The Regents of the University of California

COMMITTEE ON INVESTMENTS
INVESTMENT ADVISORY GROUP
February 20, 2015

The Committee on Investments met on the above date by teleconference at the following locations: Covel Commons, Los Angeles campus; 1111 Broadway, 14th Floor, Oakland; and Student Center, Aliso Beach B, Irvine campus.

Members present: Representing the Committee on Investments: Regents De La Peña, Kieffer, Lozano, Makarechian, Saifuddin, Sherman, and Wachter; Advisory Members Gorman, Hare, and Oved; Staff Advisor Coyne

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

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

The meeting convened at 1:40 p.m. with Committee Chair Wachter presiding.

1. **PUBLIC COMMENT**

Committee Chair Wachter explained that the public comment period permitted members of the public an opportunity to address University-related matters. The following persons addressed the Committee concerning the items noted.

A. Mr. Juan Torres, UCLA student, said students were faced with unethical tuition practices that bar students from getting the education they deserve. He said he represented many factions at UCLA, including students, faculty, workers, and alumni concerned about the increasing privatization of the University, the lack of transparency and student influence regarding funding, and increasing levels of student debt. He said three main issues of concern were tuition increases, divestment from fossil fuel industries, and investment in companies that dehumanize Palestinians.

B. Mr. Samuel Appel, UCLA student, expressed support for divestment from the fossil fuel industry, because of its environmental destruction and oppression of poor people of color, indigenous people, and developing nations. Climate change affects those without resources first; young people have the most to lose from climate change. Mr. Appel said that undergraduate students on all UC campuses, with much support from administrators, tenured faculty, and unions, have passed resolutions in favor of fossil fuel divestment.

C. Mr. Omar Zahzah, UCLA student and representative of Students for Justice in Palestine, stated that the UC Student Association (UCSA) board of directors voted nine to one to support divestment from companies violating Palestinian human rights. The UCSA is the official voice of UC students and was the first student association representing a multi-campus system to vote in favor of divestment. He called on the Regents to respect the students' call for divestment.

D. Mr. Jonathan Koch, UCLA teaching assistant, reported that one of his best students this quarter was homeless and he questioned why the University could not afford to provide funding to this student for housing. Mr. Koch also questioned the meaning of sustainable investment, adding that the Regents should have ethical guidelines for investing and should consider input from UC students and faculty.

E. Ms. Alexandra Holmstrom-Smith identified herself as campus chair of United Auto Workers (UAW) 2865, whose members have voted to call upon the University to join the global boycott, divestment, and sanctions movement in support of human rights. She expressed concern about the privatization of UC, the declining quality of a UC education, and increasing class sizes. She urged the Regents to maintain the affordability of UC for all.

F. Ms. Emily Yen, UCLA graduate student, discussed investing in higher education. The expansion of higher education in California has contributed to the state's economic growth and allowed a wide segment of society to receive an affordable college education and upward social mobility. UCLA has historically provided an excellent education to a diverse student body, but increasing costs jeopardize progress and the economic vitality of the state. She urged the Regents to repeal tuition increases and keep UC affordable.

G. Ms. Faria Tahir, UCLA student, said that education for some should not come at a cost to another group of people. She expressed opposition to UC's investing in companies that profit from Israel's occupation of Palestinian territories and construction of settlements. Undergraduate student government groups at UC Irvine, UC Berkeley, UC Riverside, UC San Diego, UC Davis, and UCLA had passed resolutions calling on the Regents to divest from companies that invest in Israel. Nearly two-thirds of UAW 2865 members statewide also voted for divestment.

H. Mr. Blake Griffith, UCLA Ph.D. student and member of the Student Workers Union and the Free University Coalition, a body of students dedicated to a university system accessible to all students, urged the Committee to use UC's working capital and endowment to freeze tuition. The proposed tuition increase contradicts the objective of a public university to provide equal access to education. Student tuition is used as collateral to maintain UC's bond rating, which Mr. Griffith said was an incentive to increase tuition to enable more borrowing for capital projects. He urged the Regents to freeze tuition, stop using tuition as collateral for bonds, and include students and faculty in Regents' investment decisions.

