience declines in gross domestic product; inflation is anticipated to be mild. In a weak-growth scenario, all regions would grow at below-trend rates and inflation would be low. In a bad economic scenario, growing output gaps would be anticipated in all regions. Mr. Phillips stated that the proposed asset allocation was based on a combination of four different portfolios, one of which is optimal in each of the four economic scenarios. The asset allocation would thus be partially hedged against all scenarios.

Regent Makarechian asked why the recommended asset allocation would not be based on an assessment of the actual economic scenario at the current time and then adjusted in the future to optimize returns if the economic scenario has changed. Mr. Phillips responded that a different weight was placed on each of the four economic scenarios based on his office's assessment of current economic conditions. Currently his office assumes that the optimistic and bad scenarios have a 15 percent probability of occurring; the realistic scenario a 40 percent probability; and the weak scenario a 30 percent probability.

Ms. Berggren discussed the recommended increased allocation to the opportunistic equity asset class, which would attempt to find managers of differentiated portfolios that would yield higher excess return and higher tracking error. Many different types of managers would be considered, including activist managers, 130/30 managers, and global managers. She stated that her office is assembling a "best ideas" portfolio, which would include the best ideas of all the managers, selecting those investments that could yield the

highest risk-adjusted excess returns. Since many of these managers' investments would be extremely concentrated, they could perform either very well or very poorly. She stated that it is very difficult for managers' long-only investments to yield high excess returns, and that her office would like to move away from managers whose investments closely match their benchmarks. The opportunistic equity class would be less constrained and could pursue what her office considers the best alternative strategies within the equity market. Mr. Terry Dennison of Mercer Investment Consulting (Mercer) added that, rather than simply selecting managers who they anticipated would do well, the Office of the CIO was building a portfolio of managers with different strategies, so that it would be unlikely that their investments would all move in the same direction at the same time, providing both risk protection and incremental excess return.

Senior Managing Director Randy Wedding stated that the proposal would reduce the allocation to Treasury Inflation-Protected Securities (TIPS). He explained that TIPS provide protection against inflation. He noted that the current market for fixed income securities was unusual; real yields on TIPS were negative out to 20-year maturities. He stated that, when the stimulus currently being put into the financial system resulted in an increase in the Consumer Price Index, real yields on TIPS would increase, and the overall return on UC's TIPS portfolio would be negative. In other words, losses due to the increasing real yields and the decline in prices of TIPS would overwhelm the additional inflation income.

Mr. Martin asked why the allocation to emerging market equity was being increased. Ms. Berggren responded that her office anticipates that emerging market areas would see the fastest growth and offer the best overall returns. The increased allocation would be country- and manager-specific. She responded in the affirmative to Mr. Martin's question whether the emerging market equity allocation would have a large tilt toward Asia. Mr. Dennison added that Mercer has had a long-standing view that, compared with developed markets, emerging markets currently have both more growth potential and less drag from excessive debt.

Regent Makarechian asked about the effect of instability and security concerns in some emerging markets. Ms. Berggren responded that her office hires outside emerging market managers with diversified portfolios. Mr. Martin asked whether these investments were currency-hedged back to U.S. dollars or traded in the local currency. Ms. Berggren said they were traded in local currency. Committee Chair Wachter said that the Committee had discussed this issue in earlier meetings and had concluded that to hedge to U.S. currency was too expensive.

Committee Chair Wachter summarized that the proposed changes in asset allocation represent another significant step in changing the investment strategy for UCRP toward a more modern method, including investments such as cross asset class, hedge funds, private equity, long/short equities, and less investment in traditional stocks and bonds.

Ms. Berggren added that the strong staff she has assembled would be necessary to pursue this strategy successfully. Committee Chair Wachter agreed, and stated that it would be necessary for the Office of the CIO to monitor external managers diligently.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer and the Regents' General Investment Consultant's recommendation, and voted to present it to the Board, Regents Kieffer, Makarechian, Mendelson, Wachter, and Zettel (5) voting "aye."

5. **AMENDMENT OF INVESTMENT POLICY STATEMENTS OF THE UNIVERSITY OF CALIFORNIA RETIREMENT PLAN AND THE GENERAL ENDOWMENT POOL TO ESTABLISH INVESTMENT GUIDELINES FOR OPPORTUNISTIC EQUITY STRATEGIES AND CROSS ASSET CLASS STRATEGIES**

The Chief Investment Officer and the Regents' General Investment Consultant recommended that the Investment Guidelines for Opportunistic Equity Strategies and Cross Asset Class Strategies, (as shown in Attachments 2 and 3) be approved for addition to the Appendices to Investment Policy Statements of the University of California Retirement Plan and the General Endowment Pool, effective April 1, 2013.

