The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP
June 19, 2012

The Committee on Investments met on the above date by teleconference at the following locations: Morgan Center, Los Angeles campus; 1111 Franklin Street, Lobby 1, Oakland.

Members present: Representing the Committee on Investments: Regents De La Peña, Hallett, Kieffer, Schilling, and Wachter; Ex officio member Yudof; Advisory member Anderson
Representing the Investment Advisory Group: Members Crane, Fong, Martin, and Taylor; Consultant Lehmann

In attendance: Regents Pattiz and Reiss, Regent-designate Mendelson, Secretary and Chief of Staff Kelman, Associate Secretary Shaw, General Counsel Robinson, Chief Investment Officer Berggren, and Recording Secretary McCarthy

The meeting convened at 1:35 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 February 22, 2012 were approved, Regents De La Peña, Hallett, Kieffer, Schilling, and Wachter (5) voting "aye."[1]

3. **UNIVERSITY OF CALIFORNIA GENERAL ENDOWMENT POOL ASSET ALLOCATION REVIEW AND RECOMMENDATIONS**

The Chief Investment Officer and the Regents' General Investment Consultant recommended that the amendments to Appendix One of the General Endowment Pool Investment Policy Statement be adopted as shown in Attachment 1, effective immediately.

[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.

Chief Investment Officer Berggren stated that the proposed changes in the asset allocation of the General Endowment Pool (GEP) were linked to macroeconomic indicators and the investment environment. The recommended portfolio would allocate more capital to higher beta and alpha strategies; ten percent of long equity would be moved to opportunistic equity, with the goal of achieving higher returns and lower downside risk than the current allocation.

Providing a background for the current recommendations, Ms. Berggren stated that the Regents have had a conservative investment strategy for the GEP. As a public institution, UC has a different kind of responsibility from some of its peer institutions, and has therefore had a less aggressive investment strategy. Some have criticized the strategy as being too conservative. Ms. Berggren stated that the strategies she would recommend would provide more flexibility and be less oriented toward benchmarks, although the overall reallocation would still be conservative compared with peer institutions' asset allocations.

Ms. Berggren stated that her office had examined whether current economic and market conditions warrant a change in the GEP's asset allocation. Global economic risks are prevalent and volatility has been high. She expressed her view that flexibility is key in any asset allocation, and particularly in the one she would recommend. Her office evaluated asset allocations in four possible economic scenarios, since assets perform differently in various economic environments. The key factors underlying the assessment were real economic growth and inflation. Currently the United States economy is performing moderately well, the non-U.S. economies are experiencing difficulties, and there is some slowdown in China. The recommended asset allocation would provide flexibility and is geared toward improving the return of the GEP, while maintaining the equity beta and transparency to preserve the current level of risk management.

To summarize the proposed changes to the GEP's asset allocation, Mr. Berggren recommended that ten percent of the long-only public equity be moved to opportunistic equity and equity-oriented hedge funds. Three percent of the long-only public equity would be moved to global asset allocation funds. Both of these reallocations would retain the same market beta exposure, but would have more alpha potential. Developed equity would be reduced from 36.5 percent to 21.5 percent; emerging market equity would increase from six percent to seven percent; liquid alternatives would increase from 25.5 percent to 38.5 percent; within the illiquid alternatives, real estate would increase from 7.5 to 8.5 percent. Specifically, Ms. Berggren recommended changing the long-term policy weights for U.S. equity from 18.5 percent to 13.5 percent, and non-U.S. developed equity from 16 percent to eight percent. Allocations to all fixed income asset classes, private equity, and absolute return would remain the same. Cross-asset allocation would increase from two percent to five percent; allocation to the opportunistic equity asset class would be ten percent.

Turning to implementation of the recommended asset allocations, Ms. Berggren stated that she would move the portfolio toward to new long-term targets in a measured fashion, as market conditions warrant and as investment opportunities become available. Current policy weights would remain the basis for the total fund performance benchmarks in the interim; per policy, the Regents' consultant would approve all benchmark changes as new investments would be made.

Regent Kieffer asked how the allocation to real estate in the GEP compares with that of UC's peer institutions. Ms. Berggren responded that the GEP allocation to real estate is considerably lower. Regent Kieffer asked whether the GEP allocation should be increased. Ms. Berggren stated that, given the overall portfolio, in her view the allocation to real estate is appropriate, particularly since the real estate portfolio is focused on separate accounts, which are individual properties requiring much due diligence. In addition, Ms. Berggren expressed her view that real estate funds are relatively expensive currently. Committee Chair Wachter asked for the current weight in real estate; Managing Director Jesse Phillips responded that real estate is currently six percent of the GEP portfolio. Ms. Berggren reminded the Committee that UC began investing in real estate later than many of its peers did.

Regent Kieffer asked how the proposed GEP allocation to liquid alternatives compares with that of peer institutions. Ms. Berggren responded that the GEP allocation to liquid alternatives was comparable that of other endowments, but that the GEP allocation to illiquid alternatives is much lower than that of UC's peers. Regent Kieffer pointed out that, even with the proposed change to the GEP asset allocation to illiquid alternatives, its allocation would still be substantially less than that of more aggressively invested endowments of private universities. Committee Chair Wachter asked for more information about the asset allocations of peer institutions' endowments. Ms. Berggren said she would provide this information.

Investment Advisory Group Member Martin asked Ms. Berggren to describe the opportunistic equity and cross asset classes. Ms. Berggren responded that opportunistic equity would be a well-diversified portfolio, including global managers, long/short equity managers, and activist managers. The opportunistic equity portfolio would be headed by her office's long-only equity manager, who would manage the portfolio jointly with the hedge fund manager.

Ms. Berggren described the cross asset class as one intended to improve upon the portfolio's overall asset allocation. Currently her office has three managers in the cross asset class. These managers examine the UC Entity asset allocation, determine ways to improve upon it, and provide assessments of additional attractive areas for investment, which could be from any asset class.

Faculty Representative Anderson asked how the benchmark would be determined for the opportunistic equity asset class. Ms. Berggren stated that the benchmark had not been determined yet, and would be developed with consultant Mercer Investment Consulting. Mr. Anderson asked that Ms. Berggren report back to the Committee when that benchmark has been determined. Ms. Berggren noted that the benchmark would require the Committee's approval.

Regent De La Peña summarized that the recommended change would reduce allocation to equities by 13 percent and allocate ten percent to opportunistic equities. Ms. Berggren agreed, and stated that the opportunistic asset class would be comprised of long or short equities, and would maintain a beta of at least one. Mr. Martin characterized the recommended reduction in developed equity as positive, since it would move the portfolio away from the current Eurozone risk.

Mr. Anderson stated that the Eurozone situation would change at some point in the future, and asked for clarification of the process by which the allocations would be re-examined. Ms. Berggren responded that her office examines the relative attractiveness of all asset classes on a weekly basis. Any material recommendations to change asset allocation would be brought to the Committee, although with the current high degree of uncertainty in the Eurozone, Ms. Berggren did not anticipate any change in the near future. Investment Advisory Group consultant Lehmann stated that some of the opportunistic funds might invest in Europe earlier; Ms. Berggren agreed.

