Mid-Atlantic UFCW and Participating Employers Pension Fund

April 16, 2019

INVESTMENT PERFORMANCE SERVICES, LLC

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Mid-Atlantic UFCW and Participating Employers Pension Fund

Preliminary Monthly Performance Analysis

Period Ending

February 28, 2019

Summary of Cash Flows

	Last Month	Year-To-Date
Beginning Market Value	$97,384,285	$91,992,846
Net Cash Flow	$2,970,201	$3,310,508
Net Investment Change	$1,976,634	$7,027,766
Ending Market Value	$102,331,120	$102,331,120

- The present assumed actuarial rate as determined by the plan actuary 8.0%.

Current vs. Policy

	Current	Current	Policy	Policy Range	Difference	Difference
Large Cap Equity	$26,996,161	26.38%	25.00%	20.00% - 30.00%	1.38%	$1,413,381
Small/Mid Cap Equity	$11,302,024	11.04%	10.00%	5.00% - 15.00%	1.04%	$1,068,912
Short Duration High Yield Fixed Income	$11,020,685	10.77%	10.00%	5.00% - 15.00%	0.77%	$787,574
Real Estate - Core	$9,087,857	8.88%	10.00%	5.00% - 15.00%	-1.12%	-$1,145,255
Real Estate - Value Add	$4,200,390	4.10%	5.00%	0.00% - 10.00%	-0.90%	-$916,166
Opportunistic Strategies	$5,207,465	5.09%	5.00%	0.00% - 10.00%	0.09%	$90,909
Private Equity	$1,016,946	0.99%	5.00%	0.00% - 10.00%	-4.01%	-$4,099,610
GTAA	$30,745,892	30.05%	30.00%	25.00% - 35.00%	0.05%	$46,556
Cash	$2,753,699	2.69%	--	--	2.69%	$2,753,699
Total	**$102,331,120**	**100.00%**	**100.00%**			

- Effective date of Policy is TBD.

Gross of Fees

	Ending February 28, 2019			
	Market Value	% of Portfolio	1 Mo	YTD
Composite	**$102,331,120**	**100.0%**	**2.1%**	**7.7%**
Total Equity	**$38,298,185**	**37.4%**	**3.7%**	**13.0%**
CRSP US Total Market TR USD			*3.5%*	*12.4%*
Vanguard Index Trust Total Stk Mkt	$26,996,161	26.4%	3.5%	12.4%
CRSP US Total Market TR USD			*3.5%*	*12.4%*
Rothschild Asset Management	$11,302,024	11.0%	4.2%	14.7%
Russell 2500			*4.7%*	*16.8%*
Total Short Duration High Yield	**$11,020,685**	**10.8%**	**0.8%**	**3.0%**
BofA ML - U.S. HY Cash Pay 1-3 Yr BB			*0.9%*	*3.1%*
Chartwell Investment Partners Short Duration High Yield	$11,020,685	10.8%	0.8%	3.0%
BofA ML - U.S. HY Cash Pay 1-3 Yr BB			*0.9%*	*3.1%*
BBgBarc 1-3 Yr BB U.S. Constrained Index			*0.8%*	*2.9%*
Total Real Estate	**$13,288,247**	**13.0%**		
American Core Realty Fund, LLC	$9,087,857	8.9%		
Intercontinental U.S. Real Estate Investment Fund, LLC	$4,200,390	4.1%		
Total GTAA	**$30,745,892**	**30.0%**	**2.1%**	**9.4%**
65% MSCI World Index/35% CitigroupWGBI			*1.6%*	*7.3%*
First Eagle Global Value Fund	$30,745,892	30.0%	2.1%	9.4%
65% MSCI World Index/35% CitigroupWGBI			*1.6%*	*7.3%*

Gross of Fees

	Ending February 28, 2019			
	Market Value	% of Portfolio	1 Mo	YTD
Total Opportunistic Strategies	**$5,207,465**	**5.1%**		
ICE BofAML US High Yield TR				
HFRX Event Driven Index				
Corbin ERISA Opportunity Fund, L.P.	$4,246,793	4.2%	0.8%	2.1%
Income Objective Return 8%			*0.6%*	*1.3%*
ICE BofAML US High Yield TR			*1.7%*	*6.4%*
EnTrustPermal Special Opp Fund IV Ltd.	$960,672	0.9%		
HFRX Event Driven Index				
Total Private Equity	**$1,016,946**	**1.0%**		
GCM Grosvenor Secondary Opportunities Fund II, L.P.	$1,016,946	1.0%		
Total Fund Cash	**$2,753,699**	**2.7%**	**0.2%**	**0.3%**
Cash	$2,753,699	2.7%	0.2%	0.3%

Net of Fees

	Ending February 28, 2019			
	Market Value	% of Portfolio	1 Mo	YTD
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EnTrustPermal Special Opp Fund IV Ltd.	$960,672	0.9%		
HFRX Event Driven Index				
Total Private Equity	**$1,016,946**	**1.0%**		
GCM Grosvenor Secondary Opportunities Fund II, L.P.	$1,016,946	1.0%		
Total Fund Cash	**$2,753,699**	**2.7%**	**0.2%**	**0.3%**
Cash	$2,753,699	2.7%	0.2%	0.3%

Footnotes

- EnTrustPermal Special Opp Fund IV market value and return is as of 9/30/18, plus or minus any flows.
- American Core Realty Fund, Intercontinental U.S. Real Estate Fund, and Grosvenor GCM Secondary Opportunites Fund II are valued quarterly and market values and returns are as of 12/31/18, plus or minus any flows.
- In 2/19, EnTrustPermal Special Opportunities Fund IV received $173,388 to satisfy a capital call from cash.
- In 2/19, Vanguard recieved $2.2M from cash.
- In 2/19, Chartwell recieved $1.0M from cash.
- In 2/19, Rothschild recieved $1.0M from cash.

