

MINUTES
INVESTMENT COMMITTEE MEETING
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (MCERA)

One McInnis Parkway, 1st Floor
Retirement Board Chambers
San Rafael, CA

November 29, 2017 – 9:00 a.m.

The Board of Retirement for the Marin County Employees' Retirement Association encourages a respectful presentation of public views to the Board. The Board, staff and public are expected to be polite and courteous, and refrain from questioning the character or motives of others. Please help create an atmosphere of respect during Board and Committee meetings. If members of the public wish to speak on any agenda item, please alert the Retirement Administrator to that request prior to the matter being called.

CALL TO ORDER

Chair Given called the meeting to order at 9:02 a.m.

ROLL CALL

PRESENT: Block, Cooper, Given, Gladstern, Jones (alternate retired), Klein, Murphy, Piombo (alternate safety), Silberstein,

ABSENT: Shaw (ex officio alternate), Thomas, Werby

A. OPEN TIME FOR PUBLIC EXPRESSION

Note: The public may also address the Committee regarding any agenda item when the Committee considers the item.

Open time for public expression, from three to five minutes per speaker, on items not on the Committee Agenda. While members of the public are welcome to address the Committee during this time on matters within the Committee's jurisdiction, except as otherwise permitted by the Ralph M. Brown Act (Government Code Sections 54950 et seq.), no deliberation or action may be taken by the Committee concerning a non-agenda item. Members of the Committee may (1) briefly respond to statements made or questions posed by persons addressing the Committee, (2) ask a question for clarification, or (3) provide a reference to staff for factual information.

No public comment.

B. MANAGER ANNUAL REPORTS

1. Manager Overview – Jim Callahan, Callan Associates

Jim Callahan, Executive Vice President with Callan Associates (Callan), said four managers are presenting annual portfolio reviews as part of ongoing monitoring of MCERA's investment managers. KBI Global Investors manages MCERA's natural resources portfolio, Invesco manages commodities, UBS manages one of the two core real estate portfolios, and BlackRock manages the U.S. Treasury Inflation Protected Securities (TIPS) portfolio.

2. KBI Global Investors – Global Natural Resources – Noel O'Halloran, Colm O'Connor, Simon Padley – 9:05 a.m.

Simon Padley, Senior Vice President, Business Development and Client Services, introduced KBI Global Investors (KBIGI) Director and Chief Investment Officer Noel O'Halloran from Dublin headquarters. Mr. Padley reported that during the past year Amundi, the 7th biggest asset manager in the world, purchased the majority of KBIGI and employees own the remaining 12.5%. Due to its responsible investment strategies, the firm was awarded the highest rating of the United Nations Principles for Responsible Investing (UNPRI). Trustee Silberstein asked what percentage MCERA's portfolio represents and Mr. Padley stated it is about 4 to 5% of assets under management. Mr. Padley explained unique features of the Global Natural Resources Solutions portfolio such as diversification, non-correlated returns, and infrastructure exposure. The portfolio is correlated to supply and demand of key natural resources like water and clean energy in a sustainable way. From a universe of 500 stocks, the investment team identifies companies less covered developing new technologies that can outperform their counterparts. Exposure to fossil fuels is minimized. Mr. Padley introduced Mr. O'Halloran.

The KBIGI Global Natural Resources portfolio returned 15.79% net of fees in the twelve months ending September 30, 2017 (versus 19.85% for the benchmark S&P Global Natural Resources Index), and through October 31, 2017 is outperforming the benchmark year to date. Returns are driven by strong earnings and superior growth over the long term. Mr. O'Halloran explained that the strategy focuses on companies providing clean, efficient, adequate supplies of key scarce natural resources: food, energy and water. Mega trends driving solutions for essential resources are insufficient supply, increasing demand and increasing regulation which leads to increasing infrastructure spending and more investment in technology.

