Minutes

Marin County Employees' Retirement Association (MCERA) Retirement Board Strategic Workshop

One McInnis Parkway, First Floor San Rafael, CA October 30-31, 2018

Day 1 October 30, 2018

Meeting Chair Steven Block

9:00 a.m.

Call to Order/Roll Call

Chair Steve Block called the meeting to order at 9:08 a.m.

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

(alternate safety), Shaw (ex officio alternate), Silberstein, Thomas, Werby

ABSENT: Cooper

Open Time for Public Expression

Open time for public expression, from three to five minutes per speaker, on items not on the Board Agenda. While members of the public are welcome to address the Board during this time on matters within the Board'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 Board concerning a non-agenda item. Members of the Board may (1) briefly respond to statements made or questions posed by persons addressing the Board, (2) ask a question for clarification, or (3) provide a reference to staff for factual information.

No members of the public provided comment.

9:00 a.m. - 10:00 a.m.

Board Governance at MCERA

Ashley Dunning, Partner, Nossaman LLP

Chair Block said topics for the Strategic Workshop were designed to further inform the Board in support of its fiduciary duties. The topic of governance will be addressed from different perspectives, beginning with Board Counsel Ashley Dunning's overview of Board Governance at MCERA. Ms. Dunning stated members of the Board of Retirement are fiduciaries with plenary authority over administration and investment of MCERA trust funds. Trustees are decision-makers with quasi-judicial authority as to disability retirement benefits, and policy-makers within statutory responsibilities on matters such as actuarial assumptions and compensation earnable determinations.

Laws and rules that govern the Board, and thus provide for the Board members' various roles, include the California Constitution, applicable County Employees' Retirement Law of 1937 (CERL or 1937 Act), the Public Employees' Pension Reform Act of 2013 (PEPRA), related sections of the California Government Code, and the Political Reform Act of 1974 and Government Code section 1090 regarding conflict of interest rules. In addition to these, the Board is governed by the Ralph M. Brown Act (Brown Act), Public Records Act, and Robert's Rules of Order.

As fiduciaries, Board members must carry out their responsibilities by acting in good faith as prudent experts and acting in the overall best interest of MCERA's members and beneficiaries. Board members should actively participate in the Board's work, read and seek to understand the information that is reasonably available, and ask questions. Reliance on management, staff and consultants should be actively considered, reasonable and fact-based. New Board members should take reasonable steps to learn about MCERA by attending training and educating themselves on the pension industry and its trends. Ms. Dunning pointed out that under general trust law, Board members do not sit on the Board as representatives of the group that elected or appointed them.

The Brown Act provides that when the Board sits down to develop its consensus, a seat at the table is reserved for the public. As such, the Board must provide a notice and agenda to the public for all meetings, usually 72 hours in advance of the meeting. In addition, the Board must conduct its meetings and make its decisions in public, and allow all persons to attend and participate in its meetings through public comment. Ms. Dunning gave examples of what types of communication would be considered a meeting that the Board should be aware of, which may include situations that otherwise may seem informal. Other meeting requirements include having staff reports and background materials for agenda items made available to the public during or after meetings or upon request, unless exempt from disclosure under the Public Records Act. The public may be excluded from attending closed sessions held on matters that are expressly authorized by explicit statutory provisions to be held in closed session. These include personnel issues and pending litigation, for example.

Board meetings are held in accordance with Robert's Rules of Order that provide for decision by majority vote and the full and free discussion of every proposition presented for decision. The Board exercises its key function of oversight through the selection and monitoring of the Retirement Administrator. In addition, the Board uses Board committees to maximize productivity and develops and monitors policies. The Retirement Administrator is accountable to the Board regarding staff and consultants and keeps it informed regarding any significant matters. On an annual basis, and less formally at mid-year, the Board conducts an evaluation of the Retirement Administrator in accordance with its related policy.

10:00 a.m - 11:00 a.m.

