



***Summit Strategies Group***

Private Equity Update

## Howard County Retirement Plans

July 25, 2018

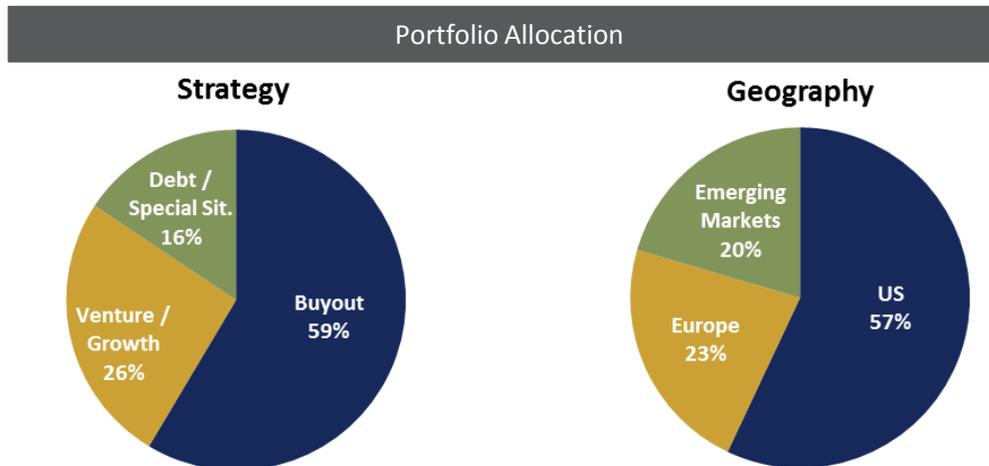
# Private Equity Portfolio Update

## ■ Performance

- Howard County committed \$167.5 million to private equity fund of funds from 2007-2018.
- Paid-in capital is equal to \$117.6 million or 70% of total commitments (as of 3/31/2018).
- Total Value is equal to \$112.6 million or 1.43x capital drawn, including distributions of \$55.4 million (47% of paid-in capital).
  - Equates to a 14.4% net IRR since inception.

## ■ Allocation

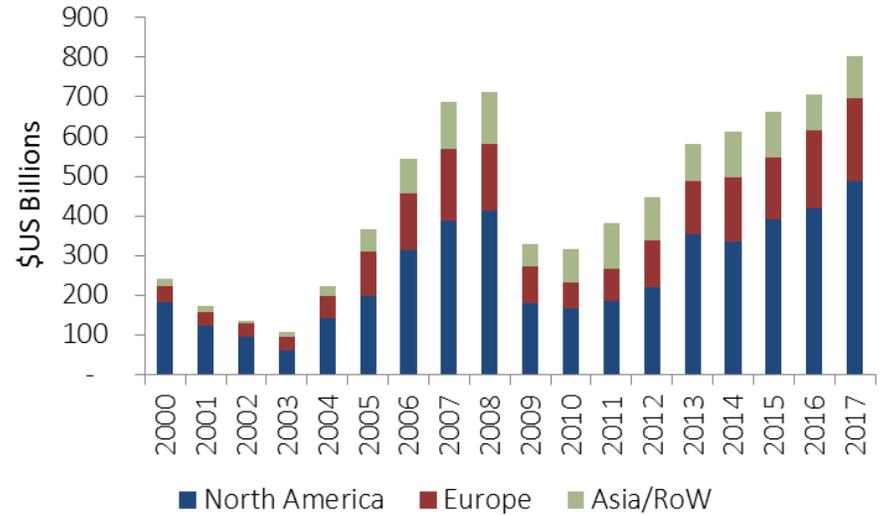
- The portfolio is well-diversified by both strategy and geography, though the exposure to Debt/Special Situations is below Summit's typical recommendation of 25% and the exposure to Buyout is above Summit's typical recommendation of 50%.
- This is a result of the opportunity set since the beginning of the program.
- These allocation recommendations are simply guidelines, and Summit is comfortable with the existing exposure; however, moving forward, the underlying allocations should be watched to help ensure the portfolio remains well-balanced.