Mr. O'Halloran gave examples of specific companies benefiting as multi-decade infrastructure projects are initiated. Other companies are developing technologies to produce more efficient cars, and in southern California another company is supplying widgets for a desalinization plant. Mr. O'Halloran emphasized that globally the big natural resource solution is water reuse, notably in Barcelona. Other sectors include renewable energy, with disruptive technologies such as battery storage technology, and smart grid to improve and assure energy quality. There are no fossil fuel companies in this portfolio, Mr. O'Halloran said.

In conclusion, Mr. O'Halloran discussed his views on market cycles across natural resource sectors, pointing to tail winds in water and renewable energy and signs of

bottoming in agriculture. He expects earnings growth in the next twelve months to be in the mid-teens and is satisfied with current portfolio allocations and diversification across end markets.

Trustee Gladstern asked how Genetically Modified Organisms are dealt with. In response, Mr. O'Halloran stated the only affected stock would have been Monsanto, which has been bought by another company. Mr. Padley noted KBIGI supported a shareholder resolution to study additional impacts of technologies used to boosting crop yield.

Trustee Block asked about a spike in energy prices which Mr. O'Halloran noted will smooth out over the long term. Trustee Block asked how correlated the portfolio is to the overall equity market. Mr. O'Halloran replied there is strong correlation with global equities, but individual holdings are very different from the S&P 500. Responding to Trustee Block's inquiry on political risk associated with water utilities, Mr. O'Halloran said there is no exposure to water utilities in the United States but there are three water utilities in the United Kingdom exposed to regulations. He explained measures used to calculate that risk using probabilities to quantify a fair value model and limit exposure in the portfolio. The largest weights will never be in utilities stocks, he said. Trustee Block asked if Bitcoin is in the portfolio and Mr. O'Halloran said it was not.

Trustee Silberstein asked how the firm voted on proxy proposals at Johnson Controls involving the CEO pay and repurchase and issuance of shares. Mr. Padley reported the firm voted against the executive pay proposal and for the share repurchase and issuance. Mr. O'Halloran explained such proposals are treated on a case-by-case basis and that share repurchase and issuance may have tax advantages and does not necessarily work to the disadvantage of investors. Many companies buy back shares to protect shareholders from share issuance, he said.

3. Invesco – Commodities – Dave Glutch, Mike Baran – 9:30 a.m.

Mike Baran, Relationship Manager and Director with the Invesco U.S. Institutional team, introduced Dave Glutch, Client Portfolio Manager. Mr. Glutch reported that since MCERA invested in the Invesco Balanced-Risk Commodity Strategy in May of 2016, Invesco has added two analysts and additional members for the client services team. Mr. Glutch discussed three aspects of the balanced risk commodity strategy. First, risk allocation balances risk exposures and creates well-defined risk budgets. Second, the portfolio is designed to improve the expected Sharpe Ratio (a measure of return) with asset classes. Finally, tactical allocation emphasizes attractive assets and de-emphasizes unattractive assets. The strategy is implemented primarily with futures and other derivatives providing ample liquidity and transparency. The strategy seeks better risk diversification and smaller drawdowns than common benchmarks.

The investment universe covers agriculture/livestock, energy, industrial metals, and precious metals. Mr. Glutch discussed the wide range of returns across commodity sectors in the past year. Crude oil is a net flat result and there are recent signs inventories are starting to fall in the United States (U.S.). With better economic growth, one group doing well is industrial metals such as copper that had a consistent lift in prices. Agriculture is struggling after a multi-year bear market and looks to be bottoming, Mr. Glutch said. Trustee Block asked if Bitcoin is in the portfolio and Mr. Glutch said it was not.

As of September 30, 2017, the Invesco Balanced-Risk Commodity Trust returned negative 2.13% net of fees (versus negative 1.03% for the benchmark Bloomberg Commodity Index), and returned 4.77% net of fees (versus 2.25% for the benchmark) for the quarter. Mr. Glutch indicated that moving to an overweight position in energy is helping the portfolio which is currently outperforming the benchmark year to date.