I. Mr. Jonathan Lake, UCLA Ph.D. student, urged divestment from fossil fuel industries. Recent studies have shown that 90 percent of coal reserves, 60 percent of natural gas reserves, and 33 percent of oil reserves must stay in the ground to achieve a stable climate. The Office of the Chief Investment Officer has said it would assess carbon asset risk. Mr. Lake expressed his view that this must include consideration of fossil fuel divestment.

2. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meetings of September 12, September 17, and December 10, 2014 were approved, Regents De La Peña, Kieffer, Lozano, Makarechian, Saifuddin, Sherman, and Wachter (7) voting "aye."[1]

3. UPDATE ON SUSTAINABLE INVESTING

[Background material was provided 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) Bachher observed that goals for developing a holistic framework covering environmental, social, and governance (ESG) issues were presented to the Committee in September. Since then, the Office of the CIO has been learning about this ongoing evaluation process. Climate is a serious issue and global momentum exists to address the carbon risk of investment portfolios. Divesting cannot be viewed in isolation. These issues must be addressed holistically and in a fiduciary context. He introduced Senior Portfolio Manager Steve Sterman, who has led the Office of the CIO's work in sustainable investing, to share findings and future actions.

Mr. Sterman said that issues around sustainable investing are a focus of the Office of the CIO. As the Office builds a team in this area, it is examining issues of importance for leaders in the field of sustainable investing to try to position the Office to go forward with a successful framework around ESG investment policy. Considering ESG issues along with traditional financial analysis is good business, and would help enrich the Office of the CIO's investment analysis when examining individual investments and in mitigating risk. Understanding these issues would be a process that would take time. Developing an understanding of sustainability would underpin policies for ESG. The current work of the Office of the CIO is to develop policy and governance around that policy, including tools and analytics staff can use to better understand these issues.

In the long term, the University wants to be a leader in sustainable investing, just as UC campuses are working in sustainability to achieve the goal of carbon neutrality by 2025.

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

The Office of the CIO would engage with companies in its portfolio and external managers around important issues about climate and environment, governance, and social policies such as the treatment of labor or community activities. UC's portfolio would be analyzed through the lens of ESG and, if needed, repositioned to be successful over the long term to support UC's benefit payout for decades to come.

The Office of the CIO became a signatory of the United Nations-supported Principles for Responsible Investment (PRI) in September and has become an active member. Mr. Sterman is on a PRI working group for developing sustainability and ESG principles in fixed income investing, and the Office of the CIO is on another PRI working group on private equity. More importantly, a global project with several other major investors worldwide is part of a working group sponsored by the PRI studying ways for institutional investors to better understand the carbon impact of their portfolios. The Office of the CIO also joined the Ceres' Investor Network on Climate Risk, which has done a lot of important engagement work around the energy industry. Such a group would allow the Office of the CIO to connect with other large investors and use Ceres as a resource for their information, knowledge, and engagement. UC was the first university in the world to sign the Montreal Carbon Pledge, initiated in September at the United Nations Climate Summit, to measure and disclose its portfolios' carbon footprint, starting in the current year with its public equity portfolio.

The Office of the CIO has had many meetings with other asset owners, consultants, asset managers, and experts in the field of sustainability to try to learn what others are finding effective around the ESG framework. The Office of the CIO is also working with Mercer, Inc., who has a sustainability consulting business, to learn from actions of five recognized leaders in sustainability. Building resources and a team to lead the Office of the CIO's sustainability effort would be key. This team would be integrated with the Office of the CIO's investment professionals.