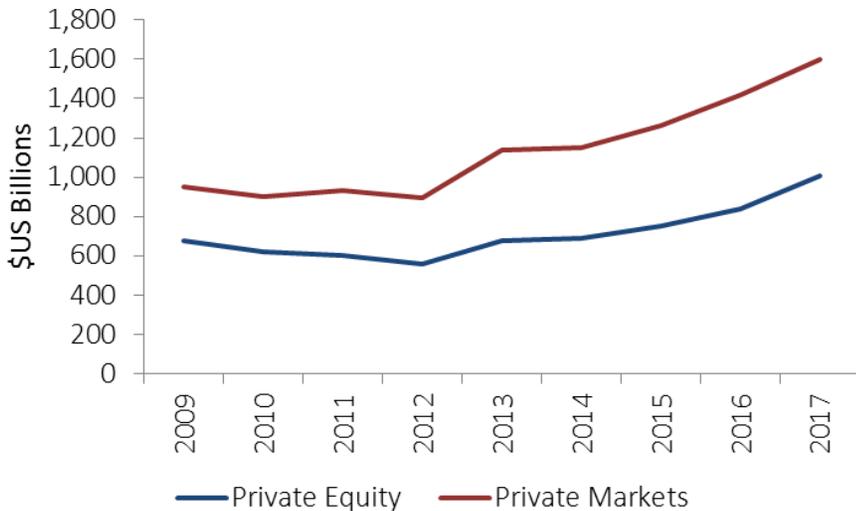
# Private Equity—Current Market Observations

- It is time to be cautious in the private markets.
  - Global private equity fundraising set a record high in 2017
  - This led to a further increase in dry powder, which remains at historical highs across all geographies
  - Pricing and debt level are at historic highs for both large and mid-market transactions

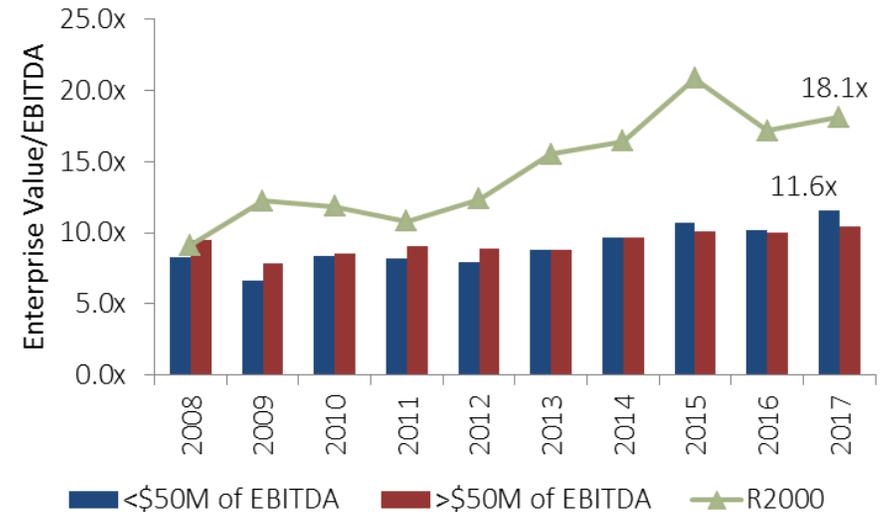
Global Fundraising



Global Dry Powder



Purchase Price Multiples vs. R2000



Source: Preqin

Source: S&P Global Inc.