Committee Chair Wachter stated that this discussion involved long-term policy weights rather than the current situation in Europe. He also pointed out that non-U.S. developed equity involves areas other than Europe. Committee Chair Wachter stated that Ms. Berggren and her team have the flexibility to move a specified percentage above or below the policy weights in each asset class; the Committee would not need to approve such tactical adjustments. He noted that the primary change being requested was to reallocate ten percent from long-only equities to managed funds that could contain both long and short equities. While such managed funds charge high fees, the goal of the recommended change is to gain more upside return when the market rises and more downside protection when the market goes down.

Committee Chair Wachter asked Ms. Berggren how the recommended asset allocation would compare with the asset allocations of large endowment funds of other universities. Ms. Berggren responded that, among comparator institutions, allocations to alternative investments range from 57 percent to 71 percent. UC’s GEP would have the highest weight in long-only equity and in fixed income, and fifth from the lowest in total alternatives. While UC is comparable in liquid alternatives, the private universities’ endowment funds have much larger allocations to illiquid alternatives. Ms. Berggren stated that UC began investing in real estate relatively recently and such a portfolio takes time to develop. Committee Chair Wachter summarized that, even with the proposed change, the asset allocation remains more conservative than most peer institutions’ endowments. Regent Kieffer agreed that the proposed allocation would maintain a fairly conservative long-term investment strategy. He noted that the investment goal of the GEP is to protect the University’s endowment over its life and viewed the proposed changes as a refinement of that long-term strategy.

Regent Reiss asked for a clarification of the target allocations toward which these recommendations are moving, compared with a traditional investment model of 60 percent equities and 40 percent fixed income. Committee Chair Wachter explained that many current asset classes did not exist when that model was prevalent. He also recalled that some private universities with allocations to illiquid alternatives higher than the GEP's experienced difficulty with liquidity during the financial crisis of 2008. He expressed his view that, while Ms. Berggren has advocated increasing the allocation to alternatives, she has been careful to maintain sufficient liquidity. Ms. Berggren added that some institutions had insufficient liquidity to meet their commitments during the 2008 financial crisis; some hedge funds were gated and investors could not withdraw their funds. Committee Chair Wachter stated that, realistically, Ms. Berggren must also consider potential public reaction if there were high volatility in the GEP or the UCRP. Ms. Berggren emphasized that, contrary to every other university endowment in the nation, the GEP has no inflow of funds; the portfolio has to be managed with that in mind, given the requirement that it must pay out 4.75 percent annually.

Mr. Martin recalled that when he joined the Investment Advisory Group (IAG) ten years prior, the GEP portfolio had no holdings in real estate, hedge funds, international, or emerging markets. He expressed his view that the GEP portfolio has become more sophisticated, and that Ms. Berggren has built an excellent team. He expressed optimism about the portfolio going forward. Mr. Lehmann added that when he joined the IAG as a consultant the GEP portfolio consisted only of 60 large-cap growth stocks. He stated that many of UC's peer universities have larger allocations to various alternative investment strategies, make many market-timing decisions, and have much higher volatility in their allocations, which would be inappropriate for UC as a public institution. Mr. Lehmann added that UC's GEP portfolio should not be compared with that of private institutions like Yale or Stanford. Committee Chair Wachter agreed that Ms. Berggren's investment team has made a good deal of progress considering the constraints under which it operates. Mr. Martin noted that building a first-class investment program takes time, particularly for a public university.

The CIO and the Regents' General Investment Consultant had recommended that the emerging market fixed income asset class benchmark, shown on page three of Attachment 1, be changed as follows "[JP Morgan Emerging Market Bond Index Global Diversified × ~~33~~67%] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × ~~67~~33%]." However, following discussion, the Committee decided to defer action on that portion of the recommendation. Committee Chair Wachter moved that the recommendation be amended to retain the emerging market fixed income asset class benchmark as "[JP Morgan Emerging Market Bond Index Global Diversified × 33%] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × 67%]."

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 De La Peña, Hallett, Kieffer, Schilling, and Wachter (5) voting "aye."

4. **UNIVERSITY OF CALIFORNIA RETIREMENT PLAN / GENERAL ENDOWMENT POOL INVESTMENT POLICY AND GUIDELINE REVIEW AND RECOMMENDATIONS**

The Chief Investment Officer and the Regents' General Investment Consultant, with the concurrence of the Hedge Fund consultant, recommended that the amendments to Appendix One of the University of California Retirement Plan (UCRP) Investment Policy Statement, as shown in Attachment 2, and Appendices 7J and 7O to the Investment Policy Statements of UCRP and the General Endowment Pool, as shown in Attachments 3 and 4 be approved, effective immediately.

[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.]

Managing Director Jesse Phillips explained that the investment guidelines delineate how much and what kinds of risk would be tolerated in the pursuit of returns, and how the returns would be evaluated. Mr. Phillips stated that the current recommendations would provide a better alignment between market opportunities and risk controls in two areas, the emerging market debt and absolute return strategies.

Regarding the emerging market debt guidelines, Mr. Phillips clarified that there are two types of emerging market debt: hard currency, which is dollar-denominated, and local currency, which are bonds issued in the currencies of the countries that issue them. There is a different benchmark for each type: one benchmark consists of the entire market of dollar-denominated emerging market debt, and another benchmark that consists of the entire market of local currency emerging market debt. Mr. Phillips stated that, for UC and for every other portfolio of which he is aware, the benchmark for emerging market debt is built by combining those two benchmarks, using the portfolio's weights of the two strategies.

Recounting the history of the University of California Retirement Plan (UCRP) and the General Endowment Pool (GEP) investment in this asset class, Mr. Phillips noted that in 2006 there was an explicit allocation to emerging market debt, which was one hundred percent dollar-denominated. In 2008, local currency emerging market debt had become attractive, and the Regents approved a change in asset allocation to two-thirds local currency and one-third dollar-denominated. During the 2008 financial crisis, the fixed income group was occupied with providing liquidity and efforts to implement the new asset allocation were postponed. In 2011, due diligence was begun and local currency managers were hired. Currently, funds of several local currency managers have been incorporated into the portfolio and the current weights are one-third local currency and two-thirds dollar-denominated. Mr. Phillips stated that the Office of the Chief Investment Officer (CIO) believes that the risk/return tradeoffs between the two types of emerging market debt are such that it would recommend the current weights as the ongoing weights for this asset class. The recommendation in this item would change the investment guidelines to reflect these weights of one-third local currency and two-thirds dollar-denominated.

Committee Chair Wachter thanked Mr. Phillips for his clear presentation and asked why it was necessary for the Committee to approve the CIO's judgment about the currency weights within the allocation to this asset class. Mr. Phillips responded that the Committee was not being asked to approve the relative weights, but rather to approve the weights used in deriving the benchmark for the emerging market fixed income asset class. Investment Advisory Group consultant Lehmann clarified that the managers could invest in the weights of local currency and dollar-denominated currency as they saw fit, but that the benchmark would be the weights approved by the Committee. Mr. Phillips agreed. Committee Chair Wachter expressed his view that, since the currency in which the University deals is dollars, this asset class should be benchmarked against dollars. Chief Investment Officer Berggren stated that the recommended weights for the benchmark should replicate a passive portfolio, so that benchmarking the class against that passive portfolio would be an accurate measure of the effectiveness of the investment decisions made by the CIO. Regent Kieffer stated that using the current weightings of one-third local currency and two-thirds dollar-denominated reflected a decision. Committee Chair Wachter added that the benchmark is important only as an incentive, and is an unnecessarily detailed decision for the Committee.