4. UBS – Core Real Estate – Steve Olstein, Tom Klugherz – 9:55 a.m.

Tom Klugherz, Portfolio and Client Services Officer with UBS, reported the UBS Trumbull Property Fund is invested mainly on the east and west coasts of the United States. The largest asset allocation is to Apartments, followed by Office and Retail. The strategy employs a supply-demand equation to analyze markets. Mr. Klugherz said recent 3% Gross Domestic Product (GDP) helps real estate and positive labor numbers are correlated with all aspects of real estate. After a peak in transaction volume in 2015, the real estate market is settling back down to more normal levels. The general trend is very segmented in retail and transactions are slowing as investors are cautious.

The UBS Trumbull Property Fund returned 4.36% net of fees (versus 5.56% for the benchmark NFI-ODCE Equal Weight Net Index) in the twelve months ending September 30, 2017. Mr. Klugherz pointed out that the portfolio is designed as core real estate with a focus on income and has less leverage, and therefore less risk, than the benchmark. Mr. Klugherz indicated that relative to the U.S. 10-Year Treasury, core capitalization rates are within a reasonable range, with differences in specific markets. There has been a slow recovery since the 2008 financial crisis with modest demand. Construction loan levels are lower as lenders have more discipline in how they are lending.

Trustee Given asked about what has changed in the investment strategy since 2008. In response, Mr. Klugherz explained the team leases up space quickly in response to signs of slowing demand and increasing supply, which helped during the downturn. The view of the Chief Investment Officer (CIO) is that the real estate market is in the second quarter of a three-quarter game. The lesson has been to keep leverage low, stay focused, and make sure space is leased. Responding to Trustee Gladstern's inquiry, Mr. Klugherz explained that the delay in capital calls following MCERA's commitments was due to more institutions increasing allocations to core real estate at that time. Currently growth is more normalized as managers rebalance out of core real estate.

Mr. Olstein, Portfolio Manager with UBS, stated the investment focus is on income as the most important aspect of holdings, and appreciation naturally follows. TPF is at the lower end of the risk spectrum and does not seek to replicate the NFI-ODCE benchmark. Asset allocations have ranges that allow room for tactical positioning; for example, there are more apartments and less office properties as compared with the NFI-ODCE. Over the last 3 to 5 years this positioning has resulted in underperformance to the benchmark. There are signs of improved performance with recent increase to the office sector and outperformance in multi-family in the past three quarters. Property types may vary across different metro areas where real estate is driven by different factors.

In conclusion, Mr. Olstein stated the fundamental job in selecting TPF core real estate investments is to minimize risk and be careful to be diversified by limiting each investment. Discussing current positioning, Mr. Olstein said he is cognizant of how far we

are in the recovery; therefore, the plan is to sell properties when the market is good and slow investment. Hotels add diversification but due to low income, these holdings are being sold. He pointed out the Net Operating Income (NOI) overall in the real estate market is slowing. TPF is in a good position to benefit from the overall allocation to apartments relative to competitors, and the fact that millennials are driving the industrial sector. Income for TPF is projected to be 4.5% to 5% in the next year.

Trustee Gladstern asked how climate change and sea level rise affects the TPF portfolio. In response, Mr. Olstein stated the only property impacted by the hurricane in Texas was in Houston where creeks flooded and property damage was covered by insurance and tenants subsequently renovated the space. In Florida two apartment towers in Miami affected by a hurricane had been designed with nothing on the ground floor. He said there is a lack of available knowledge on sea level rise other than in conjunction with hurricanes. UBS hired consultants to assess exposure and the correct amount of insurance.

In response to Trustee Klein's inquiry on how retail factors into NOI forecasts, Mr. Olstein said they are net sellers of retail properties. There is no question, he stated, that the amount of rent tenants are willing to pay is going down. Retail holdings are being shifted from the weak apparel market to properties where there is a need, such as supermarkets and restaurants.