[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.]

Senior Managing Director Jesse Phillips discussed the proposed Investment Guidelines for opportunistic equity and cross asset class strategies. He explained that the purpose of investment guidelines in general is to define performance objectives and to control risk in managing any particular allocation, and that their approval is an important role of the Regents. The UC Retirement Plan (UCRP) and General Endowment Pool (GEP) Investment Guidelines are reviewed each year and revisions are recommended when warranted by market conditions, changes in the financial or investments industry, or the Committee's risk tolerance.

Mr. Phillips said that the opportunistic equity asset class was approved the prior summer and initiated in December 2012 in the GEP. The cross asset class strategies program was initiated in April 2010 in the UCRP and the GEP. Investment guidelines for these two asset classes had not been presented until the current time because of the heterogeneous nature of these strategies. The effective date of the proposed Guidelines would be April 1, 2013.

Mr. Phillips stated that the opportunistic equity program would invest in global equity in a differentiated way, with fewer constraints and probably greater concentration than in traditional long-equity programs. Investments could include vehicles such as 130/30 strategies, in which managers invest both long and short while maintaining an equity exposure of about 100 percent, activist strategies, tactical strategies, traditional long/short hedge fund strategies, and some specialist strategies such as global small cap,

emerging market, country or sector specialist, frontier markets, or thematic, industry-tilt investments. The net long-equity exposure of the aggregate of managers in this asset class would be between 75 and 100 percent. In other words, for every \$100 of assets, there could be anywhere from \$75 to \$125 of equity exposure. The opportunistic equity portfolio would be diversified, with investment with a single manager limited to no more than 15 percent of the net asset value of the total opportunistic equity portfolio, and a 150 percent limit on the gross leverage of the portfolio.

Investment Advisory Group Member Martin asked whether any managers in this portfolio would have lock-up periods, windows of time during which investors would not be able to redeem or sell shares. Mr. Phillips responded that there could be some lock-ups, but the Guidelines contain a stipulation requiring a certain amount of liquidity. The average lock-up period for the opportunistic equity portfolio as a whole cannot exceed one year and a minimum of 65 percent of the portfolio must offer redemptions within 90 days. Mr. Phillips said that in general the portfolio would be very liquid, but would contain some strategies that are less liquid.

Mr. Phillips explained that the cross asset class strategies would attempt to integrate and leverage the best ideas across all asset classes, primarily by utilizing strategic partners, which are large global firms with capabilities across multiple strategies and geographies. These strategic partners would help inform UC's asset allocation process. The cross asset class would consist of two types of managers: core managers with global asset allocation strategies with net long positions similar to the performance benchmark, and those with satellite strategies designed to capitalize on temporary market dislocations and mispricings. Investment with a single manager would be limited to 33 percent of the cross asset class strategies portfolio's net asset value, and the gross leverage of the portfolio would be limited to 200 percent, although Mr. Phillips said the net exposure would be much closer to 100 percent at most times.

Mr. Martin asked whether one manager with 200 percent leverage could have 67 percent of the portfolio. Mr. Phillips responded that there were currently four managers in the portfolio; his office was in the process of finding probably four more managers. He said the aggregate gross leverage of the portfolio would be 200 percent or less. Mr. Phillips added that all leverage used in this portfolio was non-recourse to the Regents. Committee Chair Wachter asked how the limits on asset value of single managers would interact with the 200 percent limit on leverage. Mr. Phillips responded that the leverage is not included when determining the net asset value. He explained that leverage means that, with a given amount of capital, managers can contract for other instruments, such as futures, options, or swaps, which would give them exposures greater than that amount of capital. Their gross leverage would be the sum of the long and short exposures. Mr. Martin noted that, if one manager could hold one-third of the portfolio and be 200 percent leveraged, that manager could effectively have two-thirds of the portfolio exposed. Committee Chair Wachter agreed that would be possible under the proposed Guidelines. Regent Makarechian said the most that UC could lose would be the amount allocated to the manager. Committee Chair Wachter agreed.

Mr. Martin asked whether these managers would have any performance fees. Ms. Berggren answered in the affirmative, adding that the performance fees varied. She noted that one very important manager was diversified fairly evenly among various equities and fixed income investments, and the cross asset class portfolio as a whole was fairly well-diversified.