Governance Best Practices

Tom Iannucci, President, Cortex Applied Research

Tom Iannucci, President of Cortex Applied Research, defines pension governance as the system of policies and structures established by plan sponsors and retirement boards to guide decision-making and oversight of a retirement system, all with the goals of fulfilling the terms of the trust, satisfying fiduciary duties to members, and achieving strong performance. He distinguishes Big

"G" Governance as typically within the control of the plan sponsor or the Legislature regarding Board composition and authority. Small "g" governance is typically within the control of the retirement board, such as committee structure, roles of board, board officers, committees and staff. In addition, investment, governance, other policies, and planning practices are included in small "g" governance. Mr. Iannucci said good governance practices support the integrity of the system and create value for stakeholders which he termed Governance Alpha, such as member service quality, investment performance, risk management and information to stakeholders. An example of Governance Alpha is findings of a 2017 study showing of 35 U.S. public plans, those plans with stronger governance practices outperformed poorly governed plans from an investment perspective by nearly 2 to 1 over a 5-year period.

Establishing clear, sound roles for the board, officers, committees, management and advisors is crucial to good governance, according to Mr. Iannucci. Principles of roles and responsibilities include clarity (documentation), separation of duties (policy/strategy/operations/oversight), allocation of duties to reflect time and knowledge, and linking accountability and authority. Board policy and strategy should establish or confirm the direction of the organization in all key areas (mission, goals, objectives). In addition, Boards identify major risks and approve corresponding policies to manage them. Mr. Iannucci indicated the policy framework should allow the Board to effectively influence or control the organization without micro-managing. The policy framework should be broad in scope and distinguish between policies and procedures.

Characteristics of high-performance boards are:

- 1. They are knowledgeable and experienced (they understand the business)
- 2. They understand how boards add value
- 3. They focus on policy and risk management, not performance
- 4. They are forward looking (i.e., they plan)
- 5. They deliberate effectively
- 6. They are focused and appreciate the important vs. urgent

Important ways the Board can add value include asset allocation, creating conditions for excellence, and avoiding destroying value. Asset allocation decisions generally explain approximately 90% of the variation in returns across funds over time, and approximately 100% of the absolute return of a given fund.

Mr. Iannucci advises having a policy for every major risk, and a risk assessment for every major policy. Boards should identify and assess current and evolving risks as to the impact versus likelihood and how well the organization is positioned to mitigate or manage the risk. As part of this process, the Board should identify gaps and costs to address risks and rank and prioritize the risks. Being forward looking involves strategic plans, succession plans, board education plans, and internal audit plans.

Deliberating effectively involves constructive debate with all board members attending and coming prepared, productive discussions that are not repetitive, and with all board members contributing. In addition, ideas or concerns can be raised and discussed so that board members can disagree agreeably. Furthermore, boards should achieve closure efficiently and accept the will of the board, rather than revisit past decisions. In conclusion, Mr. Iannucci presented methods of communicating, including how to disagree, that enhance effective engagement. Finally, he presented a matrix of degrees of importance and urgency and encouraged Board members to focus on what is important but not urgent in order to be most effective.

11:00 a.m. – 12:00 p.m.

Fat Tails and Black Swans – Risk Mitigation Strategies

Dr. Sanjay Unni, Managing Director, Berkeley Research Group

Dr. Sanjay Unni, Managing Director of the Berkeley Research Group, defined the term "black swan" as a metaphor for an event considered quite impossible, until it happens. More generally, it is the notion that even beliefs held firmly and universally can be fragile; undone by a single falsification. An example of a black swan event is the stock market collapse in 2008 and 2009 known as the financial crisis. Dr. Unni pointed out that based on the market's estimate of the S&P 500's risk on September 3, 2008, the probability of a 28% decline over 3 months was less than ½ of 1%. The financial crisis not only saw a near-impossibility materializing, it also shook some long-held beliefs about financial markets.

In 2007, Nassim Nicholas Taleb first used the term "black swan" to describe a particular type of extreme event that amplifies risk in financial markets. Three attributes of a black swan event are: 1) the event is an outlier; 2) the event has an extreme impact; and 3) once the event has occurred, we develop explanations for its occurrence. The risk of a future black swan is difficult to determine, and some believe it is systematically underestimated. According to Dr. Unni, when the probabilities of random occurrences are hard to observe, we might underestimate randomness because we fail to observe the "silent evidence" of apparent losers while lionizing apparent "winners."