# Private Equity Summary

March 31, 2018

Partnerships	Vintage Year	Investment Strategy	Capital Commitment (\$)	Drawn Down (\$,1)	Distributed (\$,1)	Market Value (\$,1,2)	IRR (%) (3)	TVPI Multiple (3)	Valuation Date
<b>Private Equity</b>									
Siguler Guff Distressed Opps III	2007	Distressed Debt (FOF)	10,000,000	10,220,383	14,029,239	1,854,157	10.49	1.55	03/31/2018
Greenspring IV	2008	Venture Capital (FOF)	4,000,000	3,796,255	4,032,032	4,687,585	18.39	2.30	03/31/2018
Pantheon Global Secondaries IV	2010	Secondaries (FOF)	3,000,000	2,186,420	2,648,421	625,451	13.93	1.50	03/31/2018
LGT Crown Asia-Pacific II	2011	International Private Equity (FOF)	14,000,000	11,425,006	4,060,000	13,839,551	12.88	1.57	03/31/2018
Greenspring V	2011	Venture Capital (FOF)	7,000,000	6,143,846	5,211,500	7,275,650	20.15	2.03	03/31/2018
Adveq Europe V	2012	Buyout - Small (FOF)	10,000,000	7,313,337	2,129,112	7,093,825	9.01	1.26	03/31/2018
LGT Crown Global Secondaries III	2012	Secondaries (FOF)	10,000,000	6,284,447	3,260,000	5,689,384	15.08	1.42	03/31/2018
Flag Private Equity V	2013	Diversified (FOF)	15,000,000	13,214,188	5,786,926	12,369,927	15.69	1.37	03/31/2018
HarbourVest Partners 2013 Direct	2013	Diversified (COI)	15,000,000	15,748,646	8,051,401	15,819,568	19.09	1.52	03/31/2018
Greenspring VI	2014	Venture Capital (FOF)	7,500,000	5,851,152	1,473,750	7,012,589	15.81	1.45	03/31/2018
Greenspring Secondaries Fund I	2014	Secondaries	2,500,000	2,399,097	636,664	2,972,922	18.74	1.51	03/31/2018
Adveq Europe VI	2015	Buyout - Small (FOF)	7,500,000	2,857,944	431,732	2,904,424	13.53	1.17	03/31/2018
Flag Private Equity VI	2014	Buyout - Small (FOF)	15,000,000	9,075,000	1,686,086	9,389,800	17.46	1.22	03/31/2018
57 Stars	2015	Diversified (FOF)	7,000,000	3,542,837	407,889	3,441,451	6.83	1.09	03/31/2018
NB Crossroads XXI	2015	Diversified (FOF)	15,000,000	7,125,000	750,000	6,865,588	6.38	1.07	03/31/2018
LGT Crown Asia-Pacific III	2014	International Private Equity (FOF)	5,000,000	2,643,161	-	3,429,161	19.09	1.30	03/31/2018
HarbourVest IV	2016	Buyout - Mid (COI)	10,000,000	6,630,747	875,000	6,291,924	11.81	1.08	03/31/2018
Aberdeen US Private Equity VII	2017	Buyout - Small (FOF)	5,000,000	700,223	-	700,223	0.00	1.00	03/31/2018
Greenspring VIII B	2017	Venture Capital (FOF)	5,000,000	400,000	-	375,755	-10.88	0.94	03/31/2018
<b>Total Private Equity</b>			<b>167,500,000</b>	<b>117,557,689</b>	<b>55,469,752</b>	<b>112,638,935</b>	<b>14.43</b>	<b>1.43</b>	<b>03/31/2018</b>

# Private Equity Fund of Funds Pipeline Manager Selection



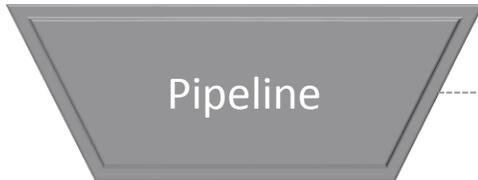
Screening

- Over 500 private equity fund of funds managers tracked by PitchBook database.
- ~300 private equity fund of funds in the market seeking to raise more than \$29 billion.\*



Analysis

- Prior track record of strong performance.
- \$250 million of private equity assets under management (AUM) and individual fund offering of \$100 million or greater.
- Minimum of 5 years experience in private equity with seasoned investment team.
- Provides diversified exposure by partnership, sector, and vintage year.