Mr. Sterman observed that those successful in this area have certain practices in common. First, policy and governance are based on core principles around ESG issues. The Office of the CIO would have a sustainability committee with a representative from each asset class. Second, personnel would be necessary to lead this effort. Third, ESG integration in manager selection and monitoring would be built into the investment process. UC would engage with its external managers about ESG and how these factors are included in their analyses, and would communicate UC's standards to these managers. The Office of the CIO would develop a set of questions regarding ESG as part of its due diligence. Fourth, UC would participate in investment networks. Fifth, a policy around active ownership would be developed. Proxy instructions would take sustainability issues into account. Sixth, measuring and reporting data about sustainable investing, beginning with those promised in the Montreal Carbon Pledge, would be developed by the sustainability team.

Mr. Bachher added that during the examination of its practices the Office of the CIO discovered that it ranked first among 270 other universities in being an active owner and proxy voter. His goal is to have the Office of the CIO truly integrate the thinking around ESG issues into its investment decision-making framework. Developing countries around the world are changing their energy use to solar, wind, geothermal, and other emerging new technologies. UC can do more as an investor in these opportunities. The White House recently announced an initiative to promote bringing private investors to the table to invest in clean energy initiatives. UC was profiled and listed as one of four organizations that would participate in this effort.

Regent Kieffer asked Mr. Bachher to remind the Committee of the sustainability framework that was adopted and why divestment from the fossil fuel industry was not pursued. Mr. Bachher observed that his office manages $90 billion across four different portfolios, including retirement assets, endowment assets, and working capital for the University. Approximately ten percent of that $90 billion would be exposed to fossil fuel or energy-related investments. So to simply divest would have immediate consequences on financial returns and would be only a short-term action. The adopted policy entailed the recognizing the importance of carbon risk and climate risk, including some issues that go beyond fossil fuels. These issues would be addressed in a broader framework of ESG issues.

Regent Makarechian said the Committee on Grounds and Buildings would hear a presentation on UC’s sustainability efforts. The Office of the CIO should consider whether it could invest its funds in some of those projects. Mr. Baccher commented that discussions about that possibility were underway. Mr. Sterman serves on UC’s Global Climate Leadership Council.

Regent-designate Oved expressed his view that increased communication with students about their ongoing involvement in this process would be beneficial. Students should be afforded the opportunity to contribute meaningfully. Mr. Bachher added that one of the student leaders of Fossil Free UC had been working for more than six months as an intern in the Office of the CIO.

Regent Saifuddin agreed that formalized student involvement as part of the process of developing the ESG framework would be critical. She encouraged the Office of the CIO to take time to consider what kind of student involvement would be incorporated into the process of developing the ESG framework. She reminded the Committee that this conversation would not be taking place, were it not for student leadership in Fossil Free UC. Many student leaders of Fossil Free UC developed expertise that would be beneficial. Mr. Bachher recommended finding ways to communicate these efforts effectively with students, faculty, staff, and alumni. He suggested meetings with Regent Saifuddin and Regent-designate Oved to consider the best ways to accomplish this.

Regent Saifuddin asked if the ESG framework would be used to evaluate only future investments, or if it would be used to evaluate current holdings. Mr. Bachher said it would be used for both.

Regent Lozano asked how the Committee, as a governing body, would exercise its oversight responsibilities to monitor and evaluate the success of the sustainability initiative. Mr. Bachher said this would involve a disciplined way of measuring investment decisions. UC faculty research could also be leveraged.

Investment Advisory Group member Taylor commented that 85 percent of UC's revenues come from three sources: taxpayers, students and their families, and patients in UC hospitals. If sustainable investments earn less than 7.5 percent returns over time, more revenue would have to be sought from those three groups in order to sustain the University. Earning adequate returns has to be the first priority. Committee Chair Wachter agreed.

4. **UNIVERSITY OF CALIFORNIA RETIREMENT PLAN INVESTMENT PERFORMANCE HIGHLIGHTS AND PORTFOLIO UPDATES FOR PERIODS ENDING DECEMBER 31, 2014**

[Background material was provided 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) Bachher discussed the portfolio of the University of California Retirement Plan (UCRP), adding that he would discuss UCRP, the General Endowment Pool (GEP), and fixed income investments separately since they have different objectives, clients, and risk and return profiles. Mr. Bachher welcomed recently hired Senior Managing Director for Public Equities Scott Chan, formerly CIO of the Sacramento County Public Employee Retirement System.

