City of Miami Beach
General Employees' Retirement Plan

Open-End Real Estate Manager Search
Finalist Report
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I. EXECUTIVE SUMMARY

In the October 2013 Asset Allocation Study, Milliman recommended an allocation to Private Real Estate and the Board approved. This allocation decision opened a search for an Open-End Real Estate manager and has led to the selection of these three finalist candidates for the Board's review:

Firm	Product
AEW	AEW Core Property Trust
JP Morgan	Strategic Property Fund
Principal Real Estate Investors	Principal U.S. Property

The real estate allocation will be the Plan's first real estate and "alternative" asset class allocation. Milliman sought to identify an investment manager that would satisfy the following criteria: 1) Real Estate investment firm with an established track record; 2) Offers a large core product with a relatively conservative investment style, and 3) Offers an attractive fee schedule. The three firms listed above meet these criteria, and a brief description of each firm is characterized below.

AEW, founded in 1981, is a solely dedicated real estate investment affiliate of Natixis Global Asset Management. AEW has $26.6 billion in real estate assets under management. Their core US Open-End Real estate product has $4.5 billion assets under management, is supported by a large team of real estate investment professionals and emphasizes integration of top-down market research into their investment process. Relatively, the product is slightly aggressive in its use of leverage and non-core properties. AEW has a limited queue for new investments.

JP Morgan Investment Management has been investing in the real estate space for over forty years. The firm prides itself on offering a "pure-core" investment product, the Strategic Property Fund, which has $21.2 billion in assets under management. Milliman has been affiliated with this investment through another client for over two decades. The team is large and well tenured. The major drawback to the product is the long investment queue which is anticipated to be 15 to 18 months.

Principal Real Estate Investors is a significant presence in the real estate space with a history going back to 1998. The fund is relatively smaller than JP Morgan and Morgan Stanley, but takes a more conservative approach than AEW. Principal has a reasonable queue at $320 million. The firm has a minimal allocation to non-core assets, but their lower leverage relative to peers is attractive given the conservative bias of the search.

Selection Factors

In analyzing the candidates, we evaluated 21 factors (listed in the report body), and found that 5 factors best helped to differentiate the candidates. Note that some of these factors are more important than others. Our assessment of the relative pluses ("+"), minuses ("–"), or neutrality ("0") on these factors is shown in the following table:

Differentiating Factors	AEW	JP Morgan	Principal
Core Real Estate Exposure	0	+	0
Leverage	0	0	0
Investment Style Bias	0	0	0
Commitment Queue	+	–	+
Fees	+	0	+

The remainder of this report describes this search and these Finalist candidates in more detail.

Recommendation

Milliman recommends interviewing all three of the finalist candidates.

II. MANAGER SEARCH

Search Overview

Following a request by the Plan, Milliman in February 2014 initiated an US Open-End Core Real Estate search.

Milliman decided upon the following steps in conducting this search:

A. Determine universes and benchmarks of US Open-End Core Real Estate products and managers

B. Determine criteria for selecting US Open-End Core Real Estate managers

C. Determine quantitative screening criteria to help limit universe (from A.) consistently with selection criteria (B.)

D. Determine limited universe by screening (from C.) in conjunction with Milliman's experience with and knowledge of managers

E. Develop Questionnaire for managers (from D.) consistent with selection criteria (B.)

F. Distribute Questionnaire to managers (from D.), giving managers 3 weeks to reply

G. Receive and review completed Questionnaires from managers

H. Determine subset of most attractive candidates consistently with selection criteria (B.)

I. Further review managers via in-person or telephone conversation

J. Write report summarizing most attractive candidates

K. Present report summary to the Board

Key decision steps were B., D., H., and I.