ASSET ALLOCATION REVIEW

Mid-Atlantic UFCW and Participating Employers Pension Fund

April 16, 2019

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Annualized Expected Returns over 10-20 years

Equity Asset Class	Return	Risk
U.S. Large Cap	7.25%	15.50
U.S. Mid Cap	7.50%	17.50
U.S. Smid Cap	7.63%	19.00
U.S. Small Cap	7.75%	21.00
International Large Cap	7.75%	17.00
International Small Cap	8.00%	20.50
Emerging Markets	9.00%	22.00
Global Equity	7.75%	17.50

Fixed Income Asset Class	Return	Risk
Cash Equivalents	2.50%	0.50
Short-term Gov /Credit	3.00%	2.50
Intermediate Investment Grade	3.25%	4.00
Core Investment Grade	3.50%	5.00
Mortgages	4.50%	5.00
Short Duration High Quality High Yield	5.00%	6.50
High Quality High Yield	6.00%	8.50
Opportunistic High Yield	6.25%	8.75
Multi-Sector Fixed Income	5.00%	6.50
Short Duration Global Bonds	4.00%	6.00
Core Plus Bonds	4.00%	6.00

Alternatives Asset Class	Return	Risk
Multi-Strategy Hedge Fund of Funds	4.75%	6.50
Opportunistic Strategies	8.00%	11.00
Long Short Equity Hedge Fund of Funds	5.75%	10.00
Global Tactical Asset Allocation	6.75%	13.00
Core Real Estate	7.00%	10.00
Value-Add Real Estate	8.00%	12.00
Opportunistic Real Estate	10.00%	15.50
REITS	7.00%	21.00
Private Equity FOF	10.00%	20.00
Private Equity Secondaries	10.00%	18.00
Core Infrastructure	6.50%	12.00
Value-Add Infrastructure	9.00%	16.00
Risk Parity	6.25%	16.00
Commodities	3.75%	18.00

INVESTMENT PERFORMANCE SERVICES, LLC

- IPS Investment Committee January 2019.
- Inflation expectation 2.00%.
- The above chart represents an annualized return forecast for different asset classes using index returns (net of fees). These forecasts are forward-looking assumptions based on reasonable beliefs of the IPS Investment Committee, but are not a guarantee of future performance. Actual results may differ from the forecast above.
-

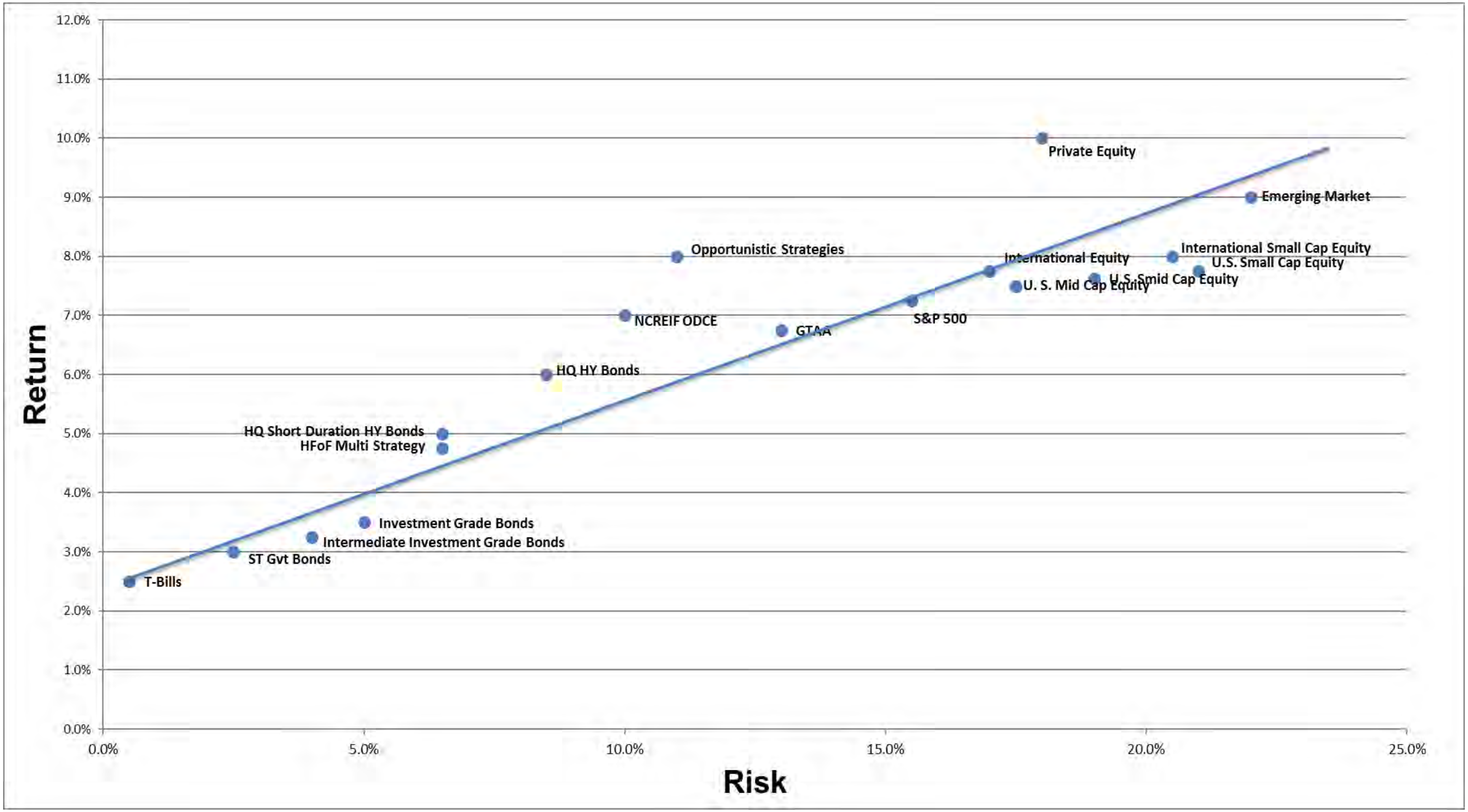
Asset Class Constraints

Total Domestic Equity	60%	Max
Domestic Large Cap Equity	25%	Min
Small, Mid and Smid Cap Equity	20%	Max
International Equity Large Cap	15%	Max
International Small Cap Equity	5%	Max
Cash	5%	Max
Fixed Investment Grade (Includes Short Term & Intermediate)	10%	Min
High Quality High Yield Bonds (Includes Short Duration)	20%	Max
Real Estate – Core	15%	Max
Real Estate – Value Add	5%	Max
Hedge Fund of Funds – Multi Strategy	5%	Max
Opportunistic Strategies	10%	Max
Global Tactical Asset Allocation	10%	Max
Private Equity Secondaries	2.5%	Max