Investment Advisory Group Member Martin expressed his view that a dollar-based benchmark would be appropriate. In response to a question from Committee Chair Wachter, Mr. Lehmann stated that the benchmark should reflect the passive alternative. If the intent is not to invest in local currency at all, then the dollar-denominated benchmark would be appropriate; if the CIO intends to invest in the world currency market, the recommended benchmark would be more appropriate. Faculty Representative Anderson stated that the passive alternative would be the weights as they exist in the market. In response to a question from Committee Chair Wachter, Ms. Berggren stated that the recommended weights are as they exist in the market of emerging market debt. Mr. Lehmann summarized that a representative slice of that market would have the recommended weights of local and dollar-denominated currency. Ms. Berggren added that investment decisions are independent of the benchmark. She emphasized that benchmarks should be clear, investible, passive alternatives, and that the recommended benchmark for emerging market debt fits those requirements. In other words, if one were to invest in emerging market debt and make no active investment decisions, the portfolio would contain one-third local currencies and two-thirds dollar-denominated debt. Mr. Lehmann explained that these weightings would be calculated by adding all the outstanding emerging market debt and determining the proportions of local currency and dollar-denominated debt. He added that the CIO would absorb the currency exchange risk; if the exchange rate were unfavorable, the returns of the CIO would be negatively affected. Mr. Anderson stated that there is potential compensation for the CIO in holding the exchange rate risk; the bonds that are issued in dollars are qualitatively different from those issued in local currency. Mr. Lehmann agreed.

Turning to the guidelines for the absolute return strategies asset class, Mr. Phillips stated that in previous discussions the Committee had indicated that this asset class, particularly in the GEP, should serve more of a return-enhancing or capital appreciation role and less of a risk-reducing or capital preservation role. The current proposals would provide more flexibility in order to permit hiring managers of smaller portfolios and use of structures other than the traditional fund structure. The CIO recommended moving the absolute return strategies portfolio in this direction.

More specifically, Mr. Phillips stated that the most important change would be to remove the fund ownership constraint. Currently, in the absolute return strategies, UC's investments must be less than 15 percent of a firm's total assets under management and less than 25 percent of a single product's assets under management, limitations that none of UC's peer institutions have. Mr. Phillips explained that removing this constraint would enable UC to engage managers of smaller, more nimble portfolios, and possibly receive better terms from managers. UC would also gain the ability to invest in a variety of legal structures such as commingled hedge funds, separate accounts, and drawdown structures. In addition, the proposed change would broaden UC's permissible strategy ranges to a range of ten percent to 50 percent in equity hedge, event-driven strategies, opportunistic, and relative value strategies, adding to the portfolio's flexibility, recognizing that certain strategies would be in favor at different times.

Regents' consultant John Claisse of Albourne Partners stated that Albourne has worked with UC since it began investing in absolute return strategies about nine years prior and also advises a substantial number of other endowments and foundations on their alternative strategies. He stated that the recommendation to remove the constraints and allow investment in a wider variety of legal structures would provide the CIO the flexibility to execute strategies seeking slightly higher returns. These constraints are not present in the investment guidelines of some of UC's peer institutions.

Committee Chair Wachter stated that a constraint on UC funds' being one hundred percent of an investment vehicle's assets would seem to be a common sense limitation. He asked Mr. Claisse why he would recommend not putting any restriction on the proportion UC's funds could be of a particular manager's funds under management.

Mr. Claisse acknowledged that it would be sensible to seek diversity in managers, and some institutional investors such as public or corporate pension plans still operate under such constraints. However, Mr. Claisse stated that these constraints are not common for endowments or foundations. A manager could have a number of funds, and UC might want to be the only investor in just one of the manager's funds. In such a situation, UC would also be in a better position to negotiate fees and other terms. Managing Director Lynda Choi added that operating without such constraints would better enable her to invest in a way that could increase return. There can be benefits to investing with some young managers, such as lower fees and added transparency. She pointed out that, even if UC were the only investor in a relatively small long/short equity fund, the investment would be liquid and could be unwound in an orderly manner, if necessary. Mr. Martin expressed his view that the Committee should rely on the staff of the Office of the CIO to make such investment judgments, which are more appropriate on a staff level than a policy level. He cautioned that some funds have large illiquid holdings and that such investments could be inaccessible in a down market. Mr. Lehmann stated that the policy-level decision could enable managers such as Ms. Choi to invest, in this case, with young fund managers. The present restrictions would disallow investment with most young managers or managers of small funds. Ms. Choi clarified that her group had already been investing with some managers of small funds, but is constrained in the amount that can be invested with a manager. If a chosen manager performs well, the upside potential for UC is limited by the restriction on the amount that could be invested.

Committee Chair Wachter asked for clarification of the overall constraint, which would not be affected by this recommendation, on the amount of the absolute return strategies portfolio that can be invested with one manager. Ms. Choi stated that, within the absolute return portfolio, no more than ten percent of the portfolio can be invested with one manager. Committee Chair Wachter stated that the absolute return asset class is currently 23 percent of the portfolio; Ms. Choi added that the portfolio is $4 billion across both the GEP and the UCRP. Therefore, the amount that could be invested with one manager would be $400 million, which would be 2.5 percent of the entire UCRP and GEP portfolio.

Regent Kieffer suggested that the restrictions on the allowable percentage of a firm's assets under management or of a firm's single product could be removed for half of the absolute return strategies portfolio and remain in place for the other half. Ms. Choi stated that a good portion of the portfolio is invested with managers of larger funds. She added that it is necessary to monitor all managers carefully, whether they manage large or small funds. Regent Kieffer asked whether the guidelines have to change as much as the recommendation proposed in order to provide Ms. Choi the investment latitude she was seeking, since a smaller change might provide the requested flexibility. Ms. Choi stated that her office could not invest its entire absolute return portfolio with small managers since it does not have a large enough staff to monitor that many managers. The portfolio would always be a combination of managers of large and small funds.

Committee Chair Wachter expressed his support for the restriction that UC funds could not be one hundred percent of a manager's assets under management. He explained that he was referring to a situation of a new manager with the entirety of funds under management being UC's funds. Ms. Choi stated that she intends to have 30 to 35 funds in the portfolio, and so it could not be invested entirely in small funds. If UC were the only investor in a small fund, Ms. Choi stated that her ability to negotiate discounted fees could improve. In addition, successful managers of funds that began small often close their funds to new investors quickly, so early access is crucial. Ms. Berggren added that such managers have often spun off from large investment companies, and have an established performance record.

Regent De La Peña expressed support for Regent Kieffer's proposal to apply the recommended changes to half of the absolute return strategies portfolio. Committee Chair Wachter stated that such a solution would not actually constrain the portfolio at all, since the proportion of the portfolio invested with managers of small funds would be less than half the portfolio in any case. Regent Kieffer stated that guidelines should provide adequate flexibility to the investment managers, but also sufficient oversight to the

Committee. Regent Hallett suggested that the allowable percentage of a firm's assets under management or of a single product could be increased to 50 or 75 percent.