Pipeline

- Summit 2018 Pipeline Managers:
  - Schroders Adveq Europe
  - Neuberger Berman
  - HarbourVest

Key Manager Evaluation Metrics	Schroders Adveq Europe	Neuberger Berman	HarbourVest
Team	↑	↑	↑
Strategy	↑	↑	↓
Track Record	→	→	↑
Terms	→	→	→

Excellent	↑
Good	→
Poor	↓

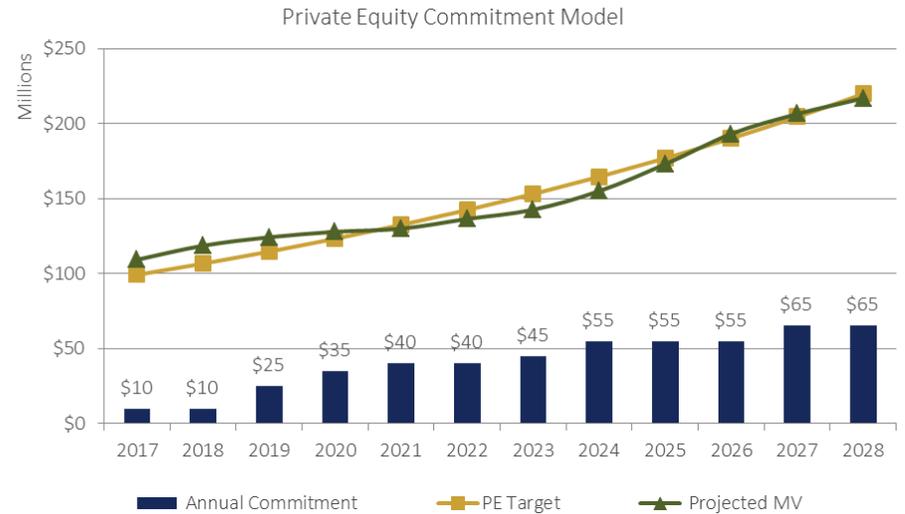
\*Source: PitchBook, as of 1/31/2018

## Private Equity—Recap and Look Ahead

- In 2017, Howard County approved the following commitments, totaling \$10.0 million.
  - Aberdeen US Private Equity VII—\$5.0 million.
  - Greenspring VIII—\$5.0 million.
- For 2018, Summit again proposes a \$10 million commitment budget.
  - Summit recommends two \$5 million commitments.
    - \$5 million to Schroders Adveq Europe VII/ Europe Direct II, a European buyout fund of fund focused on the lower middle market. \$4million would be allocated to the Europe VII fund and \$1 million would be allocated to Direct II.
    - \$5 million to Neuberger Berman Crossroads XXII Special Situations, a global fund of fund that will commit to opportunistic strategies including turnarounds, distressed debt, and deep value buyouts.
  - Greenspring, a venture capital fund of funds manager for Howard County, is back in market and is projected to have one single close at the end of 2018. Given the timing of the close, it may be appropriate to allocate a portion of the 2019 budget to a Greenspring commitment in late 2018.
  - Schroders Adveq, Neuberger Berman and Greenspring are all existing managers in Howard County’s private equity portfolio.

# Private Equity Commitment Model

- The Commitment Model attempts to predict how much capital will actually be in private equity funds at a given point in time. The model:
  - Estimates the commitments needed to reach and maintain the allocation target.
  - Diversifies the portfolio by staggering commitments to reduce vintage year risk.
- The Commitment Schedule is monitored and adjusted over time by Summit Strategies.
- The Commitment Model for Howard County is based on the following assumptions:
  - \$991.4 million of total plan assets as of December 31, 2017.
  - Annual portfolio growth rate of 7.5%.
  - 10.0% target private equity allocation.
- Based on the Commitment Model, a \$10 million private equity commitment budget is recommended for 2018.