Committee Chair Wachter said that the cross asset class portfolio had a long-term allocation of eight percent of the UCRP portfolio. One manager could hold one-third of that eight percent, or roughly 2.5 percent of the UCRP portfolio, with five percent exposure, which would be a significant portion of the portfolio. Mr. Martin advised close supervision of the managers. Ms. Berggren stated that her office has monthly calls and quarterly meetings with the managers.

Committee Chair Wachter expressed his view that, when the number of cross asset class managers was increased, the 33 percent limit on a single manager's net asset value might be too high, particularly given the 200 percent limit on gross leverage. He suggested that a 20 percent limit would be more appropriate. Regent Kieffer and Regent Makarechian agreed. Committee Chair Wachter suggested that the CIO could bring requests for exceptions to the 20 percent limit back to the Committee. Regent Kieffer proposed that approving such exceptions be delegated to the Chair of the Committee on Investments.

Mr. Terry Dennison of Mercer Investment Consulting observed that, since the portfolio has only four managers currently, if the 20 percent limit were effective on April 1, 2013, managers would have more than 20 percent of the portfolio until more managers had been added. Committee Chair Wachter proposed keeping the 33 percent limit until the portfolio reached six percent of the UCRP or GEP portfolio, at which point the limit would change to 20 percent.

Committee Chair Wachter moved that the recommendation be amended to change the limit on an investment with a single manager to no more than 20 percent, once the cross asset class portfolio has reached more than six percent of the UCRP or GEP portfolio respectively. Exceptions to this 20 percent limit could be made by the Chair of the Committee on Investments.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer and the Regents' General Investment Consultant's recommendation as amended and voted to present it to the Board, Regents Kieffer, Makarechian, Mendelson, Wachter, and Zettel (5) voting "aye."

6. **FIXED INCOME PROGRAM REVIEW**

[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.]

Senior Managing Director Randy Wedding discussed the fixed income program. He stated that the major issue currently facing fixed income investors is low yields. For

example, government sector debt currently yields less than one percent, which, when the current inflation rate of 1.5 to two percent is subtracted, results in negative real yields. Committee Chair Wachter noted the good performance of fixed income investments over the past five years. He said that some endowments that had done very well may have had large allocations to fixed income investments, while UC did not. Normally, a large allocation to fixed income would be a very conservative strategy that would not yield the best returns. Mr. Wedding stated that the change in credit yields from eight percent in 2008 to the current 2.6 percent had generated large capital gains. Given these gains, Mr. Wedding expressed his view that managing risk has become important.

Mr. Wedding displayed a chart of fixed income assets under management, totaling almost \$28 billion. Yields are currently very low; when yields rise, government securities would be the most exposed to potential negative returns, collateralized debt less so; credit, emerging market, and high yield debt would be the least sensitive to a potential rapid increase in interest rates. Mr. Wedding stated that emerging market and high yield debt have generated particularly high returns. In response to a question from Committee Chair Wachter, Mr. Wedding confirmed that the government debt in the Short Term Investment Pool (STIP) and the savings fund are short-term instruments that would not be particularly sensitive to interest rate increases. Mr. Wedding stated that the STIP contains short-term securities that serve as a liquidity buffer, since they could be sold quickly if necessary to generate cash. He explained that the savings fund is a 403(b) fund where individuals can invest in short-term U.S. government securities. Chief Financial Officer Taylor added that the STIP funds in government securities were necessary to meet rating agency requirements, since Moody's Investors Service, Inc. has gradually increased the amount of liquidity the University is required to have in order to maintain its AA1 rating.

Mr. Wedding described the core fixed income portfolios, which consist of government, mortgage-backed, and credit securities. With government yields at multi-decade lows, the portfolio has been structurally underweight in government securities for the past two years and would continue to be so to minimize exposure to an anticipated increase in interest rates. Mr. Wedding said his office has obtained good returns by overweighting its allocation to credit securities and, to a lesser degree, mortgage-backed securities, a strategy he would continue. He reported that, although collateralized debt had gone through a difficult five-year period as the real estate market and mortgage-backed securities were under duress, over the past year non-agency mortgage-backed securities and commercial-backed securities have yielded extraordinary returns.

Mr. Wedding said the fixed income portfolio was currently underweight in government debt as a cautionary step, since it would be most affected by a tightening of monetary conditions. Within the government sector, his office has taken a defensive position by structuring its risk exposure so that, should monetary conditions tighten, that sector would outperform its benchmark. He stated that the consensus of market professionals is that the Federal Reserve Board will raise interest rates in late 2014.