Ms. Berggren stated that any judgments about investing with managers of smaller funds and consideration of potential losses should be evaluated in the context of the entire portfolio. Committee Chair Wachter commented that it is appropriate to consider both actual risk and the risk of negative publicity should UC be the only investor in a hedge fund that goes out of business. Regent Kieffer agreed that there is risk when investing in alternatives. Committee Chair Wachter added that redemption liquidity decreases as the proportion of investment in the fund increases.

Ms. Berggren stated that her management team has been together for seven years, and is very careful and conservative. She stated that the absolute return strategies team has found excellent managers of small funds, but has been repeatedly hampered in its ability to invest. She stated that other endowments have achieved greater returns because they are not subject to these constraints. Mr. Lehmann expressed his view that the relevant question is whether UC wants to be in the initial public offering market in this field.

Investment Advisory Group Member Crane asked what constraints are imposed on UC's peer institutions. Ms. Berggren responded that the vast majority have no formal constraints or guidelines.

Mr. Lincoln Smith of Albourne Partners stated that, even though UC may have only 15 percent of the assets of a particular fund it could still be at risk. For example, the other investors could be funds of funds with liquidity needs in a crisis, and UC's investment could be gated. Mr. Smith said that, in his experience, an endowment that owns a large portion of a fund's assets has the benefit of increased transparency. He expressed his view that the staff at the Office of the CIO already performs a high level of due diligence in monitoring managers.

Mr. Crane acknowledged the risk of negative publicity for UC. Committee Chair Wachter noted the significant advantage of being the first investor with a new manager, but reiterated his concern about UC's being the only investor in a fund, given how many hedge funds have gone out of business. From a governance perspective, he stated that the Committee cannot simply rely on the judgment of a particular manager or team. Regent Kieffer agreed, but expressed his view that the risk of negative publicity is impossible to remove completely.

Committee Chair Wachter expressed support for the proposed changes to the guidelines for the absolute return portfolio, given the overall constraint that would remain in place, although he advised the CIO to exercise caution, as this asset class has great upside potential, but also downside risk for the reasons discussed. Mr. Crane asked for clarification of the overall constraint to which Committee Chair Wachter had referred. Committee Chair Wachter responded that no more than ten percent of the absolute return portfolio can be invested with one manager.

Committee Chair Wachter asked that Ms. Berggren report to the Committee the following year on the investments made under the new guidelines approved for the absolute return strategies. Ms. Berggren agreed.

The CIO and the Regents' General Investment Consultant had recommended that the emerging market fixed income asset class benchmark, shown on page three of Attachment 2, be changed as follows "[JP Morgan Emerging Market Bond Index Global Diversified × ~~33~~67%] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × ~~67~~33%]." However, following discussion, the Committee decided to defer action on that portion of the recommendation. Committee Chair Wachter moved that the recommendation be amended so that the emerging market fixed income asset class benchmark would remain "[JP Morgan Emerging Market Bond Index Global Diversified × 33%] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × 67%]," and to exclude changes to *Appendix 7J* to the *University of California Appendices to Investment Policy Statements.*

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 De La Peña, Hallett, Kieffer, Schilling, and Wachter (5) voting "aye."

5. **ABSOLUTE RETURN STRATEGIES 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.]

Managing Director Lynda Choi stated that, since the absolute return program's inception in 2003, the portfolio has grown to its current market value of $4.2 billion across both the UC Retirement Program (UCRP) and the General Endowment Pool (GEP), with 42 managers. The portfolio returned 4.3 percent in the first quarter of 2012, and is down ten basis points (bps) for the 2012 fiscal year to date. The portfolio has returned nine percent on a trailing three-year annualized basis, while the benchmark returned 1.3 percent. Committee Chair Wachter complimented Ms. Choi on the portfolio's performance.

Ms. Choi stated that 2011 was a challenging year for hedge fund strategies. While the S & P 500 Index finished slightly higher for the year, the market experienced extreme volatility. The financial sector was down 17 percent and the MSCI World Index was down six percent. Ms. Choi stated that, in the climate of global economic uncertainty going into 2012, she focused the portfolio on strategies that were not dependent on the market's having positive returns. During the first quarter of 2012, $500 million of the absolute return portfolio was allocated to relative value credit and dedicated mortgage strategies. During the second quarter, the portfolio made allocations to a long/short equity manager, a European distressed assets manager, and an emerging markets manager.

In response to a question from Committee Chair Wachter, Ms. Choi stated that the recommended asset allocation changes for the GEP in the *University of California General Endowment Pool Asset Allocation Review and Recommendations*, discussed earlier, would not affect the absolute return portfolio. The increase in opportunistic equity in the asset allocation would be managed by the equity team. She explained that the absolute return portfolio has always had long/short equity managers, although their funds tend to have lower beta than funds in the opportunistic portfolio. Investment Advisory Group consultant Lehmann pointed out that the absolute return portfolio did not experience violent swings during the 2008 financial crisis, because of its lower beta.

Reviewing the objectives of the absolute return portfolio, Ms. Choi stated that the program was initiated to dampen the volatility of the overall UC portfolio, while providing higher risk-adjusted returns over a full market cycle than equities. She displayed a graph showing that the absolute return portfolio modestly outperformed the S&P 500 Index on a five-year trailing basis, with significantly less volatility. Faculty Representative Anderson complimented Ms. Choi on the performance of the portfolio, but cautioned that the graph showed the realization of return over a specific period of time. He stated that, in a typical period, the S&P 500 Index would have had more volatility and also higher returns. The fact that the S&P 500 Index was lower in the period from April 1, 2007 to March 31, 2012 does not mean that going forward the absolute return portfolio, with its current investment strategy, would be expected to outperform the S&P 500 Index. Mr. Lehmann agreed, stating that in some five-year periods the S&P 500 Index has returned nine percent per year, although he stated that the volatility of the absolute return portfolio should stay about the same, since a goal of the portfolio is to be market neutral with low volatility. Ms. Choi agreed that the five-year period included 2008, and that hedge fund portfolios would be expected to outperform the S&P 500 Index during such a down market; in a positive equity market, she would not expect hedge fund managers to outperform the equity market. She added that the three-year performance of the absolute return portfolio confirmed Mr. Anderson's comment.

Turning to the growth and evolution of the absolute return program, Ms. Choi stated that, as recently as 2005, the portfolio was less than $500 million; currently the portfolio is more than $4 billion, with significantly increased diversification across managers and strategies. Ms. Choi expressed her view that active management of the portfolio is essential to its success and noted that the program's investment strategies are constantly evolving. She displayed a chart showing significant changes in strategy even within the prior two years. During that period, the allocation to long/short equity has been halved and the allocation to global macro strategies has tripled. The absolute return portfolio generated 5.3 percent annually since the beginning of 2010, but would have generated just 3.5 percent had no changes in strategy been made during that time.