5. BlackRock – U.S. Treasury Inflation Protected Securities – Kit Donovan, Trish Hunter – 10:20 a.m.

Trish Hunter, Director in BlackRock's Institutional Client Business, stated that the outlook for the BlackRock U.S. Treasury Inflation Protected Securities Fund (TIPS Fund) in 2018 is different from 2017 in that in 2017, growth and earnings were a surprise. In 2018 growth and earnings are less likely to have a positive impact on returns. Ms. Hunter stated the Federal Reserve is expected to raise interest rates, which along with reduced liquidity is expected to affect the markets with increased volatility. There is currently a technical correction in U.S. Treasuries, she reported. There is still high demand for fixed income as some aspects still look attractive to investors. Ms. Hunter introduced Kathryn Donovan, Vice President and fixed income strategist.

Ms. Donovan stated that Scott Radell is the head of the BlackRock TIPS strategy. She explained that the BlackRock trading platform provides for low cost and keeping the TIPS Fund close to the benchmark Barclays U.S. TIPS Index, Series L. The TIPS Fund replicates the benchmark by owning all 30 issues in the index. Low transaction costs are the focus of the investment strategy, and the portfolio is designed for low risk and low tracking error. Ms. Donovan said risk is low today, reporting the TIPS Fund coupon rate is in general 2 to 5 basis points from the index. The average weighted life, duration, and convexity are identical to the index. Within specific maturity ranges, there are mis-weights to the index that are tactical, according to Ms. Donovan. The TIPS Fund outperformance to the benchmark index is driven by securities lending. As of September 30, 2017, the Black Rock TIPS Fund returned negative 0.53% (versus negative 0.73% for the benchmark) in the prior 12 months. In conclusion, Ms. Donovan emphasized the added value of low trading cost and low risk relative to the benchmark and she expects similar returns going forward.

Chair Given recessed the meeting for a break at 10:35 a.m., reconvening at 10:49 a.m.

C. OLD BUSINESS

1. Education on Small Cap Equity Allocation Vehicles (Action)

Consider, discuss and take possible action regarding small cap equity vehicles

Mr. Callahan explained that the small cap equity allocation has been a topic of discussion given underperformance with one of the small cap domestic equity managers. Within the 32% allocation to domestic equities in the Fund, the two biggest determinants of return are the size of the stock, from mega cap to small or micro-cap, and the second is the style, such as value versus growth.

The small cap allocation consists of two actively managed portfolios: the Dimensional Fund Advisors small cap value portfolio, and the Columbus Circle small cap growth portfolio. Returns for the domestic equity portfolio underperformed the Russell 3000 in the short term and are in line for longer time periods, Mr. Callahan stated. The investment consultant presented time-weighted and dollar-weighted net-of-fee rates of return over time for domestic equities compared to the target benchmark.

Mr. Callahan stated the question is whether there should be two active managers and are they the right managers. The small cap portfolios are outperforming over the long term and he attributed short-term underperformance to the Columbus Circle small cap growth portfolio. Mr. Callahan pointed out that the historical risk of the small cap portfolio as measured by the rolling standard deviation is a little more volatile than the small cap market. As overall market volatility has come way down, the portfolio has behaved more like the Russell 2000 with less volatility. The DFA small cap value performance net of fees long term added significant value over the benchmark Russell 2000 value index. Shorter term, the DFA small cap value portfolio underperformed the benchmark. Tracking error and volatility is higher than its peers. The Columbus Circle small cap growth portfolio performed well when initiated 7 and ¾ years ago, but has underperformed in the last 5 years, thus triggered this discussion. Mr. Callahan reported as of October 31, 2017, the Columbus Circle small cap growth portfolio is outperforming the benchmark by 8% for the calendar year. The portfolio's long-term historical track record is good, volatility is in line with the small cap growth peer group, but tracking error is higher than the index.

Chair Given asked about the cause for differences in performance for the two small cap portfolios. Mr. Callahan stated there are multiple factors, including the equity markets behaving in unique ways post-financial crisis. Global monetary easing led to outperformance by sectors the active managers do not own; for example, the Biotech sector. Callan finds no internal changes leading to underperformance for the two small cap portfolio managers, and therefore there is a little more comfort to ride it out. All active managers, Mr. Callahan advised, will outperform at some point. In response to Chair Given's inquiry, Mr. Callahan stated the reason the DFA and Columbus Circle small cap portfolios are outperforming now is that the market has changed significantly as interest rates have started to come up and monetary policy has changed. Another big theme, he said, had been investors buying the index, which increases correlations among stocks, making active management more difficult. Conditions are changing leading to correlations

dropping significantly this year, and the result is active managers are collectively doing much better.