The Asset Allocation modeling requires the mathematical construction of an efficient frontier of various portfolios with distinct asset allocations and risk and return characteristics. The modeling process also requires the imposition of constraints, so that the efficient frontier represents a prudently diversified portfolio with adequate consideration of the liquidity needs and investment time horizon. Unconstrained optimization frequently generates allocations that have superior risk/reward characteristics, but the resulting allocations may not be adequately diversified and/or may have high allocations to illiquid investments.

The constraints shown are used for modeling purposes only. They should not be construed as suggested or recommended allocations, or limits on allocations, to any asset class or investment strategy. Each client fund has different facts, circumstances, time horizon, risk tolerance levels, return objectives, investment preferences, cash flows, and liquidity requirements. As such, each client's investment policy may differ materially from the constraints shown above.

2019 Capital Market Assumptions



Asset Class Correlations

Assumption table:	US Large Cap Equity	US Mid Cap Equity	US Smid Cap Equity	US Small Cap Equity	Int'l Equity	Int'l Small Cap Equity	Emerging Markets Equity	Cash	Short Term Govt / Credit	Interm. Invest. Grade	Core Invest. Grade	Short Duration High Yield	High Yield	Real Estate Core	Real Estate Value Add	Private Equity	HFoF Multi-Strategy	Opp. Strategies	GTAA
US Large Cap Equity	1.00																		
US Mid Cap Equity	0.96	1.00																	
US Smid Cap Equity	0.93	0.98	1.00																
US Small Cap Equity	0.91	0.96	0.98	1.00															
Int'l Equity	0.89	0.86	0.82	0.78	1.00														
Int'l Small Cap Equity	0.85	0.85	0.81	0.77	0.96	1.00													
Emerging Markets Equity	0.80	0.81	0.76	0.72	0.87	0.87	1.00												
Cash	-0.07	-0.11	-0.08	-0.07	-0.08	-0.10	-0.09	1.00											
Short Term Govt / Credit	0.01	0.02	-0.01	-0.05	0.14	0.16	0.21	-0.01	1.00										
Int. Investment Grade	0.04	0.07	0.02	-0.02	0.15	0.18	0.24	-0.11	0.86	1.00									
Core Investment Grade	0.02	0.04	-0.01	-0.05	0.12	0.14	0.20	-0.10	0.79	0.97	1.00								
Short Duration High Yield	0.57	0.66	0.61	0.55	0.63	0.69	0.70	-0.23	0.26	0.33	0.28	1.00							
High Yield	0.65	0.72	0.68	0.63	0.72	0.74	0.76	-0.23	0.21	0.28	0.25	0.93	1.00						
Real Estate Core	0.12	0.08	0.09	0.10	0.03	0.00	-0.08	-0.11	-0.42	-0.20	-0.16	-0.20	-0.10	1.00					
Real Estate Value Add	0.14	0.10	0.10	0.12	0.04	0.01	-0.07	-0.11	-0.40	-0.19	-0.15	-0.20	-0.10	0.99	1.00				
Private Equity	0.91	0.96	0.98	0.99	0.78	0.77	0.72	-0.07	-0.05	-0.02	-0.05	0.55	0.63	0.10	0.12	1.00			
HFoF Multi-Strategy	0.77	0.77	0.74	0.70	0.78	0.81	0.73	-0.11	-0.07	-0.01	-0.04	0.63	0.69	0.09	0.09	0.70	1.00		
Opp. Strategies	0.69	0.76	0.72	0.68	0.75	0.77	0.79	-0.21	0.21	0.27	0.23	0.91	0.98	-0.12	-0.12	0.68	0.69	1.00	
GTAA	0.94	0.91	0.86	0.82	0.96	0.93	0.88	-0.06	0.21	0.24	0.21	0.62	0.70	0.05	0.06	0.82	0.76	0.74	1.00

A Correlation of 1.00 indicates two series move perfectly together while a -1.00 shows they move perfectly opposite one another.

Efficient Frontier Analysis

Efficient Frontier Report										
Asset	Portfolio 1	Portfolio 2	Portfolio 3	Portfolio 4	Portfolio 5	Portfolio 6	Portfolio 7	Portfolio 8	Portfolio 9	Portfolio 10
US Large Cap Equity	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	32.50
US Mid Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
US Smid Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
US Small Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.73	20.00
Int'l Equity	0.00	0.00	0.00	0.00	0.00	0.00	5.39	12.95	15.00	15.00
Int'l Small Cap Equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	5.00	5.00
Cash	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Short Term Govt / Credit	64.34	54.74	49.21	36.24	11.04	0.00	0.00	0.00	0.00	0.00
Int. Investment Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Core Investment Grade	0.00	0.00	3.75	9.58	26.56	27.50	17.11	10.00	10.00	10.00
Short Duration High Yield	0.00	0.00	0.00	0.00	5.43	0.00	0.00	0.00	0.00	0.00
High Yield	0.00	0.00	0.00	0.00	0.00	15.00	20.00	18.69	5.77	0.00
Real Estate Core	5.66	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	0.00
Real Estate Value Add	0.00	0.26	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Private Equity	0.00	0.00	0.00	0.00	1.97	2.50	2.50	2.50	2.50	2.50
HFoF Multi-Strategy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Opp. Strategies	0.00	0.00	2.05	9.18	10.00	10.00	10.00	10.00	10.00	10.00
GTAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Return	4.50	4.92	5.33	5.74	6.13	6.51	6.87	7.21	7.51	7.60
Risk	4.22	4.36	4.74	5.29	5.99	6.78	7.80	8.98	10.48	13.56
Return/Risk	1.07	1.13	1.12	1.08	1.02	0.96	0.88	0.80	0.72	0.56

* Compound annual return.