Turning to the credit sector, Mr. Wedding stated that during 2012 prior concerns about the macroeconomy and specifically the housing market had been put to rest. The general

consensus is that the housing market would finally recover and would add materially to the gross domestic product. The portfolio's increased exposure in its credit sector to housing and building materials reflected a cyclical recovery. Weights to defensive sectors such as health care and pharmaceuticals have been reduced. Mr. Wedding expressed his view that worst-case scenarios for European markets and economies have been truncated by the actions of the European Central Bank. Primarily U.S. and a few select European financials have been added to the credit portfolio, since they offered attractive valuations.

Discussing the collateralized sector, Mr. Wedding stated that the Federal Reserve Board had engineered the lowest mortgage rates in decades, and currently purchased 70 percent of new agency mortgage-backed securities on a monthly basis. The housing sector had begun to rebound with housing price indices up about seven percent year-on-year; new home sales reached a cyclical high. He expressed his view that this rebound would continue to be a more prominent part of the economy. With the worst-case scenarios removed from residential and commercial real estate, some of the riskier assets in those areas have performed extremely well. Fiscal year to date non-agency mortgage-backed securities, representing ten percent of the collateralized sector portfolio, have returned 17 percent non-annualized, a return Mr. Wedding characterized as extraordinary.

Mr. Wedding discussed non-core fixed income holdings, including emerging market and high yield debt. In macroeconomic terms, Mr. Wedding anticipated stronger growth, better fundamentals, and lower levels of debt in emerging markets than in developed markets. He noted that over the past two years investors have fled the stressed European developed debt markets such as Italy and Spain for high-quality emerging market debt, helping returns in that sector. Mr. Wedding reported that the allocation to emerging market debt has been overweight for a few years. Regent Makarechian asked about the credit rating of emerging market high yield debt, and whether it was corporate or government debt. Mr. Wedding responded that it was entirely government debt and that the credit rating for the emerging market sovereign index had risen to a current average of BBB-, ranging from A to BB. He added that this sector's credit rating has improved greatly over the past few years as various emerging markets' fundamentals have improved, to such a degree that several so-called emerging market bonds are included in the core benchmark, since they satisfy investment-grade requirements. Mr. Wedding stated that his office avoids investing in sovereign credit of countries that have defaulted on their debt, such as Argentina. In general, Mr. Wedding said the credit-related sectors have made good progress, spreads have narrowed dramatically, and excellent returns have been made. His office is considering defensively reducing its exposure in this area.

Mr. Wedding said that the non-core fixed income portfolio's largest overweight is in high yield debt. The benchmark in high yield debt has returned ten percent annually for the past five years, equity-like returns that he said would be impossible to maintain. Mr. Wedding predicted returns of five to seven percent in high yield for 2013. He stated his intention to reduce the overweight in high yield over the upcoming few months, and is exploring the possibility of replacing some high yield debt with bank loans. Currently, approximately five percent of the high yield debt allocated to external managers is invested in bank loans. Bank loans are more secure than high yield bonds, are

collateralized, are currently attractively priced, and have the potential for higher interest rates since bank loan rates float with short-term rates.

Investment Advisory Group Member Martin asked about the duration of the fixed income portfolio. Mr. Wedding said he had lowered the interest-rate sensitivity of the core portfolio only slightly below that of the benchmark, but acknowledged the importance of this issue. He said the portfolio is set up structurally so that, if rates go up suddenly, the portfolio would perform better than an average portfolio. He expressed his view that the current economic situation indicates that rates would not rise immediately. Mr. Martin said he would agree with that evaluation, but said the interest rate situation must be watched closely. Mr. Wedding said the structural underweight to the government sector would help returns in a scenario of rising interest rates. Mr. Martin expressed his view that, in addition to underweighting or overweighting particular sectors, managing duration is also very important.

Mr. Wedding said that STIP, the portfolio through which most of the funds for the University flow, has done extremely well compared with other short-term, money market vehicles. However, as of the prior month, STIP's yield dropped below two percent. He anticipated that its return would drop further, because higher-yielding corporate securities bought a few years prior were maturing. Mr. Wedding noted STIP may have occasionally carried more liquidity than necessary, but that liquidity requirements have been clarified. Mr. Wedding said that his major concern about STIP is how to anticipate eventual rising interest rates.