The U.S. equity market recently hit another 52-week high, while equities in the rest of the world have been relatively flat. The European Central Bank and the Bank of Japan have installed quantitative easing programs which would have an effect on global markets. Relative volatility in the equity market offers opportunities. Interest rates have remained low, and in many areas of the world, government debt is yielding negative returns, making U. S. Treasury bonds a relatively attractive alternative. Public and private equity markets have benefited from low fixed income rates. High valuations have made it a good time to sell assets in the private market. Inflation is low around the world, with many parts of the world experiencing disinflation. The speed of the decline in crude oil and natural gas prices by half over the past six months was unexpected. Another surprise has been the increase in the value of the U.S. dollar, which Mr. Bachher predicted would continue. In the current lower return environment with added geopolitical tensions, security selection would play an increasing role in equity returns.

The UCRP currently has $52.8 billion in assets, about 54 percent of which is invested in the stock market. The U.S. stock market has done well, but equities in non-U.S. developed and emerging markets have detracted from returns. One-quarter of the UCRP portfolio is invested in fixed income and 22 percent in alternative investments such as real estate, private equity, and hedge funds. In the past ten months, the Office of the CIO has been more a seller than a buyer of alternatives. In the 2014 calendar year, the UCRP portfolio increased from $49.3 billion to $52.8 billion, with market gains accounting for $2.5 billion, added value over benchmarks accounting for $0.6 billion, and net cash flow of $0.4 billion. In 2014, $700 million was moved from the Short Term Investment Pool (STIP) into the UCRP to help reduce its unfunded liability. Normally, the UCRP would have about $1 billion in pension plan outflows each year.

Mr. Bachher discussed asset allocation in the UCRP. Opportunistic equities, currently about eight to ten percent of the portfolio and close to $5 billion, had been considered as part of the alternatives in the UCRP and the GEP, but in the future would be considered part of the equity allocation, because opportunistic equity holdings were a combination of equities in either U.S., non-U.S. developed, or emerging markets, the same three categories in the equity allocation. From a risk management perspective, it was more instructive to have the opportunistic portfolio divided up into those three appropriate equity categories. Investment Advisory Group consultant Klosterman said the opportunistic portfolio contained mainly liquid public equity holdings. Mr. Bachher agreed.

Mr. Bachher stated that, as of December 31, 2014, the most significant change in the asset allocation of UCRP is that the allocation was underweight in alternatives and overweight in cash. Mr. Bachher explained that he decided about six months prior that market volatility would offer opportunities for investment and wanted to have available cash. He was able to build up a cash position since the markets in alternatives have been attractive for selling assets. For example, in private equity, an examination of individual holdings where the value has been realized, the opportunity of high valuation was used to sell a portion of assets, and about $300 million to $400 million were liquidated by the end of the year from a multi-billion private equity portfolio.

Mr. Bachher discussed the cross-asset class, which had been used to hold assets that did not fit into any other category. He expressed his view that it was important from a risk-management perspective to understand what assets were in the cross-asset class. After examining the cross-asset class holdings, Mr. Bachher concluded that the assets in that $2.3 billion portfolio could be moved to another, more appropriate asset class. If the assets did not fit in another asset class, but were intended to instruct the Office of the CIO’s decision-making, then the Office must determine if holding the asset was in fact used to improve investment strategy. If not, then the asset was liquidated; a total of $2 billion to $2.3 billion of the cross-asset portfolio was liquidated. By the end of March, 2015, all holdings in the cross-asset class would have been transferred to appropriate asset classes or liquidated. Any future investment in the cross-asset class would be a truly unique opportunity that would not fit in another asset class. Mr. Bachher said his office is looking for attractive investment opportunities for its cash. The UCRP asset allocation remained neutral weight in equities. The equity market was helped by good performance of U.S. equities, but performance of non-U.S. developed markets lagged.