Trustee Silberstein said conventional wisdom is moving to passive management, and the investment consultant replied there is still a strong pull to passive management, but not at the same pace. Mr. Callahan reviewed performance of the two small cap portfolios relative to peers in response to Trustee Klein's inquiry. Trustee Silberstein asked for Mr. Callahan's opinion on the strategy of the Columbus Circle portfolio. Mr. Callahan indicated in addition to momentum and earnings surprises, the strategy employs other financial metrics such as sales.

Mr. Callahan outlined options to discuss for the small cap equity portfolio. In addition to retaining the current structure he presented three other options:

1. Option 1 – Keep DFA as active small cap value manager; replace Columbus Circle with a passive small cap growth index
2. Option 2 – Keep DFA as active small cap value manager; keep or replace Columbus Circle as small cap manager; reduce size of two existing managers and add an index fund in between the two strategies.
3. Option 3 – Remove DFA and Columbus Circle's style-based portfolios and move to small cap core allocation. The core exposure could be passive, factor-based, enhanced, active fundamental, etc.

Trustee Cooper was excused from the meeting at 11:35 a.m.

Mr. Callahan discussed modeling results for Options 1 through 3. He concluded Option 1 would not be meaningfully different from what we have now; the main benefit being lower fees and low tracking error. Option 2 modestly reduces fees, reduces tracking risk, and performance over time would be more like the market and less volatile than the current structure. For Option 3, moving to a core small cap approach, Mr. Callahan presented two ideas: 1) invest the small cap portfolio in the DFA Small Cap Core Composite; 2) invest the small cap portfolio in the passive Russell 2000 index. Mr. Callahan recommended staying style neutral for the small cap portfolio.

Trustee Silberstein expressed an interest in a low fee approach with a passive smart beta strategy. He asked Mr. Callahan if smart beta is a fad or are there managers in that area we can compare. Mr. Callahan replied that at MCERA's October 2017 Strategic Workshop, Callan communicated that available passive options for small cap are limited for institutional investors and tend to be focused in the large cap part of the market. There are very few multi-factor portfolios out there, he said, and the challenge is what factor do you want to use to tilt your portfolio.

Discussion followed on which options to consider. Trustee Block pointed out that in the last ten years both the DFA and Columbus Circle strategies resulted in net alpha. He indicated a separate issue is whether the Committee is comfortable with their investment strategies. Trustee Silberstein pointed out that DFA is a large shareholder in many holdings in the DFA small cap value portfolio. Trustee Piombo expressed an interest in

additional information on Option 3, moving to a single core strategy. Chair Given stated further education and time to consider options would be helpful for new trustees.

Trustee Klein's view is to move to a lower fee approach and eliminate the Columbus Circle small cap growth portfolio. Trustee Murphy agreed with Trustee Klein and recommended the DFA small cap core vehicle or splitting the current DFA small cap value portfolio with an index. Trustee Gladstern supported replacing the Columbus Circle portfolio with an index to reduce fees. Trustee Block proposed taking a broad view by examining alternative strategies with respect to how they fit in the Fund based on the overall Sharpe ratio and risk profile. Chair Given prefers Option 2 or Option 3 due to reduced fees but wants to employ active management too. He recommended reviewing active and passive options including fees and further analysis of the current managers at the next quarterly Investment Committee meeting.

Trustee Block proposed waiting before eliminating Columbus Circle due to recent outperformance. Based on Mr. Callahan's discussion of available small cap vehicles, Trustee Block stated he would either retain the DFA small cap value portfolio and replace the Columbus Circle small cap growth portfolio, or employ the DFA core small cap vehicle or a passive core approach. Mr. Callahan said he likes the DFA small cap core vehicle to lower fees as compromise. Responding to Trustee Silberstein, Mr. Callahan explained moving to smart beta would be an active approach.