In response to a question from Committee Chair Wachter, Chief Financial Officer Taylor stated that the liquidity requirements for STIP had increased because Union Bank currently requires UC to cover expected funds from the State, because the State had transferred funds late on a few occasions without notifying the University.

Mr. Wedding recognized the work of Senior Portfolio Manager for Credit Linda Fried, who retired after 30 years of service. Steven Sterman, who has years of directly applicable experience at Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF), has been hired to replace her.

Mr. Martin suggested that Mr. Wedding consider adding more international debt that is not emerging market to the portfolio. While some countries and regions, such as the United States, Japan, Europe, and the UK, have artificially depressed yields, yields on debt of many other non-emerging market countries have not been depressed by public policy. Mr. Wedding agreed that this sector could be attractive. He cautioned that some nations offer debt only in their own currencies, so currency risk would also be involved.

Committee Chair Wachter complimented Mr. Wedding and his team on their success in this difficult area. Mr. Martin agreed.

7. **INVESTMENT CONSULTANT REVIEW OF UNIVERSITY OF CALIFORNIA
CAMPUS FOUNDATIONS SEPTEMBER QUARTER 2012 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 (Mercer) stated that his report would cover the quarter ending September 30, 2012. Discussing a chart showing the investment performance of the campus foundations, Mr. Dennison stated that the ten foundations are managed differently. Two foundations are invested entirely in the General Endowment Pool (GEP); six foundations are invested in typical asset classes such as bonds and stocks. Two foundations, at UC Davis and UC Berkeley, have a unique strategy of purpose-based, rather than asset-based, allocations. He said that these two campus foundations have had relatively poorer performance in recent periods.

Mr. Dennison reviewed charts showing the annual investment returns for a few campus foundations to illustrate how to interpret some of the information. He pointed out that graphs showing the historical performance of a \$10,000 gift relative to benchmarks are valuable, since donors are interested in seeing that their contributions are well-invested. Patterns of steady growth above the benchmarks and excess returns relative to the benchmark provide a good indication of the success of the foundations' investment strategies in various investment environments.

Mercer's investment performance summary showed that the ten campus foundations' returns cluster around the middle of returns of Mercer's universe of endowments and foundations, which Mr. Dennison said would be appropriate for funds not invested in high-risk assets.

Mr. Dennison said that one of Mercer's responsibilities is to help the Regents assess their oversight authority in examining the risk and return structures of the foundations' portfolios. Mr. Dennison pointed out that the two purpose-based portfolios have generated negative performance relative to benchmarks for particular time periods. Mr. Dennison showed graphs demonstrating the foundations' risk/return profiles. Outliers on the graphs would be achieving a poor trade-off between risk and return, for example a high level of risk for a given level of return, or a poor return for a fairly high level of risk.

Mr. Dennison discussed the UC Santa Barbara Foundation, which he said had an unattractive five-year risk/return profile. He explained that the UC Santa Barbara Foundation moved from investing purely in the well-diversified GEP at an inauspicious time in 2008, launching an investment program with an outside manager who has underperformed and is being replaced. Mr. Dennison explained that the UC Santa Barbara Foundation's investment results are somewhat distorted, because it established a benchmark assuming immediate implementation of the alternative portfolio. A graph showing the foundations' annualized tracking error and excess returns showed an underperformance by the UC Davis and UC Santa Barbara Foundations. The investment

performance of the UC Riverside Foundation has generally been very good, although with a relatively higher risk profile.

Committee Chair Wachter asked when the UC Santa Barbara Foundation moved to its new investment strategy. Mr. Dennison responded that the move was made in stages during 2008. Committee Chair Wachter asked whether the UC Santa Barbara Foundation's investment performance and risk/return profile would have looked the same a year prior. Mr. Dennison answered in the affirmative, adding that the UC Santa Barbara Foundation has consistently underperformed. Committee Chair Wachter asked why the Committee has not taken any action in relation to the UC Santa Barbara Foundation. Mr. Dennison said that the Regents' authority is to oversee the foundations. Investment Advisory Group Member Martin said the Committee has a duty to advise the campus foundations. Mr. Dennison said Mercer's responsibility is to bring issues of concern to the Committee's attention, not to address problems with the campus foundations.