* Returns based on a geometric calculation.

Current Policy Comparison

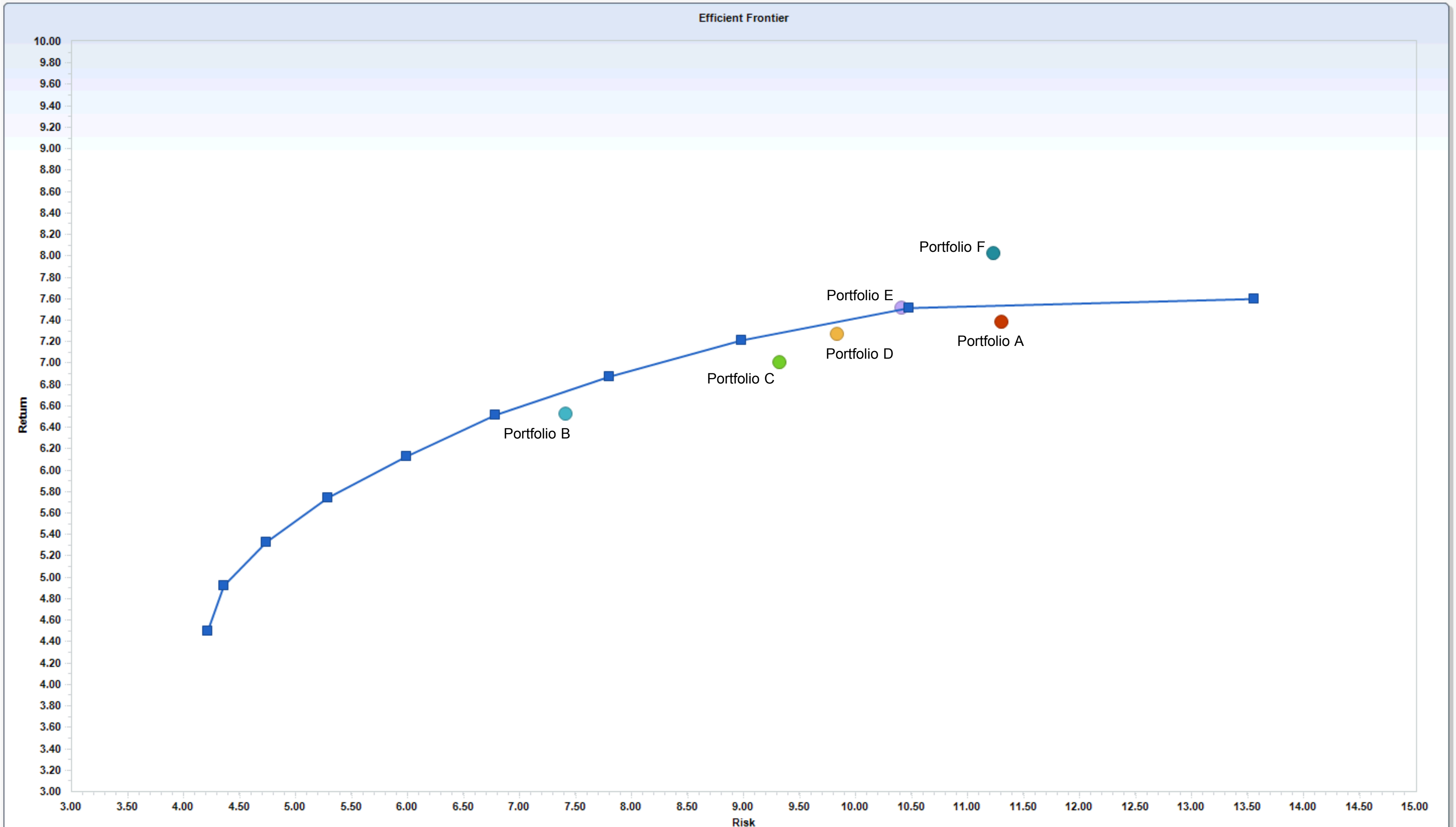
	% Asset Class Target												
	US LC Equity	SMID Cap Equity	Int'l Equity	Fixed Income Interm	SDHY	Real Estate Core	Real Estate Value Add	Opp	GTAA	Private Equity	Expected Return	Risk	Coments
Mid-Atlantic UFCW and Participating Employers Pension Fund Portfolio A	25.0	10.0	0.0	0.0	10.0	10.0	5.0	5.0	30.0	5.0	7.38%	11.31	Current Policy
Scenario 1 Portfolio B	17.5	5.0	5.0	20.0	20.0	10.0	7.5	7.5	5.0	2.5	6.52%	7.41	6.50% Assumption Rate
Scenario 2 Portfolio C	25.0	7.5	7.5	10.0	17.5	10.0	5.0	10.0	5.0	2.5	7.00%	9.32	7.00% Assumption Rate
Scenario 3 Portfolio D	25.0	7.5	7.5	7.5	12.5	10.0	10.0	5.0	10.0	5.0	7.27%	9.84	7.25% Assumption Rate
Scenario 4 Portfolio E	25.0	10.0	5.0	5.0	10.0	10.0	10.0	7.5	10.0	7.5	7.51%	10.41	7.50% Assumption Rate
Scenario 5 Portfolio F	25.0	12.5	7.5	5.0	2.5	5.0	15.0	15.0	0.0	12.5	8.02%	11.23	8.00% Assumption Rate

Efficient portfolios at each assumption rate.

Scenarios are shown for illustrative purposes.