Given that black swans are likely to be underestimated, Dr. Unni states that higher probabilities should be assigned to the tails of a bell curve, resulting in the term "fat tailed" distribution of possible outcomes. As a response to increased tail risk, Dr. Unni notes some investors position their portfolio to profit from black swans as well. In this scenario, the bulk of the portfolio is allocated into a relatively liquid, low-risk portfolio invested in cash equivalents. Then, a small percentage of the portfolio is invested in securities exposed to black swans, both good and bad. At the market level, these securities would be out-of-the-money calls or puts on market indices. Dr. Unni likened this process to insurance, where the cost of the option is the insurance premium for protection that may not actually be used. Given the benign market since the financial crisis, this type of portfolio protection has fallen out of favor.

Dr. Unni explained that it is possible to lose more on previous unutilized premiums than gained on the ultimate "insurance" payout and there was discussion on this point. Dr. Unni indicated that ultimately, decisions on whether or not to "load" on tail risk funds should reflect the fund's overall risk tolerance and its anticipated benefit payment obligations.

12:00 p.m. - 1:30 p.m. Lunch (on site)

1:30 p.m. - 2:30 p.m.

Asset Allocation Case Study - Functionally Focused Portfolio

Timothy Price, Chief Investment Officer, Contra Costa County Employees' Retirement Association

Tim Price, Chief Investment Officer with the Contra Costa County Employees' Retirement Association (CCCERA), discussed the functional approach to the CCCERA Fund's portfolio

construction and asset allocation. CCCERA is an \$8.4 billion Fund that is 90.8% funded with a 7.0% discount rate and 22,992 plan participants, 44% of whom are active. Functions are defined as liquidity for paying current benefits, growth for paying future benefits, and diversifying to act as insurance against risks in the growth allocation. Notably, the portfolio's allocation to short-term fixed income is 23%, which neutralizes near-term liquidity needs. Otherwise, the Fund is diversified across international and emerging market equities, private equity, private credit, U.S large cap equity, risk parity, risk diversifying, real estate, and U.S. Treasurys. In general, the concept is to plan for a variety of outcomes and place additional emphasis on long-term growth and health of the plan.

The genesis of CCCERA's asset allocation design was an enterprise risk tolerance study conducted in 2015. At that time, CCCERA was 81.7% funded and projected cash flows were declining. As a result, the Board was concerned about the short-term liquidity of the Fund. Based on the risk tolerance study, the Board chose to adopt the functionally-centric approach to asset allocation, targeting four years of benefits payments in the liquidity allocation. Each year actuarial projections are used to determine the amount needed for the new fourth year tranche of the liquidity allocation. Once the annual funding plan is approved, the new liquidity tranche is implemented, and the Fund is rebalanced as needed.

Governance and monitoring include an annual review of asset allocation, quarterly staff updates on functional outcomes, and functional deep dives. Each function has a number of metrics that are monitored over a time frame relevant to each function. In conclusion, Mr. Price indicated that the functional investment approach results in reducing the volatility of investment returns, meaning higher returns may not necessarily be achieved during up markets, and conversely, the portfolio will be less likely to be as negatively impacted during down years.

2:30 p.m. - 4:00 p.m.

Quantitative and Qualitative Factors for Hiring Investment Managers Watchlist Best Practices – Avoiding the Rearview Mirror Jim Callahan, President, Callan Associates

Jim Callahan, President of Callan Associates and investment consultant for MCERA, discussed approaches to monitoring and supervising the investment portfolio. There is both science and art to these processes. The science involves collecting and categorizing transaction data, calculating time-weighted returns and measures of risk and risk/reward tradeoffs, comparing returns with benchmarks and appropriate style groups, and calculating characteristics and attribution. The art comes with analyzing and interpreting quantitative information, forming judgments and making recommendations, educating to foster reasonable expectations, and considering qualitative factors such as client policies, needs and tolerances, market trends, changes at firms, and manager strategies.

Benchmarks provide the framework for risk management and should be investable for portfolios of public securities. Benchmarks used for individual mandates should fit together to reflect the objectives of the asset class as a whole. In addition, investment managers should be able to discuss their investment process in relation to the relevant benchmark. Peer group benchmarks enable an assessment of manager performance in relation to similar active managers that are available.