Committee Chair Wachter asked whether the Committee should take any action with regard to the poor investment performance of the UC Santa Barbara Foundation. Regent Makarechian suggested asking that Foundation to explain its investment strategy to the Committee. Mr. Martin agreed that a direct conversation with the Santa Barbara Foundation would be appropriate. In response to a question from Committee Chair Wachter, Mr. Dennison showed a chart displaying the UC Santa Barbara Foundation's absolute returns along with those of the other campus foundations. He reiterated that the UC Santa Barbara Foundation's benchmark incorrectly assumed instantaneous implementation of an alternatives portfolio, when in fact developing such a portfolio takes time. Committee Chair Wachter clarified that if the problem was one of implementation rather than structure of the portfolio, then the problem would be solved. Mr. Dennison reported that the UC Santa Barbara Foundation had recently issued a request for proposal for an investment manager. Chief Investment Officer Berggren stated that the UC Santa Barbara Foundation had re-hired Goldman Sachs as its outside investment manager. Mr. Dennison agreed with Committee Chair Wachter that the UC Santa Barbara Foundation's poor performance problems may be more historical than current.

Mr. Dennison displayed a bar graph showing the UC Davis Foundation and the UC Berkeley Foundation's purpose-based allocations. This evolving strategy has multi-asset class portfolios that accomplish the purposes of the allocations. Their asset allocations are adjusted by changing the weights among the various purposes.

Mr. Dennison expressed his professional judgment that, other than issues discussed at this meeting, there are no issues of concern to the Regents with respect to their oversight authority.

Investment Advisory Group consultant Klosterman asked why the current report did not have the normally reported ten-year investment returns. Mr. Dennison explained that Mercer relies on State Street Bank to provide comparable data for the report; however, State Street Bank is the record keeper for only the UCSF Foundation. For the other

foundations, State Street Bank obtains its data from the campus foundations' investment advisors or outside custodians. Historically, State Street Bank provided figures for ten-year returns, breaking data down into quarterly pieces. Mr. Dennison said that Mercer is of the opinion that State Street Bank's ten-year figures could be significantly distorted and has urged State Street Bank to fix its methodology. The prior figures for ten-year returns were correct only for those ten-year periods ending on June 30; the other ten-year returns were actually synthetic calculations. Rather than provide misleading data, Mercer chose to withhold State Street Bank's ten-year return figures from the current report.

Mr. Klosterman suggested that it would be more helpful to compare the performance of UC's endowments' equity investments with the performance of equity investments of other endowments, instead of comparing returns for the total portfolios, which are driven by asset allocation decisions. Mr. Dennison pointed out that there is a decreasing availability of data about various endowments' performance in each asset class and varying standards of classification of assets. To some degree, the data is dependent on the classification system used by each foundation.

Regent Makarechian pointed out that the Mercer report refers to the fiduciary responsibility of the campus foundations. He said further clarification of the Committee's role would be appropriate to be included on the first page of Mercer's quarterly reports on the campus foundations to the Committee. Mr. Martin expressed his view that the Committee's oversight role was similar to the prudent man rule, meaning to ensure that the campus foundations invested entrusted funds as would a person of prudence, and were doing nothing inappropriate. He said the Committee was not responsible for the investment returns of the campus foundations, but rather to review that they are conducting their investing in a prudent fashion. Committee Chair Wachter expressed his view that, if a campus foundation's investments were performing noticeably poorly, the Committee should have that foundation come to a Committee meeting to discuss its investment strategy.

The meeting adjourned at 3:45 p.m.

Attest:

Secretary and Chief of Staff

Additions shown by underscoring; deletions shown by strikethrough

APPENDIX 1Effective: ~~July 19, 2012~~April 1, 2013Replaces Version Effective: ~~January 1, 2012~~July 19, 2012

**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 (real estate, real assets) 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

	Current Policy Allocation¹	Long-Term Target Allocation	<u>Allowable Ranges²</u>	
			<u>Minimum</u>	<u>Maximum</u>
U.S. Equity	25.75 <u>25.0</u> %	20.5 <u>15.0</u> %	20.75 <u>20</u>	30.75 <u>30</u>
Developed Non US Equity	19.25 <u>19.0</u>	19.0 <u>13.5</u>	14.25 <u>14</u>	24.25 <u>24</u>
Emerging Mkt Equity	6.75	7.0 <u>11.0</u>	4.75	8.75
Global Equity	2.0	-2.0 <u>0.0</u>	1.0	3.0
US Fixed Income	12.0	12.0	9.0	15.0
High Yield Fixed Income	2.5	2.5	1.5	3.5
Emerging Mkt Fixed Income	2.5	2.5	1.5	3.5
TIPS	8.0	8.0 <u>3.0</u>	6.0	10.0
Private Equity	7.75	8.0	4.75	10.75
Absolute Return	6.0	6.5 <u>6.0</u>	1.0	11.0
Diversified Strategies				
Cross Asset Class Absolute	2.0	2.0 <u>8.0</u>	0.0	4.0 <u>5.0</u>
Return—				
Cross Asset Class				
Opportunistic Equity	<u>0.0</u>	<u>8.5</u>	<u>0.0</u>	<u>3.0</u>
Real Assets	1.0 <u>1.75</u>	3.0	0.0 <u>0.75</u>	2.0 <u>2.75</u>
Real Estate	4.5 <u>4.75</u>	7.0	1.5 <u>1.75</u>	7.5 <u>7.75</u>
Liquidity	0.0	0.0	0.0	10.0
TOTAL	100%	100%		