Year	Annual Commitments	Cumulative Commitments	Projected Market Value	Private Equity Target (10% of Total Assets)
2017	\$10.0	\$167.5	\$109.2	\$99.1
2018	\$10.0	\$177.5	\$118.5	\$106.6
2019	\$25.0	\$202.5	\$124.2	\$114.6
2020	\$35.0	\$237.5	\$127.8	\$123.2
2021	\$40.0	\$277.5	\$129.9	\$132.4
2022	\$40.0	\$317.5	\$136.4	\$142.3
2023	\$45.0	\$362.5	\$142.5	\$153.0
2024	\$55.0	\$417.5	\$154.9	\$164.5
2025	\$55.0	\$472.5	\$172.9	\$176.8
2026	\$55.0	\$527.5	\$193.1	\$190.1
2027	\$65.0	\$592.5	\$206.3	\$204.3
2028	\$65.0	\$657.5	\$216.8	\$219.7

## Potential Manager Ideas

- Schroders Adveq Europe VII/ Europe Direct II

- **Pros:** Continued commitment to focusing on the lower middle market is attractive; European exposure helps to diversify current portfolio; Fund will commit to a mixture of industry specialists, turnaround, and transformational managers that can add value throughout the market cycle; An additional allocation to the Direct fund could help augment the portfolio by lowering overall fees and by driving higher net returns.
- **Cons:** The fund will be exposed to foreign exchange risk as most investments are denominated in euros and pounds; With ~30% projected allocation to the UK, the fund will also be exposed to risks associated with the uncertainty surrounding Britain's departure from the European Union early next year; In 2017, the Adveq team was acquired by Schroders, which has led to a change in leadership of the Adveq division.

- Neuberger Berman Crossroads XXII – Special Situations

- **Pros:** A flexible mandate allows the team to tactically balance the portfolio between credit and equity-oriented strategies based on market cycle; Large, experienced team and access to resources of the broad NB platform; The fund will have a 35% allocation to secondaries and co-investments to mitigate J-curve; Concentrated portfolio of 8-12 fund investments will allow best ideas to impact the overall portfolio.
- **Cons:** Differential carry for primaries (5%) and secondaries/co-investments (10%) could produce a conflict of interest between the manager and its LPs; Although NB has consistently outperformed peers on a multiple basis, this has not been the case on an IRR basis, implying it takes longer to realize the return.

# Schroders Adveq Europe VII

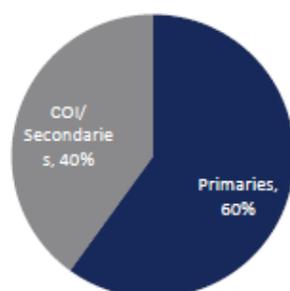
## Overview

- Schroders Adveq is the private equity subsidiary of Schroders, who acquired Adveq in July 2017. The firm has a global presence, operating out of seven offices around the world.
- The Europe team is made up of thirteen investment professionals, led by Tim Creed. Tim is joined by Rainer Ender, Nils Rode, and Lee Gardella on the investment committee. Beyond the Europe team, Schroders Adveq employs 100 professionals who manage and service the private equity funds globally.
- Europe VII will mirror the strategy of the preceding fund, which focused on fund managers pursuing one of three strategies: 1) value-oriented transformation, 2) industry specialist buyout, and 3) complex turnarounds. Targeted funds will be less than EUR 2 billion in size.
- Europe VII will target a 60% allocation to primary investments and a 40% allocation to transactional investments, namely secondaries and co-investments.

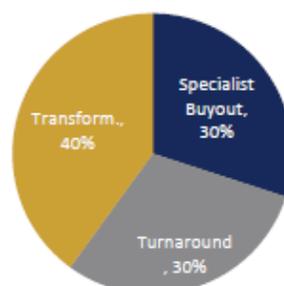
## Expected Portfolio Characteristics

Asset Class	Private Equity	Target Size Min	EUR 100 million
Primary Strategy	Buyout FOF	Target Size Max	EUR 2,000 million
Positions	15-20		