Commonly accepted investment risks include capital market risk, active management risk, and liquidity risk where there is no ready access to buyers or sellers. By analyzing statistical characteristics of historic and expected distributions of returns, useful quantitative measures may be determined that support the interrelationships of multiple asset categories. This allows for an assessment of the potential benefits of diversification among major asset categories and the expected volatility of future returns. Mr. Callahan noted that ultimately higher risk must be justified by higher return, shown in risk-adjusted return measures such as the Sharpe ratio and information ratio.

Mr. Callahan used MCERA's Morgan Stanley international equity portfolio to explain how to go about assessing manager performance. He first explained the manager's investment strategy, defining what types of investments will be made and how they are analyzed. He noted there has been turnover on the investment team, but the key founding head of the team remains. Further, portfolio performance has remained consistent throughout. Relative performance shows the Morgan Stanley portfolio tends to add the majority of value from downside protection. It is important to know what type of market environment is favorable for a manager, Mr. Callahan said.

Another approach to assessing what makes for a successful portfolio is Governance Alpha, defined as value added or lost from the decision-making process. The most common outputs of that process are the manager hire/fire decisions, which are a key part of attempting to achieve alpha. Two critical ingredients for success with active management are the ability to find great managers, and then hiring or firing managers at the right time. Mr. Callahan presented results of a study of a sample of firing/hiring decisions between 1996 and 2003 showing fired managers' subsequent 3-year cumulative excess returns outperformed hired managers by about 1%.

In summary, Mr. Callahan advised the Board to remember that everyone plays a role in adding portfolio value and to take a holistic approach when evaluating portfolio characteristics. Manager termination decisions should not be based solely "on the numbers," he said. Given enough time, investments that appear least attractive now can be most attractive in the future.

4:00 p.m. – 4:30 p.m.

Closing and Follow-up Items from Today's Agenda

Meeting Chair Block invited the Board to provide any comments on the sessions presented during the day. Board members generally thought the Black Swan and Functional Portfolio presentations provided alternate views of assessing risk. The Board also felt that Mr. Iannucci's presentation was excellent and having a follow-up presentation from him at a future workshop would be valuable.

Day 2 October 31, 2018

9:00 a.m.

Call to Order/Roll Call

Chair Steve Block called the meeting to order at 9:05 a.m.

PRESENT: Block, Given, Gladstern, Jones (alternate retired), Klein, Murphy, Shaw (ex

officio alternate), Silberstein, Thomas, Werby

ABSENT: Cooper, Piombo (alternate safety)

Open Time for Public Expression

No members of the public provided comment.

Chair Block introduced presenters for the second day of the Strategic Workshop, beginning with Patrick Richard of Nossaman who will focus on corporate governance. Anne Simpson of CalPERS follows with a case study about bringing corporate governance to the Board governance process. The final presenters are Finbarr O'Connor and Federico Jost of the Berkeley Research Group who will give their perspective on the private equity asset class.

9:00 a.m. - 10:00 a.m.

Corporate Governance – General Education and Legal Requirements Patrick Richard, Partner, Nossaman LLP

Patrick Richard, Esq., Nossaman LLP, stated as a litigator his perspective on corporate governance decisions comes after the fact when something has gone wrong. Mr. Richard defends officers and directors of corporations. He underscored the importance of understanding corporate governance by giving an example of many companies misdating stock options because "everyone else is doing it".

Mr. Richard equated corporate governance to long-term value creation. He discussed Commonsense Principles of Corporate Governance developed by a committee consisting of leaders of major U.S. financial institutions. One of these principles states because well-managed and well-governed businesses are the engine of our economy, good corporate governance must be more than just a catch phrase or fad. Another is that empowered boards and shareholders, both providing meaningful oversight, are critical to the long-term success of public companies.

Another source of corporate governance principles is the New York Stock Exchange Corporate Governance Guide of 2014 that sets forth five key categories: board composition and effectiveness, leadership challenges, executive compensation, risk management, and strategic planning. Mr. Richard highlighted key principles, stating boards should consider how to determine whether firms they invest in are following good corporate governance. Having independent directors addresses risk, Mr. Richards said, and directors serve as a check on management and the tension between the short-term profit motive and governance. Mr. Richard further stated board members must not be beholden to the CEO and should not defer to management.

Trustee Jones joined the meeting at 9:15 a.m.