Regent Lozano asked whether it was Mr. Bachher’s intention to continue to hold this cash position. Mr. Bachher responded that the cash represented a place to hold proceeds from assets that have been liquidated and would be reinvested when attractive investment opportunities were found.

Regent Makarechian observed that the current cash position was less than the figures stated as having been redeemed. Mr. Bachher explained that the redemptions were in the process of being accomplished and would be completed by March 31, 2015. Regent Sherman asked if Mr. Bachher anticipated that the cash position would increase further. Mr. Bachher expressed his view that it would likely not increase further.

Regent Makarechian noted the UCRP net cash flow of $0.4 billion, which included $700 million transferred to UCRP from STIP, and asked how much was paid out from the UCRP each year. Mr. Bachher said the payout in the 2014 was about $100 million to $120 million per month. Regent Makarechian said those figures would result in a negative net cash flow.

Regent Sherman asked if Mr. Bachher anticipated any changes in asset allocation over the upcoming 12 to 18 months. Mr. Bachher stated that his office has begun to revise the asset allocation for the UCRP and he would anticipate changes. The analysis would include consideration of the liabilities of the UCRP. His office has managed tactically in the past ten months, but would recommend strategic asset allocations to the Committee. Regent Sherman asked whether the UCRP asset allocation was more or less aggressive than that of comparable public pension funds. Mr. Bachher responded that generally other pension funds might have a larger allocation to equities, particularly U.S. equities. Investment Advisory Group consultant Klosterman cited data indicating average asset allocations for pension funds. Investment Advisory Group consultant Lehmann expressed his view that, relative to the UCRP, many public pension funds had a large allocation to fixed income and a small allocation to alternative investments. Committee Chair Wachter pointed out that there is a large range around the policy allocation within which the Office of the CIO could make tactical allocation adjustments. He explained that the Committee made the ranges wider after the 2008 financial crisis to allow the Office of the CIO more tactical flexibility. These ranges could be reconsidered when the Office of the CIO brings recommendations for UCRP asset allocation to the Committee. Regent Lozano agreed that a reevaluation of the allowable ranges would be desirable. Mr. Bachher stated that the pace at which long-term target asset allocations are achieved is sometimes affected by the availability of attractive investment opportunities. Ranges provide the flexibility to be in compliance with policy, but tactically manage investments. Committee Chair Wachter asked whether, in a situation where the UCRP equity allocation were at the high end of the allowable range, for example at 63 percent, its performance in comparison with its benchmark would be compared with an allocation in the middle of the allowable range, a 53 percent allocation, or with the actual 63 percent allocation. Mr. Bachher replied it would be based on the actual allocation. Regent Sherman added that the biggest determinant of returns is asset allocation. He suggested that it would be instructive for the Committee to see how the market returns for the portfolios' actual allocations compare with market returns for the midpoint of the allowable allocation range.

Committee Chair Wachter expressed his view that the main use of benchmark returns currently was to determine compensation. He agreed with Regent Sherman that it would be helpful to see the value of tactical asset allocation decisions within the allocation range around the policy allocation. Mr. Lehmann said a scientific way to measure this is to calculate benchmark returns of the policy allocation and compare that with the over- or underweighted returns. The difference is the value added by tactical asset allocation decisions within the allowable ranges. Mr. Bachher observed that this information was in the background materials provided to the Regents.

Mr. Bachher reported that UCRP returns for the last six months of 2014 were 0.8 percent, indicating that returns for the first six months of 2015 would likely be relatively low because of market performance.