Blue	New asset class

Efficient Frontier Comparison



* Compound Annual Return

Glossary of Investment Terminology

Total Return	The annual return on an investment including appreciation, depreciation and income (interest, dividends, net operating income).
Alpha	The excess return (positive or negative) generated by active portfolio management and security selection, relative to a benchmark.
Beta	A historical measure of an investment's volatility relative to the market. The beta of the market is 1.0 (as represented by a benchmark such as the S&P 500 Index). A beta of greater than 1.0 indicates an investment with greater volatility than the benchmark. A beta of less than 1.0 indicates less volatility than the benchmark.
Standard Deviation	Standard deviation is a statistical measurement of the dispersion of a set of data from its mean. The more spread apart the data are, the greater the standard deviation.
Risk	For an investment portfolio, risk is typically defined as the volatility of the returns, as measured by calculating the standard deviation. The risk does not necessarily indicate the risk of loss, but does indicate the risk of inconsistent returns.
Capture Ratio	Calculates how well a manager performs in a rising or falling market as a percentage of a benchmark. In a rising market, a percentage of 100 or better is preferred, and indicates the manager exceeded the benchmark (upside capture ratio). In a falling market, a percentage of less than 100 is preferred, indicating that the manager lost less than the benchmark (downside capture ratio).
Correlation	A statistical measure of how two asset classes perform in relation to each other. Asset classes with a correlation of 1.0 have perfect positive correlation (exactly the same). Assets with perfect negative correlation of -1.0 will perform equally but in opposite directions.
Efficient Frontier	A series of portfolios with the maximum expected return for any level of risk, which is calculated based on assumptions of risk, return and correlation. These portfolios are shown graphically on a risk and return chart, and represent the most efficient tradeoff between risk and return.
Market Cap	The dollar value of a corporation, which is calculated by multiplying the share price and the number of outstanding shares.
Large Cap	Stocks which typically have a market capitalization of $10 billion or higher.
Mid Cap	Stocks which typically have a market capitalization of $2 to $10 billion.
Small Cap	Stocks which typically have a market capitalization of $2 billion or less.
Geometric Calculation	Geometric Calculations are used when determining an annualized investment return and tends to dampen the effect of very high or very low values. The result is a number that is smaller than (or equal to) the arithmetic average of the values.
Compound Annual Returns	Compound annual returns show the annual investment return, assuming the investment grew at a constant rate, and reflects the impact of the time in the calculation of an investment return.
Return/Risk Ratio	The return/risk ratio is the expected return of an investment divided by the expected standard deviation (risk). When comparing return/risk ratios a higher value is presumed to be better than a lower value

Memo

To: Board of Trustees - Mid-Atlantic UFCW and Participating Employers Pension Fund

From: Richard I. Sichel, Jr.

CC: Fund Administrator; Fund Counsel

Date: April 16, 2019

Re: Hamilton Lane Secondary Fund V On-Site Due Diligence

Executive Summary

Hamilton Lane Advisors, L.L.C. ("Hamilton Lane" or the "firm") was founded in 1991 and currently has approximately $57 billion of discretionary assets under management and provides nondiscretionary advisory services for approximately $375 billion of assets. The firm provides advisory services and manages customized separate accounts and specialized fund vehicles across primary funds, secondary investments, and co-investments. The firm is currently raising $3 billion for Hamilton Lane Secondary Fund V LP "(HLSF V" or the "Fund").

Hamilton Lane has shown the ability leverage their global network to source, evaluate and invest in proprietary secondary deals that have generated attractive rates of return for limited partners. Due to their market presence, they are often viewed as a preferred limited partner by general partners, enabling them to access high quality deal flow. The firm's database of information on over 4,100 private equity funds and 50,000 underlying portfolio companies often provides an information advantage in evaluating opportunities. In addition, the large dedicated secondary team has been a key attribute to their success. Additionally, the firm has significant experience with Taft-Hartley and ERISA investors. While the target size for HLSF V represents a meaningful increase relative to past funds, Hamilton Lane's secondary deal flow and large dedicated team suggests they should be able to successfully invest the increased capital.

Manager Research suggests that the IPS Investment Committee consider Hamilton Lane Secondary Fund V LP for client use (***strategy has been approved for client use by the IPS Investment Committee***).

Meeting Date	**Location**	**Consultant Attending**
October 29, 2018	Hamilton Lane - Bala Cynwyd, PA	Chris McDonough, Co-CIO

Hamilton Lane Attendance:
Stephen Brennan, Managing Director
Keith Brittain, Managing Director
Dennis Scharf, Managing Director
Ryan Cooney, Principal
Thomas Kerr, Managing Director
Megan Milne, Vice President
Emily Nomeir, Principal

Background

Hamilton Lane recently launched HLSF V, for which they are targeting $3 billion, an increase of $1.1 billion over Hamilton Lane Secondary Fund IV ("Fund IV"). IPS previously approved HLSF IV for investment and clients committed a total of $304 million.

IPS Manager Research Department attended the Hamilton Lane Annual Investor Conference on October 3, 2018 and conducted on site due diligence with members of Hamilton Lane's Secondary team on October 29, 2018. Prior to the meeting, all materials provided by Hamilton Lane via Intralinks related to Fund V were reviewed. The materials provided by Hamilton Lane are on file.

Private Equity Secondary Market Update

Private equity secondary transaction volume and fundraising has grown concurrent with the growth in overall private market assets. While secondary market activity has increased threefold since 2008 to an expected record high of $60 billion in 2018, it represents less than 2% of the $3.3 trillion of private market assets outstanding.[1,2]

Traditional limited partner driven transactions continue to represent the majority of secondary volume; however general partner-led transactions have grown from $1.5 billion (6% of all secondary transactions) in 2012 to $14 billion (24%) in 2017[3]. Most secondary market participants expect this trend to continue in coming years as general partners play a more active role management of fund LPs and earlier vintage private equity funds approach end of life. Today there is over $600 billion of NAV in funds with vintage years of 2005 to 2008.[4]

Given the strong performance in both public and private markets since the financial crisis, pricing in the secondary market has increased meaningfully. The average discount for buyout transactions and venture capital transactions was 2% and 15% in the first half of 2018, respectively, compared to approximately 30% in 2009 for both.[5]

Hamilton Lane - Firm Overview

Hamilton Lane was founded in 1991 and currently has approximately $57 billion of discretionary assets under management and provides nondiscretionary advisory services for approximately $375 billion of assets. The firm provides advisory services and manages customized separate accounts and specialized fund vehicles across primary funds, secondary investments, and co-investments. They also provide fund administration. They estimate 20% of firm revenues come from non-discretionary advisory services. Taft-Hartley clients represent the largest percentage of the investor base (23%). The firm is headquartered in Bala Cynwyd, PA (a suburb of Philadelphia), with 14 additional offices globally, and employs over 340 employees worldwide, including 110 investment professionals. The firm frequently appears on "best places to work" lists.