Discussing current objectives for the program, Ms. Choi stated that her office has increased the number of staff managers for the absolute return program to four. This larger team will have the capacity to make targeted improvements to the portfolio, including focusing on managers of smaller funds, newer managers, and managers capable of generating higher absolute returns over time if given slightly more tolerance for volatility and possibly a longer lock-up structure. She expressed her view that the proposed changes to the guidelines, particularly the ability to invest with managers of smaller funds, are crucial to the portfolio's performance going forward, since more than half of the portfolio's current managers' funds are not accepting new investments even from existing customers, or are accepting new capital only if other investors redeem.

Committee Chair Wachter asked for a clarification of the cross asset class. Ms. Choi responded that the cross asset class is a separate allocation that would be managed by a different team. That team has selected three large strategic investment firms as partners to help with asset allocation decisions for a defined set of assets. These partners would attempt to outperform the UC Entity returns, by dynamically allocating across their asset classes more quickly than UC can. Chief Investment Officer Berggren explained that these three firms are very large, well-established, long-existing investment firms that UC has given a defined amount of funds to invest. The firms would determine the optimal asset allocation at any point in time, then overweight or underweight their portfolios tactically depending upon their assessment of market conditions. These firms also invest in some newer strategies that could become mainstream strategies over time, giving UC the ability to find new investment vehicles earlier than it has historically. This asset class would provide a way of making the most attractive investments at any given time across all asset classes. The firms would make an independent determination, given UC's asset allocation, about what asset allocation they would recommend to optimize UC's portfolio. Mr. Lehmann asked how these firms would be benchmarked; Ms. Berggren responded that the UC Entity performance would be their benchmark.

Investment Advisory Group Member Martin asked whether these firms could draw additional fees through the investments they make, in other words by investing in their own products, and cautioned about their potential conflict of interest. Ms. Berggren stated that these firms would make only very minor investments in their own products. Mr. Martin advised Ms. Berggren to exercise caution in such investments, since such firms could recommend investments in their own products for the purpose of gaining fees. Ms. Berggren stated that her office was very careful to monitor such possibilities and would be aware of all of the investments made by the firms. Committee Chair Wachter asked that the Committee receive a presentation from the team managing the cross asset class at its next meeting.

6. ADOPTION OF EXPENDITURE RATE FOR TOTAL RETURN INVESTMENT POOL

The Chief Investment Officer recommended and the Regents' General Investment Consultant concurred that the expenditure rate (payout rate) for the Total Return Investment Pool for the fiscal year 2012-13 be set at a maximum of six percent.

[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 her office had developed the Total Return Investment Pool (TRIP) by moving a portion of funds from the Short Term Investment Pool into a portfolio with a higher overall expected return. The expenditure rate for the TRIP was set at six percent. The expected return for that portfolio must equal six percent in order to pay out six percent. Since the return for the TRIP is currently six percent, Ms. Berggren recommended maintaining the payout rate at six percent.

Committee Chair Wachter asked how the paid out funds are used; Ms. Berggren responded that the funds go to the campuses. Faculty Representative Anderson asked whether, if the return for the TRIP were four percent in a given year, Ms. Berggren would recommend a payout rate of four percent. She answered in the affirmative. He asked a further question as to what the payout rate would be if the return for a year were negative; Ms. Berggren stated that, even if its overall return were negative, the fund would still have income, which would be paid out.

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer's recommendation and voted to present it to the Board, Regents De La Peña, Hallett, Kieffer, Schilling, and Wachter (5) voting "aye."

7. **FIRST QUARTER 2012 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 (CIO) Berggren stated that the United States market had very good returns with decreased volatility in the first quarter of 2012. For the quarter, the Russell 3000 Index rose 12.9 percent; the MSCI World ex-U.S. Index rose 10.4 percent; the MSCI Emerging Markets Index rose 14.1 percent. Gains in fixed income were modest. All portfolios had gains for the quarter. The UC Entity gained 6.4 percent, and has now offset the losses of the first part of the fiscal year. U.S. equity rose 13 percent; international developed equity rose ten percent; emerging market equity gained 15 percent. Asset allocation and security selection were the main reasons for the gains. Bonds, absolute return, and cross asset allocation rose five percent. For the fiscal year to date, the best performing asset classes were bonds.

Turning to asset allocation, Ms. Berggren stated that both the University of California Retirement Plan (UCRP) and the General Endowment Pool (GEP) portfolios were slightly overweight in U.S. equity, and slightly underweight in core fixed income and Treasury Inflation-Protected Securities (TIPS). Asset allocation benefited performance in the UCRP by 14 basis points (bps), primarily because of the portfolio's underweight in bonds. Security or manager selection added 28 bps, including 16 bps in equities. Ms. Berggren stated that performance attribution in the GEP was similar, with 14 bps from asset allocation.

In response to a question from Investment Advisory Group Member Crane, Managing Director Jesse Phillips explained that the performance figures represented the absolute percentage returns for the quarter, while the performance attribution figures indicated the return relative to the benchmark and the contribution to the relative return of each asset class. Committee Chair Wachter asked for a clarification of the figures for performance attributed to asset allocation. Ms. Berggren explained that the performance attribution measures how the allocation within the portfolio relative to the benchmark either added or subtracted value. Mr. Phillips explained that the performance attribution figures show the contribution of an asset class to excess return, due to underweighting or overweighting, or performance relative to its own benchmark. Mr. Crane and Investment Advisory Group consultant Lehmann asked that the CIO add a brief explanatory sub-heading to future performance attribution charts to clarify the meaning of the figures.

8. **INVESTMENT CONSULTANT REVIEW OF UC CAMPUS FOUNDATIONS FOURTH QUARTER 2011 PERFORMANCE REPORTS**

[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.]

Ms. Ursula Niederberger of Mercer Investment Consulting reported that Mercer had reviewed the investment policies, asset allocations, performance, and benchmarks of all ten campus foundations, and found no issues that needed to be brought to the Committee's attention.

Committee Chair Wachter recognized Nandan Das, attending his last meeting as student observer to the Committee, and complimented him on the quality of his service. Mr. Das stated that he had attempted to improve communication between the Committee and the student groups he represented. Mr. Das thanked the Committee for its cooperation during his tenure as its first student observer. He particularly thanked the Committee and Chief Investment Officer Berggren for producing the helpful informational paper for students he had suggested at the prior meeting. He expressed his view that continuing to produce short informational papers would be beneficial to students, the public, and the press. He urged students, particularly members of student news organizations, to attend Committee meetings. He expressed hope that the Committee would use the next student observer as a way to reach out to the student community. He suggested allowing the next student observer to take part in Committee discussions.

The meeting adjourned at 3:40 p.m.

Attest:

Secretary and Chief of Staff

Additions shown by underscoring; deletions shown by strikethrough

UNIVERSITY OF CALIFORNIA GENERAL ENDOWMENT POOL
INVESTMENT POLICY STATEMENT

APPENDIX 1
Effective: ~~January 1, 2012~~<u>July 19, 2012</u>
Replaces Version Effective: ~~March 1, 2011~~<u>January 1, 2012</u>

ASSET ALLOCATION, PERFORMANCE BENCHMARKS, AND REBALANCING POLICY

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

- Widely recognized and accepted among institutional investors
- Has low correlation with other accepted asset classes
- Has a meaningful performance history
- Involves a unique set of investors

The Current Policy Allocation recognizes the current under-investment in illiquid asset classes (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.