In the past ten months, since he became CIO, Mr. Bachher has reviewed the public equities portfolio, which holds about half of the portfolio's assets, to determine if the returns were appropriate for the risk and at an efficient cost. He displayed a graph showing the proportion of the equity portfolio invested in U.S. equities, non-U.S. developed equities, and emerging market equities. A portion of the public equity portfolio is managed passively with the balance actively managed by external investment managers. The number of stocks owned in the public equity portfolio in 2008 was 10,394. Mr. Bachher expressed his view that owning that many stocks would be basically like owning an equity index fund, with the exception of the management fees paid to active managers. When Mr. Bachher became CIO, the public equity portfolio held almost 6,500 different stocks. He reduced that number to 4,172 by the end of 2014. The number of external public equity managers has been reduced to 38. Having too many external managers can result in over-diversification and a portfolio that resembles the index, but with much higher costs. While good returns could be earned through strategic, efficient active management, Mr. Bachher cautioned against paying active management fees for returns that could be gained through passive investing at low cost. This problem was even more acute in the GEP.

Mr. Bachher displayed a graph indicating the UCRP beta since 2004. The portfolio's beta, or sensitivity to the equity market, is currently 0.5, less than its ten-year average of 0.62.

Mr. Klosterman suggested that future presentations include names of the benchmarks for each asset class.

5. **GENERAL ENDOWMENT PLAN INVESTMENT PERFORMANCE HIGHLIGHTS AND PORTFOLIO UPDATES FOR PERIODS ENDING DECEMBER 31, 2014**

[Background material was provided 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 Bachher commented that his office would manage its portfolios according to their different purposes for different clients, rather than focus on managing various asset classes.

Committee Chair Wachter raised questions about the possibility of a management company for the General Endowment Pool (GEP) or the GEP and the UC Retirement Plan (UCRP), the role of the campus foundations, the role of the Total Return Investment Pool (TRIP) and the Short Term Investment Pool, and plans to improve the performance of the GEP.

Mr. Bachher reported that the combined assets of all the UC endowments, including the campus foundations, were roughly $14 billion. The GEP, managed by the Office of the CIO, has $8.3 billion, up from $7.8 billion at the beginning of 2014. Market gains accounted for $0.5 billion and value added above benchmarks by the Office of the CIO for $0.2 billion. The GEP had a negative cash flow of $200 million in 2014, because of the 4.75 percent payout. In calendar year 2014, the GEP gained 9.1 percent, with only 2.3 percent of that gain in the last six months of 2014, indicating that returns would be lower for fiscal year 2014 than they had been for fiscal year 2013. For calendar year 2014, active management yielded 2.4 percent, which Mr. Bachher characterized as a healthy amount, above benchmark returns. Alternative investments comprise 46 percent of the GEP, compared with just 22 percent of the UCRP. The source of the larger allocation to alternatives is mostly a lower allocation to fixed income and a ten percent lower allocation to equities. As with the UCRP, the opportunistic equity asset class would henceforth be reported with equities, rather than with alternatives.

Investment Advisory Group member Rogers asked how the payout from the GEP is calculated. Mr. Bachher said the payout is 4.75 percent of the 60-month moving average of the market value of a unit invested in the GEP. Investment Advisory Group consultant Klosterman asked whether the payout was based on quarters or months. Mr. Bachher said it was based on 60 months. The gross payout, including both income and distributions, from the GEP in 2014 was $259 million.

Mr. Bachher discussed the GEP's asset allocation. Sale of some alternative assets had resulted in a cash position of 2.6 percent of the portfolio. The GEP is tactically underweight in fixed income and neutral in equities. At the end of 2014, the GEP beta was 0.46, below its ten-year average beta of 0.56.

Mr. Bachher displayed a slide showing a comparison of endowment returns of the top 20 U.S. public and private universities that have over $5 billion in assets under management. Mr. Bachher expressed his review that it would be unacceptable for the GEP to remain near the bottom of this group, since the goal was to achieve the best returns for the benefit of the University. UC ranked 15th out of 20 on a 20-year basis; 18th out of 20 on a ten-year basis; 17th out of 20 on a five-year basis; 14th out of 20 on a three-year basis; and 10th out of 20 on a one-year basis. Mr. Rogers said this showed improvement. Mr. Bachher agreed and acknowledged Mr. Rogers' concern about UC's endowment performance relative to its peers. Mr. Rogers expressed appreciation for this real-world comparison, instead of comparison of returns to benchmarks.