Selection Criteria

Milliman determined 21 selection criteria to use in evaluating Open-End Real Estate managers and products as follows:

Selection Criteria		
Organizational Stability	Investment Team	Geographic Diversification
Ownership Structure	Investment Process	Core Real Estate Exposure
Firm Growth	Product Size	Investment Style Bias
Litigation	Product Growth	Cash Management
Insurance Coverage	Product Capacity	Leverage
IT Systems	Fees	Portfolio Turnover
Risk Management	Commitment Queue	Performance Profile

These selection criteria were integrated into a comprehensive questionnaire for selected managers and for subsequent review and discussion of these managers.

Selection of Candidates for Questionnaires

Milliman initiated the search by considering the 33 funds and managers in the NCREIF Open-End Diversified Core Equity (ODCE) Real Estate Index. Based on Milliman's experience, we added other managers for consideration. From this combined list, we reviewed several quantitative and qualitative characteristics, including length of real estate investment experience, leverage used in the funds, amount of real estate acquisition versus development, investment in core versus non-core assets, and performance history. These characteristics, combined with Milliman's knowledge and judgment, led to a list of twelve candidates shown in the table below:

Firm	Product
AEW	AEW Core Property Trust
American Realty Advisors	American Core Realty Fund
ASB Real Estate Investments	ASB Allegiance Real Estate Fund
Deutsche Asset & Wealth Mgmt.	RREEF America REIT II
Heitman	Heitman America Real Estate Trust
Invesco Real Estate	Invesco Core Real Estate-USA
JP Morgan	Strategic Property Fund
L&B Realty	L&B Core Income Partners
Morgan Stanley Real Estate Advisor	Prime Property Fund
Principal Real Estate Investors	Principal U.S. Property
Prudential Real Estate Investors	PRISA/PRISA II
UBS Realty	Trumbull Property Fund

Milliman sent these twelve candidates a comprehensive questionnaire on March 11, 2014. The twelve candidates provided questionnaire responses by the April 2^{nd} due date.

Selection of Finalist Candidates

Milliman reviewed and analyzed the completed responses from all of the twelve firms and held conference calls or in person meetings with candidates to ask further questions where necessary.

Internal discussions on the pros and cons of each manager, including the review of scoring sheets for each of the selection criteria listed above, led to nine managers being eliminated and three managers being put forward.

The eliminated managers and the primary reasons for their eliminations are as follows:

Firm	Reasons for Exclusion
American Realty Advisors	Recent personnel turnover is a major concern, particularly as this is a 100% privately held firm (firms like this are typically strong and resistant to turnover). Product has lost personnel every year since 2007, totaling 24 individuals. A key Managing Director responsible for overseeing the firm's research activity left the firm shortly after we received the completed questionnaire.
ASB Real Estate Investments	Much smaller real estate firm than peers; team is very small at 36 professionals. Fund size is also smaller at 75 investments. Queue is significant at $445 million.
Deutsche Asset & Wealth Mgmt.	Personnel turnover is a major concern despite firm's large presence in core real estate space. Firm has lost 69 real estate professionals since 2007 including 18 in 2012's internal restructuring. Many team members are relatively new to the product. Firm real estate assets have significantly and steadily declined over the past seven years. Product has lost $763 million in assets and 39 client accounts over last two years.
Heitman	Non-core property holdings of the fund are significant at 17%, well above our tolerance. Fund's queue is substantial at $735 million.
Invesco	After departure of a key person, firm suffered large asset losses of $560 million. Firm hired two replacements for this person, but their tenures are short relative to peers.
L&B Realty	Fund is far too concentrated with only 9 properties. Team is significantly smaller than other candidates at only 56 individuals. Non-core assets comprise 12% of the fund and beyond our tolerance.
Morgan Stanley	Fund has high fees (84 bps base fee plus a maximum 35 bps incentive fee). Firm wide real estate assets have declined substantially (9.4 bn to 3.4 bn) from 2007 to 2013. Entry queue is significant and capital would not be called until early 2015.