Based on discussions the Chair directed the investment consultant to present alternatives for Option 3 at the Committee's January 24, 2018 meeting that would include the DFA Small Cap Core Composite.

Chair Given recessed the meeting for lunch at 12:29 p.m., reconvening at 12:56 p.m.

D. NEW BUSINESS

1. Annual Alternative Investment Fee Report

Mr. Wickman presented the Annual Alternative Investment Fee Report to comply with California Government Code Section 7514.7. Gary Robertson, Callan Associates Private Equity Consultant, joined the meeting by conference call. Mr. Robertson said alternative investment fee information was collected from MCERA's private equity managers Abbott Capital Management and Pathway Capital Management based on a template developed by the Institutional Limited Partners Association (ILPA) to promote thorough fee transparency. Mr. Wickman asked Callan to summarize the fee information collected by the managers for presentation to the Committee.

The summary lists fees and expenses at the total fund-of-funds level and for underlying partnerships. At the fund-of-funds level, these include management fees and carried interest, and expenses including audit and tax preparation and organization costs. For the underlying partnerships, fees and expenses include management fees net of offsets, waivers, and rebates; expenses paid; incentive allocation paid; and accrued incentive allocation. Finally, the total fund-of-funds and underlying partnership fees and expenses are totaled. Mr. Robertson noted Callan and staff have identified future improvements to

be made regarding the uniformity and types of information the managers provide. For example, information will coincide with MCERA's June 30 fiscal year.

Mr. Robertson reported total management fees for Abbott and Pathway are \$2.4 million over twelve months. He explained that organization costs may be amortized over time from an accounting perspective. Including underlying partnerships, total fees and expenses were \$17.2 million over twelve months. At the underlying partnerships level, Pathway will be presenting additional detail in the next annual report. Mr. Robertson explained that carried interest is effective only after MCERA receives the original investment in distributions. He pointed out that carried interest is not comparable to each manager because dates are not in alignment. Chair Given asked how much control MCERA has over underlying partnership fees. In response, Mr. Robertson stated the fund-of-fund managers negotiate fees on MCERA's behalf. He further explained that it is in the interest of Abbott and Pathway to get the lowest fees as they are aligned with MCERA. The fees are consistent with the contracts with Abbott and Pathway, and as modeled by Callan, Mr. Callahan stated. In response to Trustee Block's inquiry, Mr. Callahan stated MCERA pays management fees on committed capital which ramps down over time, 2% being the highest rate.

2. Watch Period Review

a. Columbus Circle Growth Equity (Action)

Consider and take possible action regarding updated Watchlist criteria

Mr. Wickman stated based on the Board's policy managers on the Watchlist are reviewed annually to determine if they should be removed or retained from the Watchlist or terminated. Anne Heaphy with Callan Associates reported that based on new quantitative criteria, managers on the Watchlist still qualify for the Watchlist. In addition to the Columbus Circle small cap growth portfolio and the Parametric emerging markets portfolio, four more managers met the Watchlist criteria: the DFA small cap value equity portfolio, the Morgan Stanley international equity portfolio, the Artisan international growth portfolio, and the FIAM international small cap portfolio.

Ms. Heaphy presented a table listing areas of concern for the managers on the Watchlist. Trustee Block asked about changes on the DFA team, and Mr. Callahan replied the changes involve top-level executives, including a Chief Executive Officer, who are not involved in managing MCERA's portfolio. At Morgan Stanley, a portfolio manager retired but the main portfolio manager, William Lock, is still overseeing the strategy. Mr. Callahan indicated if there is a meaningful organizational event, the Investment Committee and Board will know about it very quickly.

It was M/S Piombo/Gladstern to adopt accept the consultant's recommendation confirming that Columbus Circle and Parametric will remain on the Watchlist and Dimensional Fund Advisors, Artisan Partners, Morgan Stanley and Fidelity Institutional Asset Management will be added to the Watchlist.