In 2017, the firm completed an initial public offering on the NASDAQ. Post IPO, ownership is widely distributed through the employee base with employees owning 60% of the shares. The stock has doubled in price since going public.

The firm is a meaningful participant in the private markets, having allocated $27.8 billion to primaries, $710 million to secondaries, and $1.2 billion to co-investment in 2017. They have approximately $281 million of firm capital invested alongside clients in various vehicles.

Hamilton Lane Private Equity Secondary Program

Overview

Hamilton Lane began investing in private equity secondary transactions in 2000. They seek to leverage their platform in sourcing and evaluating secondary opportunities. They estimate they monitor $4.4 trillion of private

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[1] Source: Greenhill Secondary Market Trends & Outlook (July 2018)
[2] Source: Hamilton Lane
[3] Source: Greenhill Secondary Market Trends & Outlook, January 2018
[4] Source: Hamilton Lane
[5] Source: Greenhill Cogent (September 2018)

market assets across their business, equivalent to 90% of the private equity fund universe. Their database contains information on 4,100 active funds and over 50,000 portfolio companies, including actual cash flows and company information which enhances their diligence process. Historically, 70% of secondary investments made by Hamilton Lane have been in funds recommended by the firm's Fund Investment Team for other products. As a consultant and an allocator in the private equity space, they are frequently viewed as a strategic long-term partner to general partners, an increasingly important factor in a market where general partners are becoming more selective about who they will allow limited partner interests to be transferred to.

As previously noted, purchase price discounts have decreased dramatically post financial crisis. In evaluating and structuring transactions, Hamilton Lane is mindful that they can generate returns through both upfront discounts as well as post-purchase price appreciation. Hamilton Lane believes many general partners are conservative regarding ongoing portfolio company valuations. This creates an opportunity to identify funds that are at inflection points where they will have a meaningful uptick in valuation due to an exit or other event. Secondary transactions typically close six to nine months after the record date which can allow secondary buyers to realize the uplift in valuation between the record date and closing date. This approach has allowed Hamilton Lane to consistently achieve a higher average discount than the market. In 2016 and 2017, Hamilton Lane achieved discounts of 12% and 16% on transactions in HLSF IV based on the purchase price relative to the first post-closing reported net asset value.

At $3.0 billion, HLSF V will be $1.1 billion larger than HLSF IV. The larger fund size will likely result in an increase on the number of deals completed and larger deal sizes. Hamilton Lane expects to complete approximately 50-60 transactions at an average size of $55 to $60 million. Hamilton Lane notes the increased fund size is supported by the 29% annual deal flow growth rate over the last 10 years, resulting in $62 billion of opportunities evaluated in 2017. The deal flow run rate for 2018 is in excess of $100 billion. The table below shows the number of transactions and average size in pervious vehicles.

As of March 31, 2018	Pre-Fund	HLSF I	HLSF II	HLSF III	HLSF IV
Amount Committed ($ millions)	387	361	570	915	995
# of Transactions	13	20	34	35	25
Average Transaction Size ($ millions)	29.8	18.1	16.8	26.1	39.8

The growth in the dedicated secondary investment team over the past six years also supports the increase in fund size. The increase in average deal size across HLSF II, III, and IV has not negatively impacted performance.

Secondary Investment Team

The secondary team consists of 25 investment professionals in offices across North America, Europe, South America, and Asia. Except for four individuals, the team is completely dedicated to secondary transactions. The team has tripled in size in the last six years and has only had one departure (a Vice President from the London office). On average the team has been with Hamilton Lane for more than 14 years and has 23 years of private equity experience. At the current size, the team can run six deal teams at a time, with each team able to evaluate multiple transactions.

The group is led by Tom Kerr, Global Head of Secondaries, who has been with the firm since 1999. Mr. Kerr was a member of the Fund Investment Team, responsible for due diligence of primary fund investment opportunities and also worked in the client relations group. In 2007, the firm decided to carve out a dedicated secondaries team under the leadership of Mr. Kerr.

All secondary transactions must be approved by the firm's 12-member Secondary Investment Committee, headed by Mr. Kerr. Six of the members have been involved in all previous secondary fund and three members have been with the firm for every secondary transaction completed. There are three new members added for Fund V, all of whom are members of the secondary team.

Hamilton Lane utilizes a pooled compensation model where carried interest from all products is shared across the employee base. This compensation model is intended to encourage cooperation and collaboration across investment groups.

Investment Process

Hamilton Lane leverages their broad global network to source secondary investment opportunities through three channels:

- General Partners: through their primary fund investment business, Hamilton Lane has become a preferred partner for many general partners. Since January 2016, 45% of closed transactions were sourced directly from the general partner channel.
- Limited Partners: Hamilton Lane's investment and business development functions lead to regular contact with the LP community which positions them favorably with potential selling limited partners. They have also implemented an outbound calling program to target traditional and non-traditional limited partners.
- Intermediaries: While the involvement of intermediaries is common in secondary transactions, Hamilton Lane typically only participates in situations where the number of secondary bidders has been substantially reduced due to restrictions placed on the process by the underlying private equity managers. That said, they recognize the importance of intermediaries in the process and maintain open lines of communication.

Sourced secondary opportunities are entered into a proprietary deal management system and screened by the secondary team. The secondary team is evaluating transactions for the following:

- GP Quality: Are the general partners of the funds for sale considered high quality by Hamilton Lane's primary fund team?
- Information Availability: Does the secondary investment team have access to information about the funds for sale and underlying portfolio companies through Hamilton Lane's various business lines?
- Competition: Is the transaction being widely marketed or does Hamilton Lane's status as a preferred limited partner afford them an advantage?

For those opportunities that pass the screen, initial quantitative and qualitative analysis is performed. This analysis includes an evaluation of the general partner's track record, team cohesion, value creation, deal sourcing and competitive positioning.