Prudential	Material non-core assets investments at 10% or greater. Queue for the product is large at $894 million. Allowable fund leverage is also high at 40%.
UBS	Assets lost from 2007-2009 were greater than assets gained. In 7 of the last 8 annual periods with positive real estate market returns, the fund has underperformed on a net of fee basis.

The selected managers, first listed in the Executive Summary above, are shown again in the following table.

Firm	Product
AEW	AEW Core Property Trust
JP Morgan	Strategic Property Fund
Principal Real Estate Investors	Principal U.S. Property

The remainder of this report describes these finalist candidates in more detail.

III. FINALIST COMPARISON

In the remainder of the report, we compare the finalists, including:

- Fund Comparison
- Fund Exposure by Property Type
- Fund Investment Queue
- Fees & Expenses Comparison
- Individual Manager Pros and Cons
- Performance Comparison
- Complete Questionnaire Responses (Section VI)

Product Comparison

The table below compares key product details of the finalists as of 3/31/2014:

Firm	Year Firm Founded	Product Assets 3/31/14	Fund Managers/ Real Estate Professionals	Investment Professionals	Typical Number of Fund Investments	Fund Leverage: Current / Max
AEW	1981	$5.6 billion	2/40	179	113	28/30%
JP Morgan	1984	$21.6 billion	2/215	406	165	23/35%
Principal	1998	$6.2 billion	4/1	214	120	17/33%

Fund Exposure by Property Type

The table below compares the 3/31/2014 exposures to the four core property types (Office, Industrial, Multi-family, and Retail). Non-core assets are typically volatile sectors which include hotels, self-storage and assisted living properties.

Firm	Office	Industrial	Multi Family	Retail	Non-Core Assets	Other (Land/Cash)
AEW	38	14	25	20	0	3
JP Morgan	44.8	8.3	24.6	18.6	1.1	2.7
Principal	42	17	17	19	3	2

Fund Queue

The table below compares the queue as of 3/31/2014.

Firm	Queue: Dollar Amount ($ Millions)	Estimated Waiting Time for Capital Calls (Quarters)
AEW	120	1-2
JP Morgan	1,600	4-5
Principal	186	1-2

Fees & Expenses Comparison

The table below compares the fund fee schedules for a $50 million investment:

Firm	Management Fees	Incentive Fees	Maximum Fees
AEW	**0.95%**	n/a	**0.95%**
JP Morgan	**1.00%**	n/a	**1.00%**
Principal	**0.95%**	n/a	**0.95%**

Individual Manager Pros and Cons

The tables below provide a comparison of the pros and cons of the finalists:

AEW Capital Management

Pros	Cons
• AEW is an autonomous, wholly-owned subsidiary of Natixis Global Asset Management (headquartered in Paris and Boston with $838 billion in assets) • Firm founded in 1981 • Ample fiduciary liability insurance of $100 million • No history of any litigation since 2007 • Very strong product growth including a doubling of assets in 2013 • No investment professionals have left team since 2007 • Relative short investment queue of only one full quarter (e.g. commitments made by 6/30/14 are anticipated to be called on 10/1/14) • Portfolio limited to four areas of core property with provision for up to 15% outside of core, although typically only 2-3% is opportunistic (e.g. hotels) • Investment process includes following population flows and anticipating supply constraints, especially along East and West Coasts • Low portfolio turnover (5-10% per year) • Moderate total fees at 95 bps	• Firm asset growth lackluster • Firm employees lost similar to employees gained

J.P. Morgan Investment Management

Pros	Cons
• Large and deeply staffed real estate team (406 professionals) • Very tenured and experienced team. The thirteen key members of the team average 14 years of experience on the SPF strategy • Firm wide real estate assets are at an all-time high at $3.7 billion • Fund has a pure core orientation, investing only in high-quality office, retail, residential and industrial assets in dominant geographic regions • The SPF fund has exhibited a consistently lower volatility relative to the index and has the second lowest volatility profile. • The SPF fund has beaten the index over all trailing time periods while maintaining their lower volatility profile	• 32 investment professionals related to the US Real Estate team have been lost over the last five years. • SPF's contribution queue is $2,879.5 million (13.6% of the Fund's NAV). We can expect the fund to call new commitments in approximately 15 to 18 months. • Employees lost in 2013 totaled 11 • Fees are slightly higher at 100 basis points •