A. Strategic Asset Allocation and Ranges

	Current Policy Allocation	Long-Term Target Allocation	Allowable Ranges	
			Minimum	Maximum
U.S. Equity	~~20.0~~<u>18.5</u>%	~~18.5~~<u>13.5</u>%	~~15~~<u>13.5</u>	~~25~~<u>23.5</u>
Developed Non US Equity	~~18.5~~<u>16.0</u>	~~16.0~~<u>8.0</u>	~~13.5~~<u>11.0</u>	~~23.5~~<u>21.0</u>
Emerging Mkt Equity	~~5.0~~<u>6.0</u>	~~6.0~~<u>7.0</u>	~~3~~4.0	~~7~~<u>8.0</u>
Global Equity	2.0	~~2.0~~<u>0</u>	1	3
US Fixed Income	~~7.5~~<u>5.75</u>	5.0	~~4.5~~<u>2.75</u>	~~10.5~~<u>8.75</u>
High Yield Fixed Income	3.0	2.5	2	4
Emerging Mkt Fixed Income	3.0	2.5	2	4
TIPS	4.0	2.5	2	6
Private Equity	~~7.0~~<u>9.0</u>	9.0	~~4~~<u>6.0</u>	~~10~~<u>12.0</u>
Absolute Return – <u>Diversified</u>	~~24.0~~<u>23.5</u>	~~25.5~~<u>23.5</u>	~~19~~<u>18.5</u>	~~29~~<u>28.5</u>
<u>Cross Asset Class</u>	<u>2.0</u>	~~2.0~~<u>5.0</u>	<u>0</u>	<u>7.0</u>
<u>Opportunistic Equity</u>	<u>0.0</u>	<u>10.0</u>	<u>0.0</u>	<u>12.0</u>
Real Assets	~~1.0~~<u>1.25</u>	3.0	~~0~~<u>0.25</u>	~~2~~<u>2.25</u>
Real Estate	~~5.0~~<u>6.0</u>	~~7.5~~<u>8.5</u>	~~2~~<u>3.0</u>	~~8~~<u>9.0</u>
Liquidity	0	0	0	10
TOTAL	100%	100%		

Combined Public Equity	~~45.5~~42.5	~~42.5~~28.5	~~35.5~~32.5	~~55.5~~52.5
Combined Fixed Income	~~17.5~~15.75	12.5	~~12.5~~10.75	~~22.5~~20.75
Combined Alternatives*	~~37.0~~41.75	~~45.0~~59.0	~~27.0~~26.75	~~47.0~~56.75

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

B. Asset Class Performance Benchmarks

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

- Unambiguous: the names and weights of securities comprising the benchmark are clearly delineated
- Investable: the option is to forego active management and simply replicate the benchmark
- Measurable: it is possible to readily calculate the benchmark's return on a reasonably frequent basis
- Appropriate: the benchmark is consistent with the Committee's investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period
- Reflecting Current Investment Opinion: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction

Asset Class	**Benchmark**
U.S. Equity	Russell 3000 Tobacco Free Index
Non US Eq. Devel.	MSCI World ex-US Net Tobacco Free
Emerging Mkt Eq.	MSCI Emerging Market Free Net
Global Equity	MSCI All Country World Index Net – IMI – Tobacco Free
Fixed Income	Barclays Capital US Aggregate Bond 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%)
~~Absolute Return~~Cross Asset Class	~~Cross Asset Class:~~ Aggregate GEP Policy Benchmark
Opportunistic Equity	To be determined by Regents' Investment Consultant
Real Assets	Commodities: S&PGSCI Reduced Energy Index All other: N/A (See below note 3.)
Real Estate	Public: FTSE EPRA NAREIT Global Index return
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 GEP Performance Benchmark
This is the composition of the total GEP performance benchmark referred to in the Investment Policy Statement, Part 4(b). The percentages below add to 100%.

Percentage	Benchmark
~~20.0~~18.5%	× Russell 3000 Tobacco Free Index
~~18.5~~16.0%	× MSCI World ex-US Net Tobacco Free
~~5.0~~6.0%	× MSCI Emerging Market Free Net
2.0%	× MSCI All Country World Index Net – IMI – Tobacco Free
~~7.5~~5.75%	× Barclays Capital US Aggregate Bond Index
3.0%	× Merrill Lynch High Yield Cash Pay Index
3.0%	× [JP Morgan Emerging Market Bond Index Global Diversified × ~~33~~67%] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × ~~67~~33%]
4.0%	× Barclays Capital US TIPS Index
~~7.0~~9.0%	× Actual return of private equity portfolio
23.5%	× [HFRX Absolute Return Index × 50%] + [HFRX Market Directional Index × 50%] [Abs. Ret. - Diversified]
~~0.5~~2.0%	× Aggregate GEP Policy Benchmark [~~Abs. Ret. –~~Cross Asset Class]
0.0	× To be determined by Regents' Investment Consultant [Opportunistic Equity]
~~1.0~~1.25%	× Aggregate Real Assets benchmark (see section B), with components weighted by their actual weights within the total real assets portfolio
~~5.0~~6.0%	× 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 of total fund performance evaluation.
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 GEP. Accordingly, the Investment Committee authorizes the Chief Investment Officer to rebalance the GEP 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 GEP. Results of rebalancing will be reported to the Committee at quarterly meetings.

Additions shown by underlining; deletions shown by strikethrough
UNIVERSITY OF CALIFORNIA RETIREMENT PLAN
INVESTMENT POLICY STATEMENT

APPENDIX 1
Effective: ~~January 1, 2012~~July 19, 2012
Replaces Version Effective: ~~March 1, 2011~~January 1, 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 Allocation	Long-Term Target Allocation	Allowable Ranges Minimum	Allowable Ranges Maximum
U.S. Equity	~~28.5~~25.75 %	20.5 %	~~23.5~~20.75	~~33.5~~30.75
Developed Non US Equity	~~22.0~~19.25	19.0	~~17~~14.25	~~27~~24.25
Emerging Mkt Equity	~~5.0~~6.75	7.0	~~3~~4.75	~~7~~8.75
Global Equity	2.0	2.0	1	3
US Fixed Income	12.0	12.0	9	15
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	6	10
Private Equity	~~6.0~~7.75	8.0	~~3~~4.75	~~9~~10.75
Absolute Return ~~Strategy~~ – Diversified	~~6.5~~6.0	~~8.5~~6.5	~~1.5~~1.0	~~11.5~~11.0
Absolute Return – Cross Asset Class	2.0	2.0	0.0	4.0
Real Assets	1.0	3.0	0	2
Real Estate	~~4.0~~4.5	7.0	~~1~~1.5	~~7~~7.5
Liquidity	0	0	0	10
	100%	100%		

Combined Public Equity	~~57.5~~<u>53.75</u>	48.5	~~47.5~~<u>43.75</u>	~~67.5~~<u>63.75</u>
Combined Fixed Income	25.0	25.0	20	30
Combined Alternatives	~~17.5~~<u>21.25</u>	26.5	~~10.5~~<u>14.25</u>	~~24.5~~<u>28.25</u>