AYES: Block, Given, Gladstern, Jones, Klein, Murphy, Piombo, Silberstein
NOES: None
ABSTAIN: None
ABSENT: Cooper, Thomas, Werby

3. Future Meetings

Trustee Block proposed a discussion of how our investment portfolio reflects cash flow and liquidity requirements going forward.

E. INVESTMENT CONSULTANT QUARTERLY REPORT AND PERFORMANCE UPDATE

As of September 30, 2017

Mr. Wickman reported the return for the Fund was revised up to 12.34% net of fees for the fiscal year as of June 30, 2017. The improved results were based on positive private equity returns that normally lag the reporting period. Anne Heaphy, Vice President with Callan Associates, presented the quarterly investment review. The investment report begins with a summary covering the Watchlist and attribution reports for individual managers. Moving forward, Mr. Callahan indicated they will be moving to a more easily digestible summary report.

As of September 30, 2017, the Fund returned 12.54% net of fees in the last twelve months (versus 12.01% for the Composite Benchmark) and returned 3.32% net of fees (versus 3.49% for the benchmark) for the quarter. The total market value of the Fund is \$2.39 billion, an increase of \$79 million during the quarter ended September 30, 2017. Ms. Heaphy presented asset allocations including targets and ranges that are monitored quarterly for rebalancing purposes. Based on gross performance values, the Fund return outperformed the Composite Benchmark over one, three, five, and longer time frames.

As of September 30, 2017, domestic equity managers had strong returns on an absolute basis, returning 19.77% prior twelve months and 5.10% for the quarter. The Dimensional Fund Advisors (DFA) small cap value portfolio outperformed its benchmark for the quarter and was in line for the prior twelve months. The Columbus Circle small cap growth portfolio outperformed its benchmark, returning 23.49% for the last twelve months. The overall international equity portfolio returned 18.11% for the twelve months ending September 30, 2017, and returned 5.13% for the quarter. The Artisan international growth equity portfolio bounced back as growth is favored, and the Morgan Stanley international value equity slightly trailed its benchmark as it normally does in strong equity markets.

Ms. Heaphy explained that the Parametric emerging markets portfolio differs from its benchmark in part with a large underweight to China. Parametric uses a systematic process within the emerging market universe based on liquidity of those markets. When there is strength in China, the portfolio will lag, which has recently been the case. In response to Trustee Block's inquiry, Mr. Callahan explained that Parametric is by design more diversified and equally weighted than the index and tries to rebalance. In markets when big countries

underperform, the Parametric emerging markets portfolio is likely to outperform, Mr. Callahan pointed out.

Ms. Heaphy reported that the fixed income portfolio, notably the Colchester Global fixed income portfolio, is outperforming over the quarter and the last year ending September 30, 2017. The combined real assets portfolio returned 2.02% (versus 2.61% for the Real Assets Benchmark) for the quarter and 4.68% (versus 5.80% for the Real Assets Benchmark) for the prior twelve months.

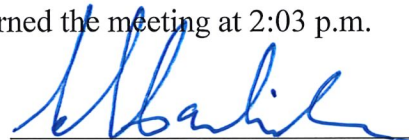
Mr. Callahan explained that the UBS benchmark NFI-ODCE Equal Weight Net represents the universe of core real estate funds you can invest in. UBS is more conservative than that universe and uses less leverage. As a result, the UBS portfolio underperformed the benchmark, but their merits will show in different markets, Mr. Callahan said. The AEW core real estate portfolio is more in line with the index and therefore the two strategies complement each other well.

Trustee Block inquired about the Parametric Futures positions. Mr. Callahan explained that Parametric manages the Fund's cash overlay program to provide market exposure through the futures market. The overlay program is also a way to rebalance to target allocations. Short positions show as negative positions, and the overall net overlay position is equal to the cash balance in the Fund. The risk exposure is strictly market risk, he said, and the overlay is another way to manage cash and is additive to the portfolio.

There being no further business, Chair Given adjourned the meeting at 2:03 p.m.



Roy Given, Chair



Attest: Jeff Wickman
Retirement Administrator