Principal Real Estate Investors

Pros	Cons
• Stable organization • Firm registered with SEC in 1999 • Strong client growth in product • No investment professionals have left team since 2007 • Firm assets are at an all-time high • Assets lost have been minimal over the past seven years • Investment queue of only 3 full quarters (e.g. commitments made by 6/30/14 are anticipated to be called on 4/1/15) • Property type allocations have been relatively stable • Properties are externally appraised on an annual basis • Maximum leverage for the fund is 33% • Moderately low portfolio turnover (4-17% per year over last 7 years) • Moderate total fees at 95 bps	• Firm asset growth lackluster • Firm employees lost similar to employees gained • Soft dollar usage within the safe harbor Section 28(e) • The fund has latitude to invest in non-stabilized properties (max 15%), REITs (max 2%), and development projects (max 7.5%)

Performance Comparison

The table below is for performance through 3/31/2014. Data longer than one year is annualized. The index is the NCREIF Fund Index – Open End Diversified Core Equity Index (“NFI-ODCE” or “ODCE”). All numbers below are percentages.

Calendar Year Total Returns

Firm	Q1 2014	2013	2012	2011	2010	2009	2008	2007
AEW	2.3	12.3	9.5	16.4	18.2	-25.6	-5.9	--
JP Morgan	2.4	15.9	12.1	16.0	14.2	-26.5	-8.1	16.7
Principal	2.3	14.6	12.7	16.7	17.3	-30.8	-12.2	14.7
Index	**2.5**	**14.0**	**11.0**	**16.0**	**16.4**	**-29.8**	**-10.0**	**16.0**

Trailing Period Total Returns as of 3/31/14

Firm	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
AEW	12.6	11.0	12.2	13.7	9.8	--	--
JP Morgan	14.7	13.8	14.2	15.0	8.4	4.2	8.3
Principal	13.7	13.5	14.3	15.9	7.3	2.8	7.0
Index	**13.8**	**12.3**	**13.1**	**14.8**	**7.3**	**3.0**	**7.2**

Trailing Period Volatility (Standard Deviation of Total Returns)

Firm	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
AEW	1.27	1.25	1.82	2.00	11.29	--	--
JP Morgan	1.58	1.32	1.65	1.64	6.83	9.28	8.38
Principal	1.84	1.53	2.22	2.51	8.88	10.40	9.23
Index*	**1.04**	**1.05**	**1.36**	**2.30**	**10.45**	**10.18**	**8.98**

*Index data as of December 31, 2013. This data will be updated.

Definitions

Excess Returns – Returns in excess of the risk-free rate, a benchmark or in excess of another manager. A positive excess return indicates that the manager outperformed the benchmark for that period.

Given two return series (typically a manager and a benchmark), $x_1, \ldots, x_n$ and $y_1, \ldots, y_n$, the excess return series is defined as $er_1, \ldots, er_n = x_1\text{-}y_1, \ldots, x_n\text{-}y_n$

Annualized Excess Return = Annualized Manager Return – Annualized Index Return

Standard Deviation – A measure of the average deviations of a return series from its mean; often used as a risk measure. A large standard deviation implies that there have been large swings or volatility in the manager's return series.

$$StDev_{(SD)} = \frac{[\sum (x_i\text{-}X)^2]^{1/2}}{n} \text{ or Square Root of the Variance} = \sqrt{(Var)}$$

$$\text{Ann StDev} = SD * \sqrt{(N_y)}$$

x_i = the *ith* observation
X = mean return for series
n = the number of observations
N_y = the number of periods in a year (4 if quarterly data, 12 of monthly data)

Tracking Error – A measure of the amount of active risk that is being taken by a manager. This statistic is computed by subtracting the return of a specified benchmark or index from the manager's return for each period and then calculating the standard deviation of those differences. A higher tracking error indicates a higher level of risk – not necessarily a higher level of return – being taken relative to the specified benchmark. Tracking error only accounts for deviations away from the benchmark, but does not signal in which directions these deviations occur (positive or negative).