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Combined Public Equity	53.75 52.75	48.5 39.5	43.75 42.75	63.75 62.75
Combined Fixed Income	25.0	25.0 20.0	20.0	30.0
Combined Alternatives	21.25 22.25	26.5 40.5	14.25 15.25	28.25 29.25

1 [Current Policy allocation as of January 1, 2013](#)

2 [Ranges are set around the Current Policy Allocations, not the Long-Term Target Allocations. Ranges will be adjusted accordingly as the Current Policy Allocations converge on Long-Term Target Allocations.](#)

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

<u>Asset Class</u>	<u>Benchmark</u>
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	Barclays Capital US Aggregate Index
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index
Emg Mkt Fixed Income	Dollar Denominated: JP Morgan Emerging Markets Bond Index Global Diversified
Emg Mkt Fixed Income	Local Currency: JP Morgan Government Bond Index Emerging Markets Global Diversified
TIPS	Barclays Capital US TIPS Index
Private Equity	N/A (See below note 2.)
Absolute Return	Diversified: HFRX Absolute Return Index (50%) + HFRX Market Directional Index (50%)
Strategies Cross Asset Class Absolute Return Strategy	Cross Asset Class: Aggregate UCRP Policy Benchmark
Opportunistic Equity	MSCI All Country World Index (Net Dividends)

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Real Assets	Commodities: S&PGSCI Reduced Energy Index All other: N/A (See below note 3.)
Real Estate	Public: FTSE EPRA NAREIT Global Index
Real Estate	Private: NCREIF Funds Index – Open End Diversified Core Equity (ODCE), lagged 3 months

Notes on asset class benchmarks:

1. Global Equity: The Chief Investment Officer 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. Real Assets (all strategies ex-commodities): similar to Private Equity

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
28.5 25%	× Russell 3000 Tobacco Free Index
22 19%	× MSCI World ex-US (Net Dividends) Tobacco Free
56.75 %	× MSCI Emerging Market Free (Net Dividends)
2%	× MSCI All Country World Index Net – IMI – Tobacco Free
12%	× Barclays Capital US Aggregate Index
2.5%	× Merrill Lynch High Yield Cash Pay Index
2.5%	× JP Morgan Emerging Market Bond Index Global Diversified
8%	× Barclays Capital US TIPS Index
67.75 %	× Actual return of private equity portfolio
6%	× [HFRX Absolute Return Index × 50%] + [HFRX Market Directional Index × 50%] [Abs. Ret. - Diversified]
0.52 %	× Aggregate UCRP Policy Benchmark [Abs. Ret. - Cross Asset Class]
0%	× <u>MSCI All Country World Index (Net Dividends)</u>
1.75%	× Aggregate Real Assets benchmark (see section B), with components weighted by their actual weights within the total real assets portfolio
44.75 %	× Aggregate of Public and Private Real Estate benchmarks (see section B), with components weighted by their actual weights within the total real estate portfolio

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

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of total fund performance evaluation. Similar comments apply to private real estate – non-core strategies (closed end funds) and Real Assets (all strategies ex commodities).

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

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 Fund. Accordingly, the Investment Committee authorizes the Chief Investment Officer to rebalance the Fund when necessary to ensure adherence to the Investment Policy.

The Chief Investment Officer will monitor the actual asset allocation at least monthly. The Committee directs the Chief Investment Officer 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 Chief Investment Officer may utilize derivative contracts (in accordance with Appendix 4) to rebalance the portfolio.

The Chief Investment Officer 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 Chief Investment Officer may delay a rebalancing program when the Chief Investment Officer believes the delay is in the best interest of the Plan. Results of rebalancing will be reported to the Committee at quarterly meetings.