Board members should be independent of mind, but not divisive or self-serving, Mr. Richards said. Studies on effective decision-making show that in the short run, diverse groups can be less efficient, but longer term reach better decisions by drawing on different perspectives. For effective risk management, directors should evaluate and know a considerable amount about the primary risks for the organization. Risk compliance should include a checklist to address potential risk, and consider how accurate and current information is. Directors should satisfy themselves whether there are policies in place to assure a bank is making good loans, for example.

Mr. Richard addressed current trends and concerns in the areas of environment, social, and governance (ESG), compensation, and information technology. He pointed out that over half of shareholder proposals filed to date in 2018 involve ESG issues. The implication is that more oversight leads to better decisions. According to Mr. Richard, a question may be whether these issues of governance are born out as addressing real risks.

Mr. Richard stated the top governance issue today is cybersecurity. Mr. Richard said the cyber threat is worth understanding and planning for, and it is a corporate governance issue and not a "black swan" risk. Due to increasing cyber risk, companies are looking for talent in this area, including on boards of directors. Mr. Richard presented data showing the significant number of data breaches and related cost in 2016.

Mr. Richard discussed the role of pension funds and asset managers in corporate governance. Issues to consider include corporate governance infrastructure, aligning executive compensation with performance, ensuring high quality financial reporting, and promoting diversity in the board room. Evaluating executive compensation must address long-term performance, according to Mr. Richard. Asset managers can use Common Sense Principles of Corporate Governance as a guide and should pay attention to proxy voting.

Trustee Silberstein asked Mr. Richard to comment on differences between asset managers and asset owners, indicating asset managers are for profit and their interests are not aligned with customers who are asset owners. Mr. Richard replied that clients rely on the professionalism of asset managers over a long period of time. Mr. Silberstein asked about the NYSE selling order flow, thereby letting some people get closer to the information. In response, Mr. Richard said there may be a lack of transparency, noting over time reputational risk will cause institutions not to engage in self-dealing or fraud.

Mr. Richard addressed challenges and practical considerations in evaluating corporate governance. The point is to invest only in companies with good corporate governance, and the difficulty is in determining how granular standards should be. Trustee Block asked him to describe the business judgment rule, and Mr. Richard replied it depends on the board and state, and he discussed the business judgment rule in California.

Trustee Klein gave the example of General Electric once having a good reputation and then being investigated for financial issues. Mr. Richard said this would be a governance issue and a lack of checks and balances. The misdating of options mentioned earlier would be an auditor failure, according to Mr. Richard in response to Trustee Werby's inquiry. Trustee Gladstern asked about the principle of a periodic change in auditors. Mr. Richard responded that changing

auditors every 5 to 7 years is a way to address issues but not a guarantee. Board turnover is also good for the entity, he added.

Trustee Silberstein noted Dodd-Frank legislation gave shareholders the right to vote on CEO pay since some board directors are appointed by the CEO. Mr. Richard responded that others would say it is not good to turn over responsibility for CEO pay to shareholders. Considerations are how shareholders act, what information they are relying on, and do they have other agendas. The wisest course is to have compensation expertise on the board. There is a need for diversity and greater transparency on boards, he said, which should take responsibility for CEO compensation.

In conclusion, Mr. Richard said the Board has the duty of reasonable inquiry as long as it is tempered with the understanding of its role and limitations. There is no one size fits all answer and the reasonable allocation of resources needs to be considered. Mr. Richard advised having a process for good decision making based on a model used by entities that are used to making risk-based decisions.

Chair Block recessed the meeting for a break at 10:07 a.m., reconvening at 10:16 a.m.

10:00 a.m. - 11:00 a.m.

Corporate Governance – Pension System View of Good Governance Anne Simpson, Investment Director, CalPERS

Anne Simpson, Senior Portfolio Manager, Investments and Director of Global Governance at CalPERS, is leading the CalPERS sustainability project to integrate environmental, social, and governance (ESG) factors across the total fund. Ms. Simpson stated one challenge for CalPERS is its size as the largest public defined benefit retirement plan in the United States. The CalPERS fund is internally managed except for private asset classes. Ms. Simpson explained that after the 2008 financial crisis CalPERS' funded ratio was under 70%. As a result, cash flow management became important as public equities were sold to make benefit payments. Without protection, there was a need to go back to basics and determine what investment beliefs and assumptions should be to help improve the chances of a better outcome. The project began by forming a joint group to manage a process to gather ideas from surveys and interviews. The investment beliefs were the result and provide a guiding framework for the fund.