Mr. Bachher suggested that the Committee consider how the GEP has been invested and how it should be invested to propel UC into the top quartile of returns among its peers within five years. He expressed his view that managing with a focus on asset classes and then dividing returns between the various portfolios is not the same as managing the allocation of capital efficiently according to the particular objectives of the GEP. The public equity portion of the GEP portfolio is invested with 40 to 50 external managers, which he said was not an efficient use of capital. In the GEP private equity portfolio, there were more than 100 managers, many with investments of less than $5 million, which he said was also not an optimal use of capital. Mr. Bachher recommended investing the GEP in amounts of at least $50 million, in unique opportunities that would be available to the University with its size and patience as a long-term investor. Improving the GEP's returns would entail both strategic and tactical considerations. He would welcome investment suggestions from Committee members. Mr. Bachher said it would be worthwhile to examine the asset allocations of the top-performing endowments. Mr. Rogers observed that, had the GEP been in the top quartile of its comparators group for the past decade, it would have $5 billion more in assets.

Mr. Bachher commented that establishing a management company is not a trivial decision. His office would attempt to establish a business case for consideration. Committee Chair Wachter commented that the University's investment structure had changed substantially over the past 20 years. Even ten years prior, UC's investments consisted of stocks and bonds. Over the past ten years, UC's investments have moved toward a more modern model. He noted that, of the top 20 endowments on the chart of comparative returns, only four were public. Committee Chair Wachter expressed his view that the pros and cons of forming a management company should be given serious consideration. In addition, other changes could be made internally that would improve performance without forming a management company. The trend in the GEP performance has been positive.

Mr. Lehmann recalled that fewer than five years prior, the GEP had a much lower allocation to alternatives than its comparators' endowments. The change in the GEP allocation combined with excellent management of the fixed income portfolio had resulted in improved performance. To move further in that direction may require establishment of a management company. Committee Chair Wachter pointed out that, in spite of this change in asset allocation, the beta in the GEP portfolio is very low. The fact that UC has a lower risk portfolio than some of its comparators' could contribute to lower returns.

Mr. Bachher commented that he would continue to share data about comparator institutions' endowment returns. He stressed the importance of determining the unique things the University could do to use its competitive advantage. He pointed out that as of June 30, 2014, the GEP had a 45 percent allocation to public equities compared with 29 percent for the average endowment greater than $4.5 billion. When that 45 percent is added to the GEP's 24 percent allocation to hedge funds, it results in a 69 percent equity risk. He would recommend re-examining those allocations. The GEP has a nine percent allocation to private equity, while comparators' endowments have an average allocation of 22 percent. The Committee would consider recommendations for changes to asset allocation.

Mr. Bachher added that implementation of strategies within asset categories was also important. For an endowment the size of the GEP, individual investments should be of sufficient size. Unlike its comparator institutions, UC's $8 billion endowment is not UC's only asset; the University also has the $52 billion UCRP and $8 billion TRIP liquid portfolio. These additional assets give the University a competitive advantage that should be leveraged. Regent Sherman asked for clarification. Mr. Bachher explained that UC's $52 billion UCRP contains 20 percent alternatives and 53 percent public equities. If the UCRP has 52 external managers, then, under existing procedures, the GEP would have the same number of managers, with portions of the returns of those managers being allocated to the GEP. Mr. Bachher would focus on managing the GEP with a more concentrated portfolio. There still would be demand in the UCRP for alternatives. As investments are made in the GEP, a portion of the proceeds could be allocated to the UCRP. Larger investments would be made with individual managers. Mr. Bachher envisioned this as both a lean and muscular tactic that would involve a cultural change in the Office of the CIO and could be instituted irrespective of forming a management company. Regent Kieffer said this would be tactical change and would not necessarily involve changes to asset allocation. Mr. Bachher agreed.