TE = Standard Deviation of Excess Return

Information Ratio – This statistic is computed by subtracting the return of the market from the return of the manager to determine the excess return. The excess return is then divided by the standard deviation of the excess returns (or Tracking Error) to produce the information ratio. This ratio is a measure of the value added per unit of active risk by a manager over an index. Managers taking on higher levels of risk are expected to then generate higher levels of return, so a positive IR would indicate "efficient" use of risk by a manager. This is similar to the Sharpe Ratio, except this calculation is based on excess rates of return versus a benchmark instead of a risk-free rate.

$$IR = \frac{\text{Excess Return}}{\text{Tracking Error}}$$

Sharpe Ratio – This statistic is computed by subtracting the return of the risk-free index (typically 91-day T-bill or some other cash benchmark) from the return of the manager to determine the risk-adjusted excess return. This excess return is then divided by the standard deviation of the manager.

A manager taking on risk, as opposed to investing in cash, is expected to generate higher returns and Sharpe measures how well the manager generated returns with that risk. In other words, it is a measurement of efficiency utilizing the relationship between annualized risk-free return and standard deviation. The higher the Sharpe Ratio, the greater efficiency produced by this manager. For example, a Sharpe Ratio of 1 is better than a ratio of 0.5.

$$\text{Sharpe} = \frac{\text{Ann Rtn}(x) - \text{Ann Rtn}(R_f)}{\text{Standard Deviation of } x}$$

R_f = Risk-free rate

Alpha – The incremental return of a manager when the market is stationary. In other words, it is the extra return due to non-market factors. This risk-adjusted factor takes into account both the performance of the market as a whole and the volatility of the manager. A positive alpha indicates that a manager has produced returns above the expected level at that risk level, and vice versa for a negative alpha. Alpha is the Y intercept of the regression line.

$$\text{Alpha}_{(a)} = X - [\text{Beta}*Y]$$

X = the mean return for the manager
Y = the mean return for the index

Beta – This is a measure of a portfolio's volatility. Statistically, beta is the covariance of the portfolio in relation to the market. A beta of 1.00 implies perfect historical correlation of movement with the market. A higher beta manager will rise and fall more rapidly than the market, whereas a lower beta manager will rise and fall slower. For example, a 1.10 beta portfolio has historically been 10% more volatile than the market.

$$\text{Beta}_{(\beta)} = \frac{[(n)*\sum(x_i*y_i)] - (\sum x_i)(\sum y_i)}{[(n)*\sum(y_i^2)] - (\sum y_i)^2}$$

n = the number of observations
xi = the return of the first data series (*ith* observation)
yi = the return of the second data series (*ith* observation)
Generially, xi = the manager's return series and yi will be a specified index (benchmark)

R-Squared – Otherwise known as the *Coefficient of Determination*, this statistic, like beta, is a measure of a manager's movement in relation to the market. Generally, the R-Squared of a manager versus a benchmark is a measure of how closely related the variance of the manager returns and the variance of the benchmark returns are. In other words, the R-Squared measures the percent of a manager's return patterns that are "explained" by the market and ranges from 0 to 1. For example, an r-squared of 0.90 means that 90% of a portfolio's return can be explained by movement in the broad market (benchmark).

$$\text{R-Squared} = (r)^2$$

r = correlation coefficient

VI. QUESTIONNAIRE RESPONSES

The questionnaire responses for the finalist candidates appear in their complete form in the following tabs.

Tab A – AEW

Tab B – JP Morgan

Tab C – Principal

Disclosures

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