Ms. Simpson reviewed key investment beliefs and highlighted differences from modern portfolio theory. The first is liabilities must influence the asset structure, followed by the long-term horizon and consideration of stakeholder views. Next is the concept of three forms of capital. Ms. Simpson explained that for value to be created, there has to be stewardship of human and physical capital along with financial capital. This means analysis of companies includes what is happening with their people and physical resources. This belief sets the stage for board experience and competence, Ms. Simpson said. Investment concepts such as strategic allocation and risk-reward are included in the beliefs. One important evolution from traditional thinking, according to Ms. Simpson, was that risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error. For example, climate change is an investment risk not experienced before, and how we start looking at uncertainty and complexity is new.

Ms. Simpson said CalPERS' ESG Strategic Plan approach is to use integration, engagement and advocacy supported by partnerships. The goal is the integration of ESG into all managers'

investment processes. Engagement involves looking at our position as owners of equity and deciding what are the things in our orbit of influence. Ms. Simpson's view is that one of the fundamentals is that the governance framework was invented on the idea of accountability of directors. She noted that the majority of U.S. corporations are incorporated in Delaware where the default articles of incorporation do not include the ability to vote against directors. She further questioned why domestic CEO compensation is so much higher than the rest of the world. CalPERS initiated a shareholder campaign for the right to vote no on directors and for proxy access through shareholder proposals.

Once investment beliefs were in place, the focus turned to evidence. Because of the need for a good flow of information, the focus began with data and corporate reporting standards in order to build evidence to test things that matter. Since there was difficulty finding good data on human capital, for example, CalPERS worked with a group of investors to petition the SEC and ask for improved reporting on human capital intangibles like intellectual capital and good will. This effort shows the need to engage with regulators and do it in partnership with others, Ms. Simpson said.

Another priority is climate risk and the impact of carbon emissions. There is a 5-year engagement plan to request and require companies to put transition plans in place. CalPERS is also concerned with how to get compensation aligned with long term issues. Another priority is diversity and inclusion. One of the benefits of diversity on boards is access to a broader pool of talent. Diversity promotes more robust decisions and is protective against group think, identified as an issue by the International Monetary Fund following the financial crisis.

In summary, Ms. Simpson stated CalPERS' ten ESG strategic goals are designed to get all managers using an integrated approach to investments with sustainable guidelines. Keeping an eye on important areas like continuing research to show well-grounded evidence would be the best reflection of our fiduciary duty, she said.

For private equity assets, governance is the biggest challenge, said Ms. Simpson. CalPERS will need exposure to private equity in order to achieve its investment objectives. The plan is to reorganize the private equity program and bring it in house for better alignment of interests. Another focus will be investing in California companies in the late-stage venture capital phase.

In conclusion, Ms. Simpson referenced resources available on the CalPERS website and said they always want to partner with sister funds. CalPERS is a founding signatory of Principles for Responsible Investment (PRI) and offers a work screen for small pension plans.

Trustee Klein asked about compensation for in-house private equity mangers. The expectation is the compensation would be market rates, although it would still be less than the amount paid to an outside private equity advisor. Ms. Simpson indicated this is the only way to achieve alignment of interests.

Trustee Jones asked about staff turnover at CalPERS. Ms. Simpson replied CalPERS has a recruitment advantage by offering employment benefits that support work-life balance. Personally, for Ms. Simpson public service is an important draw and has a social purpose by helping people protect their income in retirement. She credited CalPERS Chief Executive Officer Marcie Frost for leading the Board to make changes to their funding policies that will help improve the financial stability of the system. Trustee Block asked whether Ms. Simpson

has considered the potential for markets seizing up in the event of the failure of the Depository Trust & Clearing Corporation (DTCC) due to a cyber attack or some other event. Ms. Simpson replied it should not matter for a long-term investor. She views a downturn in the markets as a cheap buying opportunity. Trustee Silberstein asked Ms. Simpson to comment on past attacks on CalPERS studies that showed ESG elements added to the value of stock holdings. Ms. Simpson indicated some push-back is ongoing. Ms. Simpson said CalPERS continues to submit ESG proposals that occasionally win, such as persuading the SEC on whether the proxy vote threshold for stock ownership should be changed to more than \$2,000.