Fund Exposure



Strategy Exposure



# Schroders Adveq

## Firm

Founded	1997
Primary Office	Zurich, Switzerland
Ownership	Owned by Schroders
Assets Managed	\$8.0 billion
Strategies Covered	Fund-of-funds
Employees	100

## Investment Team

Total Professionals	13
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## Key Personnel

Key Personnel	Title	Joined Firm
Tim Creed	Head of Invest. Europe	2004
Rainer Ender	Head of Invest. Mgmt.	2001
Nils Rode	Chief Invest. Officer	2005
Lee Gardella	Head of Risk Mgmt.	2007

## Fees & Key Terms

Annual Mgmt Fee	62 bps average annual fee over life of the fund
Carried Interest	8%
Preferred Return	8%
Investment Period	3 Years
Fund Term	12 Years, with 3 One-Year extensions
GP Commitment	1%

## Investment Information

Target Size	EUR 600 million
Commitments	EUR 300 million
Minimum	EUR 10 million, or manager discretion
Expected Close Date	3Q 2018

# Schroders Adveq Europe Direct II

## Overview

- Schroders Adveq is the private equity subsidiary of Schroders, who acquired Adveq in July 2017. The firm has a global presence, operating out of seven offices around the world.
- The Europe team is made up of thirteen investment professionals, led by Tim Creed. Tim is joined by Rainer Ender, Nils Rode, and Lee Gardella on the investment committee. Beyond the Europe team, Schroders Adveq employs 100 professionals who manage and service the private equity funds globally.
- Europe Direct II will invest exclusively in co-investments alongside European specialist GPs, creating a more concentrated portfolio of small buyout deals.
- The team will look to leverage their relationships with GPs to source capacity-constrained opportunities on a no fee or carry basis.
- The fund will have a focus on "Core Europe", which includes primarily countries located in the Nordics and Western Europe.

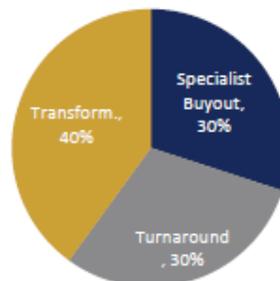
## Expected Portfolio Characteristics

Asset Class	Private Equity	Target Size EV Min	EUR 50 million
Primary Strategy	Co-Investment Fund	Target Size EV Max	EUR 500 million
Positions	~20 companies		

Fund Exposure



Strategy Exposure



# Schroders Adveq

## Firm

Founded	1997
Primary Office	Zurich, Switzerland
Ownership	Owned by Schroders
Assets Managed	\$8.0 billion
Strategies Covered	Fund-of-funds
Employees	100

## Investment Team

Total Professionals	13
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Key Personnel	Title	Joined Firm
Tim Creed	Head of Invest. Europe	2004
Rainer Ender	Head of Invest. Mgmt.	2001
Nils Rode	Chief Invest. Officer	2005
Lee Gardella	Head of Risk Mgmt.	2007

## Fees & Key Terms

Annual Mgmt Fee	1.5% on committed for 5 years, then 1.5% on the lower of NAV or committed
Carried Interest	10%
Preferred Return	8%
Investment Period	3 Years
Fund Term	10 Years, with 3 One-Year extensions
GP Commitment	1%

## Investment Information

Target Size	EUR 300 million
Commitments	-
Minimum	EUR 10 million, or manager discretion
Expected Close Date	Early close discount thru Nov 2018

# NB Crossroads XXII - Special Situations

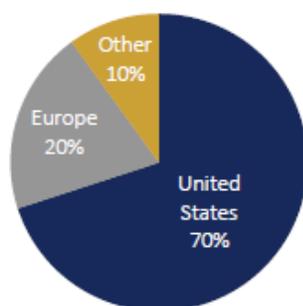
## Overview

- Neuberger Berman's private equity team is part of the larger NB organization that spun out of Lehman Brothers in 2008/2009.
- The PE platform encompasses both fund investments and direct investments, and covers multiple underlying strategies such as buyout, venture capital and credit.
- The investment team dedicated to private equity includes over 100 professionals located in New York, Dallas, Boston, London, Milan, Hong Kong and Bogota. The Special Situations fund is led by Jonathan Shofet.
- This fund is one investment option within the broader Crossroads program. The Special Situations fund will invest globally in distressed, turnaround and other opportunistic strategies that take advantage of market dislocations and operational issues at underlying companies.
- The fund will run a concentrated portfolio of high conviction ideas to drive overall returns. The fund will also allocate up to 35% of its capital to secondaries and co-investments, which should help mitigate the J-Curve and reduce the overall fee burden.