Mr. Bachher observed that the global flow of capital is changing the investment environment, with increasing worldwide competition for attractive alternative investments. The University has unique access to investment opportunities that are attractive to investors outside of California. Investment Advisory Group member Martin agreed that UC has unique advantages of size and access to the University's research that could be leveraged. Mr. Bachher commented that the Office of the CIO had invested alongside some UC campus foundations. He invited the campus foundations to partner with his office to increase the size and scale of the foundations' possible investments. UC campus foundation trustees may also have access to investment opportunities. The Office of the CIO offers the campus foundations the opportunity to invest with it to gain a wider range of opportunities at lower cost. Ultimately, these are all assets of the University that both the Office of the CIO and the campus foundations want to invest for the best returns at the lowest cost without taking undue risk. Mr. Rogers expressed support for this strategy.

Mr. Bachher tasked Associate CIO and Chief Operating Officer Arthur Guimaraes with developing a new product that would offer access to alternative investments for all the UC foundations and endowments at low cost, thus expanding the smaller campus foundations' access to alternative investments. Mr. Lehmann asked about the Office of the CIO's prior experience with campus foundations' investing in certain assets. Mr. Bachher said that such investments were currently less than $50 million and had been done in a piecemeal fashion. He would like to provide such offerings on a systematic, uniformly available basis. Cost savings to the campus foundations would be significant when compared to using a third-party manager.

6. **WORKING CAPITAL INVESTMENT PERFORMANCE HIGHLIGHTS AND PORTFOLIO UPDATES FOR PERIODS ENDING DECEMBER 31, 2014**

[Background material was provided 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 Randolph Wedding reported that the Short Term Investment Pool (STIP) held $6 billion and the Total Return Investment Pool (TRIP) held $7.3 billion as of December 31, 2014. STIP usually holds assets of about $7.3 billion, but there were some large outflows at the end of 2014. On average, STIP and TRIP combined hold assets of about $15 billion.

TRIP was initiated in 2008 and has been very successful. Over the five years ending June 2014 TRIP’s incremental income over STIP was well over $1 billion. TRIP’s asset allocation change in 2013 to include more equity risk was well-timed and resulted in excellent returns. Consideration is currently be given to the future of TRIP and whether the TRIP’s risk profile should be reduced, or whether TRIP assets should be transferred to the General Endowment Pool (GEP) as funds functioning as an endowment. Mr. Wedding said his office was seeking input from stakeholders on these questions of the appropriate amount of risk for TRIP and whether the TRIP portfolio was needed.

Mr. Bachher commented the TRIP is currently invested like the GEP and that TRIP’s payout is similar to the GEP payout. TRIP was designed to be liquid, at the request of stakeholders, but in practice TRIP has not been used to supply liquidity. If TRIP is working capital, then the risk of its asset allocation should be reduced. If TRIP is in fact working like the GEP, then its allocation could mirror that of the GEP, and could yield a steady payout for the benefit of the campuses. These fundamental questions should be addressed before simply adjusting TRIP’s asset allocation.

Investment Advisory Group consultant Lehmann observed that $15 billion was a large amount of liquid working capital. He recommended a rational assessment of liquidity needs and then deciding how much risk was appropriate to take with the balance.

Investment Advisory Group member Taylor added that liquidity analyses had shown that the University almost never draws down more than $100 million in any given week and that $2 billion in liquidity could cover even any “black swan,” or highly improbable negative, event. Committee Chair Wachter agreed that it was necessary to calculate the University’s liquidity needs and funds not needed for liquidity should be invested like an endowment.

Investment Advisory Group consultant Klosterman added that the University would also have access to lines of credit.

Mr. Bachher expressed his desire to position the portfolios for the specific needs of UC and welcomed the Committee’s input.

The meeting adjourned at 4:30 p.m.

Attest:

Secretary and Chief of Staff