B. Asset Class Performance Benchmarks

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

- Unambiguous: the names and weights of securities comprising the benchmark are clearly delineated
- Investable: the option is to forego active management and simply replicate the benchmark
- Measurable: it is possible to readily calculate the benchmark's return on a reasonably frequent basis
- Appropriate: the benchmark is consistent with the Committee's investment preferences or biases
- Specified in Advance: the benchmark is constructed prior to the start of an evaluation period
- Reflects Current Investment Opinion: investment professionals in the asset class should have views on the assets in the benchmark and incorporate those views in their portfolio construction

Asset Class	Benchmark
U.S. Equity	Russell 3000 Tobacco Free Index
Developed Non US Equity	MSCI World ex-US (Net Dividends) Tobacco Free
Emerging Mkt Equity	MSCI Emerging Market Free (Net Dividends)
Global Equity	MSCI All Country World Index Net – IMI – Tobacco Free
Fixed Income	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 Strategy	Diversified: HFRX Absolute Return Index (50%) + HFRX Market Directional Index (50%)
Absolute Return Strategy	Cross Asset Class: Aggregate UCRP Policy Benchmark
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%	× Russell 3000 Tobacco Free Index
22%	× MSCI World ex-US (Net Dividends) Tobacco Free
5%	× 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 × ~~33~~67%] + [JP Morgan Government Bond Index Emerging Markets Global Diversified × ~~67~~33%]
8%	× Barclays Capital US TIPS Index
6%	× Actual return of private equity portfolio
6%	× [HFRX Absolute Return Index × 50%] + [HFRX Market Directional Index × 50%] [Abs. Ret. - Diversified]
0.5%	× Aggregate UCRP Policy Benchmark [Abs. Ret. - Cross Asset Class]
1%	× Aggregate Real Assets benchmark (see section B), with components weighted by their actual weights within the total real assets portfolio
4%	× 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 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.

Additions shown by underscoring; deletions shown by strikethrough

UNIVERSITY OF CALIFORNIA
APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7J
This Version: ~~July 1, 2008~~<u>July 19, 2012</u>
Replaces version: ~~February 14, 2006~~<u>July 1, 2008</u>

EMERGING MARKET DEBT
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 Emerging Market Debt 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

a. Investment Objective

The primary investment objective of the Program is to generate a rate of return from investments in debt of issuers in emerging market countries which exceeds the return on the Benchmark, which is a weighted sum of ~~33~~<u>67</u>% times the J.P. Morgan Emerging Markets Bond Index – Global Diversified plus ~~67~~<u>33</u>% times the J.P. Morgan Government Bond Index – Emerging Markets Global Diversified, while maintaining risk similar to that of the Benchmark.

b. Investment Strategy

The Program shall be implemented by a combination of the Treasurer's internal fixed income staff, and multiple external investment managers (internal and external strategies will be collectively referred to as "Managers"). Each Manager's strategy will focus on a subset of the emerging market debt universe in which the Manager is believed to have a competitive advantage in providing returns in excess of its respective benchmark on a risk adjusted basis. The Treasurer will monitor whether the aggregate of all emerging market debt portfolios adheres to these Guidelines, and in particular achieves the overall performance and risk objectives stated below. In addition, each Manager shall have written guidelines, which will detail its strategy, performance objectives, permitted investments, and restrictions. The Treasurer will monitor each Manager's adherence to its respective guidelines. In no case may a Manager's guidelines conflict with the Guidelines for the Program.

c. Performance Objectives

The performance objective of the Program is to meet or exceed the return of the Benchmark, on a consistent basis over time, net of all costs and fees. Each Manager will have a unique objective, (benchmark), which is appropriate to its individual strategy, and specified in its guidelines.

d. Risk Objective

The Program shall be managed so that its annualized tracking error budget shall be 500 basis points. Each Manager will have a unique active risk budget, relative to its specific benchmark, which is appropriate to its individual strategy, and specified in its guidelines, and which will reflect the risk-return profile of its specific investment objectives.

e. Other Constraints and Considerations

- Managers shall comply with applicable State and Federal laws and regulations and the prudence requirement described in section 3(a) of the Policy.
- Managers shall act solely in the interest of the Fund's constituents.
- Implementation of this Program shall comply with the Fund's Policy.

2. Investment Guidelines

a. Asset Allocation

The portfolio will be invested primarily in marketable, publicly traded, fixed income instruments, notes and debentures issued by emerging market sovereign or corporate issuers, denominated in U.S. dollars and issuers' local currencies.

b. Types of Securities

The Program will be invested in diversified portfolios of fixed income securities and their derivative securities, subject to restrictions noted below in section 2c.

The following list is indicative of the securities which are appropriate for the Program, given its Benchmark and risk budget. It should not be construed to be an exhaustive list of "allowable" investment securities. Security types and/or strategies not specifically enumerated, but which the Treasurer and Regents' Investment Consultant believe are appropriate and consistent with the Investment Policy may also be held, subject to the restrictions in 2c. and 2d. below.

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

1. Fixed income instruments
   a. Obligations of foreign governments (or their subdivisions or agencies), international agencies, and supranational entities.
   b. Obligations of foreign corporations such as corporate bonds, convertible and non-convertible notes and debentures, preferred stocks, and bank loans
   c. Private Placements or Rule 144A securities, issued with or without registration rights
2. Short term fixed income instruments
   a. US Treasury and Agency bills and notes
   b. Repurchase and reverse repurchase agreements (must be fully collateralized with approved collateral, using approved counterparties only)
   c. Eurodollar CD's, TD's, and commercial paper
   d. US and Eurodollar floating rate notes
   e. Money market funds managed by the Custodian
   f. Short Term Investment Pool (STIP), managed by the Treasurer
3. Fixed income derivatives
   a. US Treasury, Agency, and Eurodollar futures

b. Interest rate options, swaps, and swaptions
c. Credit default swaps (CDS) and their derivatives
d. Foreign currency forward contracts and options
e. Total rate of return swaps

c. Restrictions

The Managers may **not:**

- Purchase securities of tobacco related companies, as per the Policy, section 5b.
- Invest in mutual funds or group trusts unless specifically allowed in their guidelines
- Buy securities on margin, except for futures or swaps, against which are held a risk equivalent amount of cash or liquid securities
- Sell securities short, except for interest rate futures and options, credit default swaps, and foreign currency forwards and options
- Purchase equity securities or commodities or their derivatives
- Buy party-in-interest securities
- Buy securities restricted as to sale or transfer, except for 144A securities, which are permitted
- Buy or write structured ("levered") notes
- Employ economic leverage in the portfolio through borrowing or derivatives, or engage in derivative strategies that conflict with the Derivatives Policy

d. Diversification and Concentration

The Program's investments will be appropriately diversified to control overall risk. The Program's investments will exhibit portfolio risk characteristics similar to the Benchmark. The following limitations apply in order to manage risk within acceptable ranges:

- **Interest rate risk**
  - The average weighted effective duration of portfolio security holdings shall not vary from that of the Benchmark index by more +/-20%.
- **Credit risk**
  - No more than 20% of the Program's investments, measured by market value, should be rated "B+" (or equivalent) or below by all major NRSRO's
    - Standard & Poor's and Fitch (B+)
    - Moody's (B1)
  - The Program's investments should exhibit an average credit quality of BB (or equivalent) or better. Split-rated credits are considered to have the higher credit rating as long as the higher rating is given by one of the NRSRO's
  - Except for securities issued by the US Treasury or sovereign entities included in the Benchmark, no more than 5% of the Program's market value may be invested in any single issuer, without a written exception approved by the Treasurer.
- **Liquidity risk**
  - The Program's investments in aggregate of any security may not exceed 20% of that security's outstanding par value, without a written exception approved by the Treasurer.