APPENDIX 7R

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

**OPPORTUNISTIC EQUITY
INVESTMENT GUIDELINES**

The purpose for these performance objectives (“Objectives”) and management guidelines (“Guidelines”) is to clearly state the investment approach, define performance objectives and to control risk in the management of the Opportunistic Equity allocation of the Fund (“the Program”). These Objectives and Guidelines shall be subject to ongoing review by the Committee. Capital market conditions, changes in the investment industry, new financial instruments, or a change in the Committee’s risk tolerance, are among factors to be considered in determining whether the Guidelines shall be revised.

1. Investment Policy

Investment Objective

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

Investment Strategy

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

Core Strategies

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

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

Satellite Strategies

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

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

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

2. Portfolio Construction

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

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

3. Investment Guidelines

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

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

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

4. Definitions

- 1. Active Risk: a measure of the difference between a portfolio or strategy and a benchmark. It takes into account the size, volatility of, and correlations between the various exposures and risk factors which differ between portfolio and benchmark.
- 2. Activist strategy: Activist managers acquire larger ownership stakes in companies in an effort to improve the business performance of the companies they are invested in are managed. Activism in this sense is not engaged in environmental or social investing; the emphasis here is to improve the business performance of specific companies.
- 3. Beta: the sensitivity of a portfolio to a benchmark, computed by regressing portfolio excess returns on benchmark excess returns from the same period. A beta of 1.0 indicates similar return variability as the benchmark. A beta of 1.2 (alternately, 0.80) indicates that for every 1% increase or decrease in the benchmark excess return, the portfolio's excess return increases or decreases by 1.2% (alternately, 0.8%).
- 4. Equity Exposure: the gross exposure to equity securities or securities underlying equity derivatives
- 5. Forecast active risk: an estimate of the active risk of a portfolio or strategy based on the forecast volatilities and correlations among the securities or risk factors held in the portfolio as of a given date
- 6. Frontier markets: Equity markets not included in MSCI All Country World Index; they are considered too new or undeveloped to be included in the Emerging Market Index
- 7. Gross dollar exposure is defined as the sum of the combined long exposures and the absolute value of the short exposures, including all physical and derivative securities positions.
- 8. Gross leverage: a term used to indicate that the gross dollar exposure of a portfolio exceeds the net market value of the total portfolio
- 9. Lock-up: the period of time after making an investment with a manager during which the investor may not withdraw or redeem any of the investment
- 10. Net dollar exposure (of a portfolio): the arithmetic sum of the dollar market values of all long (positive) and short (negative) positions in securities, plus the notional value of futures contracts, plus the dollar delta of options contracts.
- 11. Overlay strategy: a strategy intended to manage a specific risk factor, such as currency, of a group of accounts, each managed by a separate manager. The overlay is designed by

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

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

APPENDIX 7S

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

**CROSS ASSET CLASS STRATEGIES
INVESTMENT GUIDELINES**

The purpose for these performance objectives (“Objectives”) and management guidelines (“Guidelines”) is to clearly state the investment approach, define performance objectives and to control risk in the management of the Cross Asset Class allocation of the Fund (“the Program”). These Objectives and Guidelines shall be subject to ongoing review by the Committee. Capital market conditions, changes in the investment industry, new financial instruments, or a change in the Committee’s risk tolerance, are among factors to be considered in determining whether the Guidelines shall be revised.

1. Investment Policy**Investment Objective**

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

Investment Strategy

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

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

Portfolio Guidelines

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

This will provide the Chief Investment Officer with the ability to make timely investments in specific asset class strategies.

4. No investment with any single manager can represent more than 33% of the CAC portfolio at time of investment.
5. No investment with an asset management firm may exceed 15% of that firm's total assets under management.
6. The Chief Investment Officer may not incur debt to leverage the CAC portfolio; however, portable alpha strategies are permitted.
7. No more than 50% of the total CAC portfolio risk budget may be derived from any single manager.
8. Gross accounting leverage at the aggregate portfolio level shall not exceed 2.0 times the market value of the total CAC assets. All leverage shall be non-recourse to the Regents, as trustee of UCRP, with respect to UCRP investments in the Program. All leverage shall be non-recourse to the Regents, a public corporation, with respect to GEP investments in the Program.

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

Definitions

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

Gross dollar exposure is defined as the sum of the combined long exposures and the absolute value of the short exposures, including all physical and derivative securities positions.

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

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