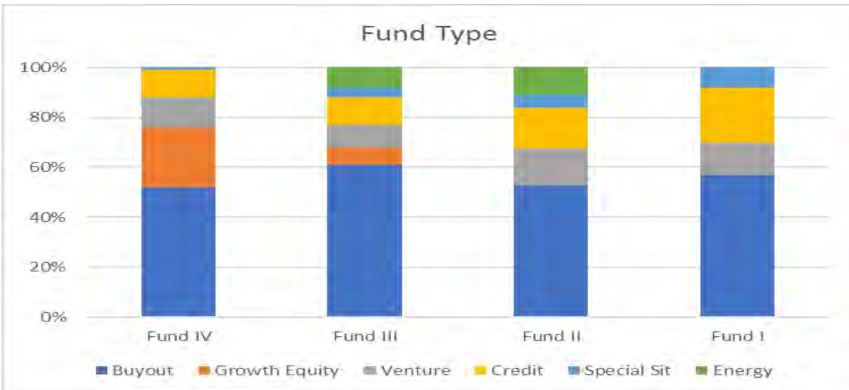
Full due diligence is completed on opportunities that clear the initial due diligence. This includes an in-depth review of a fund's portfolio companies and the preparation of bottom-up financial projections for each portfolio company and potential return assumptions for uncalled capital. Projections typically include an upside case, which usually comes from the GP, a base case, and a downside case. Hamilton Lane has been modeling multiple contraction in the analysis of transactions for Fund IV and expects to the same for Fund V.

Prior to determining a bid price, the Secondary Investment Committee reviews a report on the opportunity from the secondary team. For deals approved by the Secondary Committee they provide a price range which allows the secondary investment team to negotiate with the seller.

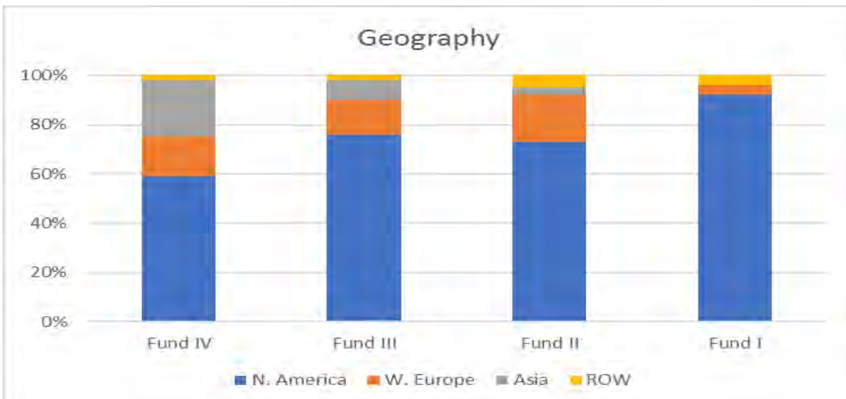
In 2017, the secondary team screened $62 billion in transactions, diligenced 41%, bid on 5%, and committed to 2%. Since 2008, they invested $3.7 billion in in over $300 billion of deal flow sourced.

Portfolio Construction

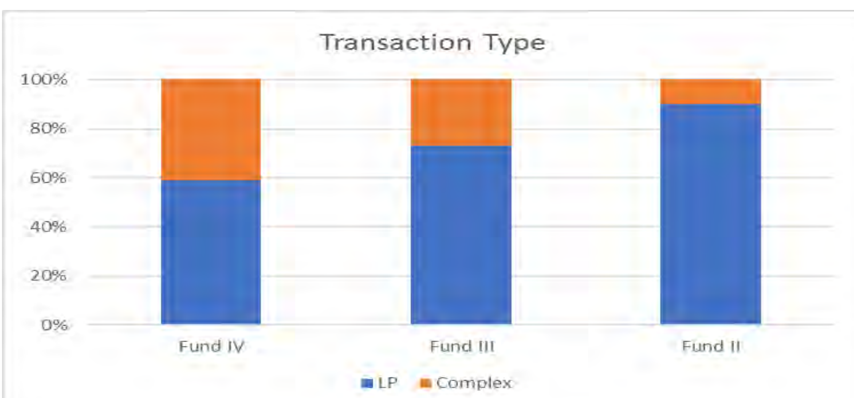
The portfolio is expected to be diversified by vintage year, fund type, geography and manager. The following charts show the evolution of previous Hamilton Lane Secondary Funds by certain metrics.



Historically, Buyouts have represented approximately 50%-60% of capital. Strong recent performance of Growth Equity led to an increased exposure in Fund IV as sellers sought to monetize gains. Energy exposure in Funds II and III were a function of stressed performance in those funds.



The Hamilton Lane Secondary Funds have become more geographically diverse over time with North American exposure decreasing from 92% of Fund I to 59% of Fund IV. Exposure to Asia and Europe have increased as Hamilton Lane has increased their presence in those areas.



As discussed in the market background section, GP-led transactions have represented an increasing percentage of overall secondary deal volume and that has also been the case for Hamilton Lane with complex transaction representing 59% deal activity in Fund IV. Breakdown of transaction type for Fund I is not available.

Performance

Hamilton Lane's secondary investing track record as of June 30, 2018 is presented below.

Fund	Vintage	Size ($ million)	Invested ($ million)	Realized ($ million)	Unrealized ($ million)	Net IRR*	Net MOIC**	DPI***
Pre-Fund	N/A	N/A	363	533	2	17.10%	1.5	1.47
I	2005	360	353	426	9	3.80%	1.2	1.21
II	2008	590	571	858	55	15.0%	1.5	1.50
III	2012	909	800	699	460	15.0%	1.4	0.87
IV	2016	1,900	949	242	933	46.0%	1.2	0.26

* Net IRR for Pre-Fund investments not available; gross IRR shown
** MOIC: Multiple of Invested Capital- Measures how much the investment is worth (distributions plus remaining value) relative to the amount invested
*** DPI: Distributed Per Invested- Measures how much the investor has received back relative to the amount invested.

Hamilton Lane's secondary track record across all transactions is a gross weighted IRR of 20% as of June 30, 2018. Each fund has exceeded the MSCI World on a PME (Public Market Equivalent) basis.