Mr. Wickman expressed appreciation to Ms. Simpson for taking her valuable time to address MCERA's Board and acknowledged Marcie Frost for her support of this presentation.

Chair Block recessed the meeting for a break at 11:16 a.m., reconvening at 11:32 a.m.

11:00 a.m. – 12:00 p.m.

A Private Equity Primer on the Beginning, the Middle and the End Federico Jost, Managing Director, Berkeley Research Group Finbarr O'Connor, Managing Director, Berkeley Research Group

Finbarr O'Connor, Managing Director of Berkeley Research Group, stated his background is in turning around troubled investments and their managers. Mr. O'Connor manages two end-of-life stage private equity funds with 1999 and 2005 vintage years that he termed tail-end funds. Federico Jost, Managing Director of Berkeley Research Group, has a background in the valuation of private equity investments for investment bankers. Mr. Jost reviewed asset classes, strategies, and the structure of private equity investments. He listed three differences of private equity from public equity: 1) less liquidity; 2) low correlation; and 3) active management. Mr. O'Connor said private equity investments take time to mature and recently the time frame has become more extended.

Mr. O'Connor said in private equity at the portfolio level the manager serves at the discretion of investors who have control driven by the level of ownership. Trustee Werby asked what the discount is for the lack of control and liquidity MCERA as an investor has. Mr. Jost replied depending on the investment the discount ranges from 5% to 40%. Trustee Given inquired about the validity of the reports we receive with respect to credentials for valuations. In response, Mr. Jost said in theory private equity valuations have to follow fair value standards in Generally Accepted Accounting Principles. He said that quarterly reporting will follow those standards but may not receive the same scrutiny. He indicated different organizations have been endorsing international private equity guidelines for the private equity valuation process. As a result, fair value standards are starting to converge for everyone. Mr. O'Connor noted through side letters investors can negotiate more disclosure from private equity managers. Counsel Dunning asked about reactions to the Institutional Limited Partner Association (ILPA) reporting template and Mr. Jost replied the form is getting traction as CalPERS and larger pension systems are asking for the information.

Turning to performance measurement, Mr. Jost advised using the internal rate of return (IRR) which gives the annual return and is therefore the better measure. He noted that invested capital benefits the manager, but the number of years is a consideration. In response to Trustee Silberstein's inquiry, Mr. Jost said some funds use leverage in the early stages, but there is no particular intention to abuse cash flow to boost private equity returns.

Mr. Jost listed five strategies for private equity investments: venture capital, growth equity, buyout, distressed, and secondaries. Venture capital is early-stage seed money to develop ideas, concepts, or prototypes. At this stage, typically there is no revenue. Late-stage private equity investing is the sweet spot when there is confirmation that the idea is good, and revenues are coming in and growing. In the high-growth stage, revenues are growing 10 to 20% annually. At maturity, private equity investments may experience a buyout that involves restructuring. In the decline stage, private equity investments are considered distressed debt that is purchased in return for equity and will be restructured. Secondaries involve investors buying an existing limited partner's interest. Mr. O'Connor said investors use buyouts to gain access to good investments. The price depends on the quality of management and how stale the assets are.

Private equity funds are managed by general partners using capital from limited partners who make commitments through separate investment advisory agreements. Mr. O'Connor explained that the general partner is in for the life of the fund, and is compensated first from commitments and then from harvesting. Once hurdles of returning a certain amount of money to limited partners are reached, the general partner is given carry interest. Fund raising takes about 1 year to 1.5 years and is followed by the final closing. Then, the fund is incorporated and begins its investment period to deploy capital over a period of about 5 years. The harvesting period lasts from 5 to 10 years, and some funds some drift over that period. Currently, the secondary market is very active in scooping up maturing funds, in Mr. O'Connor's experience. Cracks in older funds are becoming apparent, and some managers have not been able to raise capital. Interest in extensions and restructuring are picking up.