- **Asset allocation and Foreign currency risk**
  - The Program's investments in aggregate may overweight or underweight issuer countries (including their currencies) so that each country contribution to portfolio risk is within +/- 20 percentage points of the corresponding Benchmark country contribution to portfolio risk. That is, if Brazilian bonds (including currency) contribute 20% of total Benchmark risk, then the Program's Brazilian bond and currency contribution to portfolio risk should be between 0% and 40%.
- Notwithstanding the overall diversification of the Program, the Treasurer may set limits on any individual Manager's tracking error and/or contribution to active risk of the Program.

It is expected that each Manager's portfolio be appropriately diversified, within limits established in its guidelines and relative to its performance objectives, to control risk, but without unduly restricting the Manager's ability to out-perform its benchmark. That is, the Managers' portfolios may be more concentrated than is appropriate for the Program's aggregate investments.

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

f. Managing Cash Flows

Managers may use derivatives and foreign exchange forwards for facilitating investment of cash flows related to income received, contributions, withdrawals, or other asset allocation rebalancing. Fixed income exposure, including cash and derivative instruments, shall at all times be equal to the market value of the portfolio (leverage is not permitted).

3. Evaluation and Review

a. Policy and Guideline Review

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

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

4. Reporting

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

a. A performance attribution explaining differences in country weights and returns, between the aggregate Program investments and the Benchmark, and an explanation of any material differences.

b. A forecast risk report, using the Treasurer's risk system, showing the total, systematic ("common factor"), and non-systematic ("residual") risk of the aggregate portfolio, the Benchmark, and the active Program relative to the Benchmark, and an explanation of any material differences.

c. A summary of individual Manager performance, on an absolute and benchmark relative basis.

Managers will be required to provide the Treasurer monthly and quarterly reports, including but not limited to:

a. A monthly performance statement for the portfolio (gross and net) and the benchmark, and also provide the gross performance for the product Composite at least quarterly
b. If available, a monthly or quarterly forecast risk report, using the Manager's risk system, showing the total, systematic ("common factor"), and non-systematic ("residual") risk of the portfolio relative to the benchmark
c. A monthly or quarterly variance analysis, indicating sources of performance variances (difference between portfolio and benchmark return), and an explanation of any material differences.
d. A quarterly review of portfolio and strategy performance including a market outlook
e. An annual statement of compliance with investment guidelines

5. Definitions: See Appendix 8

Additions shown by underscoring; deletions shown by strikethrough

UNIVERSITY OF CALIFORNIA
APPENDICES TO INVESTMENT POLICY STATEMENTS

APPENDIX 7O
Effective: ~~April 1, 2010~~<u>July 19, 2012</u>
Replaces version approved ~~March 1, 2009~~<u>April 1, 2010</u>

ABSOLUTE RETURN (AR) STRATEGIES
INVESTMENT GUIDELINES

The purpose of portfolio guidelines is to clearly define performance objectives, state the investment approach, and to control risk. Portfolio guidelines should be subject to ongoing review. A change in the allocation to the strategy or the Investment Committee's risk tolerance can be among the reasons for a guideline review.

Performance Objective:
The objective of the absolute return strategy (AR) portfolio is to earn an annualized return that exceeds the Performance Benchmark (below). The AR portfolio should also provide diversification benefits to the overall portfolio by offering returns that ~~have low~~ <u>exhibit moderate</u> correlation to the performance of other asset classes. The portfolio shall be ~~roughly~~ composed of ~~one half low volatility,~~ absolute return ~~type strategies~~ and ~~one half higher volatility,~~ market directional type strategies.

Portfolio Performance Benchmark
The performance benchmark is a weighted combination of 50% times the return of the HFRX-Absolute Return Strategies Index plus 50% times the return of the HFRX Market Directional Index

Portfolio Guidelines
1. Permissible investments include ~~funds~~ <u>vehicles</u> that invest primarily in Long/Short strategies (including U.S., dedicated Non-U.S., short bias, and global equities), Relative Value strategies (including equity market neutral, convertible bond arbitrage, <u>relative value credit,</u> and fixed income), Event Driven strategies (including distressed securities, special situations, ~~capital structure arbitrage, relative value credit,~~ and risk arbitrage strategies), and Opportunistic strategies (including macro, CTA and portfolio hedge).

2. Investments may be made in ~~funds~~ <u>vehicles</u> that ~~manage~~ <u>invest in</u> single or multiple strategies.

3. ~~Fund of funds investments are permitted.~~ <u>Investments may be made in a variety of vehicle structures, which may include: separate accounts, funds-of-one, comingled hedge funds, fund of hedge funds, and drawdown structures.</u>

4. Policy ranges for the strategies are:

	<u>Range</u>
Long/Short Equity	~~30-60~~<u>10-50%</u>
Event Driven	~~20-50~~<u>10-50</u>%
Relative Value	~~10-40~~<u>10-50</u>%
Opportunistic	~~0-30~~<u>10-50</u>%

5. No investment with any single manager can represent more than 10% of the AR portfolio.

~~6. No investment with an asset management firm may exceed 15% of that firm's total assets under management, and no investment in a single product may exceed 25% of the assets under management of that product.~~

~~7.~~6. Gross accounting leverage at the aggregate portfolio level shall not exceed 4.5 times the market value of the total AR assets. No more than 25% of the portfolio may be invested in managers who use on average more than 4.5 times gross accounting leverage. Recognizing the illiquidity of these investments, these constraints should guide the execution of the AR program, but may be exceeded temporarily between rebalancing. 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.

~~8.~~7. The Treasurer may not incur debt to leverage the AR portfolio; however, portable alpha strategies are permitted.

~~9.~~8. No more than 15% of the total AR portfolio forecast risk ~~budget~~ may be derived from any single manager.

~~10.~~9. Total AR portfolio forecast ~~downside~~ risk shall be maintained at a level of no more than ~~5~~8.0% of total invested capital.

~~Note: During the initial implementation of an allocation for the UCRP, compliance with some of these guidelines will not be required. The Treasurer and Regents' investment consultants will monitor and inform the Committee as to the status of its compliance with these guidelines with respect to UCRP.~~

[Definition] Gross Accounting Leverage: the ratio of the sum of the absolute values of the long and short exposures of a portfolio divided by the net market value of the total portfolio. Gross accounting leverage of the AR portfolio is the sum of the individual manager leverage ratios, weighted by their market values.

[Definition] Forecast ~~Downside~~Risk: the volatility of forecast ~~negative~~ returns, as measured by ~~the~~annualized ~~semi-~~standard deviation. ~~The 5% level of forecast downside risk is the "risk budget."~~Forecast risk is calculated using a factor based risk model, which decomposes each AR portfolio investment's forecast risk into forecast systematic factor exposures and forecast residual risks, making adjustments for strategy evolution and various liquidity and valuation related considerations.