Legal, Regulatory, Compliance and Operations

- Hamilton Lane is an SEC-registered investment adviser
- To the extent assets of the Fund constitute "plan assets", Hamilton lane expects to be a qualified professional asset manager under ERISA with respect to any limited partner subject to ERISA.
- The firm states no material legal or regulatory issues of note.
- Hamilton Lane maintains $40 million of E&O policies and $500,000 to $1 million of ERISA Fidelity bond coverage per insured (depending on needs of clients under ERISA).
- Hamilton Lane has retained Ernst & Young for audit services and Gibson Dunn & Crutcher, LLP as external legal counsel.
- Hamilton Lane will likely utilize a line of credit during the investment period in lieu of calling investor capital, which was done on prior funds as well. Utilizing deal-level leverage is typically not part of Hamilton Lane's investment strategy, though the fund documents do allow for its use. Hamilton Lane states they have utilized deal-level leverage for one transaction in the last ten years.

ERISA Considerations and Fund Structure

HLSF V is structured as a Delaware limited partnership. A Delaware limited partnership feeder fund has been established for tax exempt limited partners seeking to avoid "unrelated business taxable income ("UBTI") and a Cayman Islands exempted limited partnership has been established for non-U.S. investors.

HLSF IV qualified as an ERISA "plan assets" vehicle, and Hamilton Lane expects that HLSF V will likely be considered a "plan assets" vehicle as well. Nonetheless, IPS recommends that Trustees defer to their legal counsel to review and evaluate the ERISA considerations relevant to this investment, and potentially negotiate a side letter agreement with Hamilton Lane to address any ERISA fiduciary issues.

Risk Factors

- Illiquidity: Private equity is a long-term asset class and is only appropriate for investors that can "lock up" capital for an extended period. HLSF V has a term of ten years.

- Capital commitment/drawdown/distribution structure: Investors commit an amount to be invested, which is "called" by the private equity manager and invested over time. Fully funding a private equity investment can take several years. Distributions are returned to investors as investments are realized and may be recycled and re-invested rather than distributed in cash during the Fund's investment period.

- Blind pool of assets: Due to the drawdown structure, investors commit to a private equity fund before knowing the underlying portfolio companies. This risk is mitigated with investments purchased on the secondary market, when the majority of portfolio companies are known and can be analyzed before an investment is made.

- J-curve effect: Private equity investments are subject to a "J-curve" during the early years of a fund's life, resulting from a decline in valuations due to a lack of realized investments early on, and management fees being paid on committed, rather than invested capital. Secondary funds are less susceptible to the J-curve than primary funds as secondary funds invest in more mature assets and thus may make distributions back to investors earlier in a fund's life.

- Market growth: The secondary market has experienced significant growth, with heightened competition for assets. Discounts received by secondary buyers have decreased meaningfully since the financial crisis as both public and private markets have appreciated meaningfully.

- Equity / Market Risk and Exit Strategy: A private equity fund's underlying portfolio companies are typically exited via an initial public offering (IPO) or sale to an economic buyer. Equity / market risk will be a factor in any fund holdings requiring a public exit. Market stress or a variety of economic factors could potentially inhibit an exit, which in turn would limit the private equity fund from liquidating their position and returning capital to limited partners in a timely fashion. Longer hold periods may in turn lead to reduced IRRs.

- Lack of benchmarks: Private equity investments usually seek to outperform public equities over a long-term period, and there are few publicly-available private equity benchmarks, which may not be truly representative of a particular private equity fund.

<u>Terms</u>

- $3 billion target size
- 10-year fund term plus two one-year extensions at discretion of the GP plus one additional year with approval of the advisory board plus one additional year with consent of the majority of LPs
- 3-year commitment period
- $5 million minimum investment
- Management fees as follows:

Commitment Amt.	During Commitment Period	After Commitment Period
<$50 million	**1.00%**	Declining by 10% per year
$50 – $99 million	**0.90%**	
$100 million- $149 million	**0.825%**	
>$150 million	**0.75%**	

  - *Management fees increased by 5 bps at the $50-$99 million breakpoint and by 7.25 bps at the $100 million to $149 million breakpoint relative to HLSF IV.*
  - *There is a 10% discount on management fees during the investment period for early close investors. The discount is expected to apply to closes that take place in December 2018 and January 2019.*

  - *Hamilton Lane expressed openness to discussing aggregating commitments across IPS clients. Following the 10/29/18 on-site meeting, Hamilton Lane verbally offered the aforementioned 10% management fee discount to all IPS clients regardless of the timing of closing, provided that at least one IPS client commits to Fund V during the December 2018 or January 2019 close.*

- 12.5% carried interest
- 8% preferred return
- 1% General Partner commitment
- European Waterfall (backend carry to GP)
- Distributions may be recycled if occurring within 18 months of the date of the original investment

<u>Summary</u>

Hamilton Lane has a long, successful history of investing in secondary transactions. Their global platform as an advisor and investor in primary funds, secondary transactions, and co-investments provides them with a competitive advantage in sourcing and evaluating secondary transactions. While the fund size is increasing relative to past funds, their deal flow and large dedicated secondary team suggests they should be able to continue to successfully implement their investment strategy. Finally, the firm has experience with Taft-Hartley and ERISA investors.

Manager Research suggests that the IPS Investment Committee consider Hamilton Lane Secondary Fund V for client use (***strategy has been approved for client use by the IPS Investment Committee***).

ERISA Pension Investment Conference

April 24 – 27, 2018

IPS does not sell products or services to investment managers. However, such managers may pay IPS to attend and to help defray the cost of IPS' annual ERISA Pension Investment Conference ("EPIC"), an educational conference devoted to various issues relating to Taft-Hartley plans. IPS will not give preferential treatment to investment managers who pay to attend and help defray the costs of EPIC.

It is important to note that no fees are paid to IPS by any investment manager to be included in a search or database. The only requirement placed upon the manager is their willingness to submit and maintain data concerning their firm, its investment products, and performance results.

Hamilton Lane Advisors attended and helped defray the cost of IPS' annual ERISA Pension Investment Conference ("EPIC").