Mr. Jost presented a graph showing private equity has outperformed the S&P 500 Index since the 4th quarter of 2000 with an average 8% internal rate of return. Trustee Klein asked how the starting point was determined, and Mr. Jost replied the dates reveal the cyclicality of private equity. He noted that the graph shows how private equity is correlated with the public equity markets. Mr. O'Connor observed the reason is that valuation inputs for private equity come from the public markets. Mr. Jost said a recent paper puts into question whether performance after fees is as impressive as advertised. He indicated 8% is a typical net internal rate of return and can be higher. Trustee Silberstein observed an 8% return is about 1% over public equities, asking if that is reasonable given the risk and illiquidity of private equity. Mr. O'Connor said he did not disagree with Mr. Silberstein's implication that there is a tradeoff between return and risk with private equity.

Fees and expenses are a hot topic for private equity. Mr. O'Connor stated there is an increasing amount of direct investment activity in private equity as a lot of institutions try to step around fees. Mr. Jost said one area is infrastructure with 50-year cash flows to match pension liabilities. Mr. Jost said there is a focus on implementing standards for fees to determine what needs to be disclosed that is accessible. A Standards Board for Alternative Investments developed Alternative Investments Standards establishing disclosures to help investors understand the different types of fees and expenses. According to Mr. O'Connor, the SEC's focus on litigation and the importance of transparency on what is getting charged is a wakeup call. Trustee Silberstein noted that California passed a law on disclosing private equity fees. He asked if the fees MCERA has paid are reasonable. In response, Mr. Jost said the fees likely reflect performance, adding that carry fees are directly tied to performance. Mr. Jost advised that MCERA is paying for access and due diligence by investing in fund-of-funds, which is a good

thing. Mr. O'Connor added the fees may also reflect timing, because vintages have done well for that time frame.

Key things to expect from a Limited Partnership Agreement (LPA) include terms for the investment, and how the manager functions and sets compensation. Ms. Dunning said that when the California law was passed requiring private equity fee disclosures, it became part of MCERA's required contractual terms, so MCERA can comply with the requirement.

Trustee Klein asked about current valuations for private equity. In response, Mr. Jost said private equity valuations come from comparable companies in the public markets, which are at all-time highs. He said valuations can become inflated when managers chase the same assets. Mr. O'Connor said the other factor is leverage and growth in shadow banking and the private credit market. Mr. Jost said private equity valuations generally match the exit price. Trustee Block inquired about managers buying in the secondary market at a discount to the Net Asset Value, and then marking the investment up to show a return. Mr. O'Connor replied this may happen, but not in the case of a big write-down of 50%, for example.

Closing and Follow-up Items from Today's Agenda 12:30 p.m. – 1:30 p.m.

Chair Block invited trustees to comment on how Workshop presentations may apply to future Board or Committee discussions. Trustee Gladstern expressed an interest in having more time with Anne Simpson of CalPERS. Ms. Simpson said on issues like compensation, it gets down to your will and your ability to sustain it. Boards should question everything, think about and investigate new ideas, and put in place mechanisms for future board members to buy into. Trustee Silberstein was interested to hear how other systems such as CCCERA are allocating assets.

In response to Chair Block's inquiry, Mr. Wickman outlined reasons for differing funding policies for CalPERS and MCERA. The Administrator noted MCERA is 85% to 90% funded and average amortization is now 12 years. Mr. Wickman stated the funding policies adopted by the Board over the past five years have required more contributions into the system with the goal of having a more aggressive funding policy.

Trustee Jones asked if there is a need for Board members with expertise in cybersecurity. In response, Ms. Dunning noted the discussion on cybersecurity was about corporate boards. Trustee Given noted Board members all have varied backgrounds and the Board uses consultants such as Callan with specific expertise, all of which plays into making good decisions. Chair Block added the Board's responsibilities include the duty of inquiry, having education and being engaged. Trustee Given observed Board members work well together and make good decisions.

After visiting Pathway, Trustee Werby said he gained confidence in how Pathway selects fund managers. Trustee Klein stated she is comfortable the private equity program is being implemented in a reasonable way in diversified fund-of-fund vehicles under the guidance of Callan. Mr. Wickman noted the Investment Committee will be discussing funding for the private equity program at its December meeting.

There being no further business, Chair Bloc	k adjourned the meeting at 1:40 p.m.
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- Comments	Mortil
Steve Block, Chair	Attest: Jeff Wickman
	Retirement Administrator