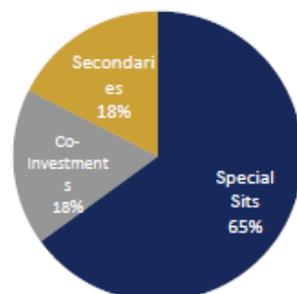
## Expected Portfolio Characteristics

Asset Class:	Private Equity	Target Fund Size Min	Varies
Primary Strategy:	Special Situations	Target Fund Size Max	Varies
Positions:	8-12		

Geographic Focus



Investment Styles



# Neuberger Berman

## Firm

Founded	1939
Primary Office	Simsbury, CT
Ownership	100% employee owned
Assets Managed	\$45 billion (private equity platform)
Strategies Covered	Primaries, Co-investments, Secondaries
Employees	1,900

## Investment Team

Total Professionals	115
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Key Personnel	Title	Joined Firm
Jonathon Shofet	Managing Director	2005
John Buser	Managing Director	1999
Joana Rocha Scaff	Managing Director	2008
Brien Smith	Managing Director & COO	2001
David Stonberg	Managing Director	2002
Anthony Tutrone	Managing Director	2001

## Fees & Key Terms

Annual Mgmt Fee	0.26%-0.59% avg. annual fee depending on size
Carried Interest	5% on funds, 10% on secondaries & Co-invests
Preferred Return	8%
Investment Period	4 years from 1st close
Fund Term	10 years from 1st close
Extensions	Up to 2 one-year extensions
GP Commitment	1.00%

## Investment Information

Target Size	\$650 million across all strategies, 10-25% to Special Situations
Commitments	\$200 million
Minimum	\$500k
Final Close	Q4 2018

# Forward Pipeline

Manager	Fund	Strategy	Rationale
Greenspring Associates	Greenspring Global Partners IX	A venture capital fund of funds that will target technology-related investments primarily in the United States with around a 10% allocation to Europe. The fund will look to invest 70% of its capital in primary funds with the remaining capital allocated to co-investment opportunities.	Greenspring has a well-established network, a deep experienced team and a consistent historical track record. All of these elements have made them one of the premier venture-focused fund of funds, with a proven ability to access attractive opportunities and balance risk and return.
LGT	LGT Crown Asia-Pacific Private Equity (CAPE) IV	An Asia-Pacific fund of funds focused on small and middle market growth buyout strategies in the emerging markets of Asia. The fund will be concentrated around 15-20 primary commitments, and will supplement with healthy weights to secondaries (20-25%) and co-investments (10-20%).	LGT's focus on country-specific managers is attractive, and its local presence in Asia could provide an advantage over firms that try to operate out of the US or Europe. Further, LGT makes a big effort to mitigate the J-Curve, as evidenced by the fund's high allocation to secondaries and co-investments.
Aberdeen	Aberdeen US Private Equity VIII	A fund of funds that will construct a concentrated portfolio of US-based small-and mid-sized private equity funds managed by experienced, operationally-oriented investors that typically target companies smaller than \$250 million in enterprise value. Aberdeen will also strategically invest in co-investments and/or secondaries (up to 30% combined) to mitigate the J-curve and enhance the portfolio's return profile.	The concentrated portfolio results in only the "best ideas" making it into the portfolio, which we believe results in superior performance. The firm's track record helps support this thesis, as all previous funds have beaten the Preqin median on an IRR basis, and only Fund IV has underperformed on a TVPI basis.

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