



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

PAI Europe VII L.P.

Private Equity Commitment

Darren Foreman, CAIA
Senior Portfolio Manager

September 8, 2017



Recommendation:

Staff, together with Hamilton Lane, recommends the Board commit up to €125 million to PAI Europe VII L.P. (the "Fund").

Firm Overview:

PAI (the "Firm") is one of the oldest and most experienced investors within Europe, with origins dating back to 1872 and Paribas Affaires Industrielles, the principal investment activity of Paribas (a pan-European merchant bank). Historically, PAI invested from the Paribas' balance sheet, managing its unleveraged equity portfolio, which was one of the largest in Europe at the time. Always organized along sector lines, the Firm became noted as an active shareholder in numerous companies across Western Europe (e.g. RTL Group, Schneider, Eiffage) supporting the development of many firms which have since become domestic, regional and global market leaders. Leveraging its experience, reputation and networks, in the early 1990s, PAI identified the opportunity to generate outperformance through the application of a control-oriented private equity strategy in upper mid-market Continental European businesses. Since 1994, PAI has invested €9.3 billion in 62 buyout transactions across Europe. PAI Partners was created as the management company of the first institutional fund, PAI LBO in 1998. In 2002, the PAI team took control of PAI Partners with the buyout of a 51% stake and a call option for the remaining interest, which was exercised in 2006.

Fund Size

PAI Partners ("PAI" or "GP") is seeking to raise €4 billion for the Fund. A hard cap for the fund hasn't been established.

Investment Strategy:

PAI will invest in European upper middle market companies at attractive valuations, where they have a clear vision to transform the company and its market position. PAI focuses on five sectors (Business Services, Food & Consumer, General Industries, Healthcare, and Retail & Distribution) that provide natural portfolio diversification.

Investment Team:

PAI's team structure, centered in Paris, executes a sector-focused investment strategy. PAI combines their sector expertise with six other investment offices across Western Europe. The country teams provide access to local companies, vendors, intermediaries and management teams, as well as an understanding of cultural differences that are critical in completing transactions. PAI's US office in New York focuses on supporting the value creation of their European portfolio companies.

PAI has a team of 60 experienced investment professionals. The 19 person strong Partner group has an average tenure of 16 years with the firm. Sixteen of the nineteen Partners were homegrown whereby they were promoted to Partner while at PAI.

PAI's Investment Committee is the core engine for all investment and exit related decisions. Frederic Stevenin, CIO chairs the IC. A consensus amongst the group drives all investment decisions. Meetings and/or calls are held at least weekly and are open to the whole Partner group and the Investor Team.

PAI's Investment Committee members are listed in the table that follows.

Name	Role	Yrs. At PAI	Prior Experience
Michel Paris	CEO	33	Valeo
Frederic Stevenin	CIO	21	Deutsche Bank
Nicolas Holzman	Partner	19	Bossard-Gemini Consulting
Richard Howell	Partner	8	Lehman Brothers
Mirko Meyer-Schonherr	Partner	10	McKinsey, KarstadtQuelle AG
Colm O'Sullivan	Partner	11	Deutsche Bank, Hambros Bank
Laurent Rivoire	Partner	16	Goldman Sachs, Bossard Consultants



Raffaele Vitale	Partner	15	Lazard Group, Chase Manhattan
Olivier de Vregille	Partner	34	Paribas Capital Markets

Investment Instruments:

The Fund will make equity investments in upper middle-market European companies. The Fund may also make investments in temporary (i.e. bridge) financing instruments.

Market Opportunity:

The European economic environment is showing the strongest performance since the Global Financial Crisis, with consistent GDP growth and unemployment trending downwards, now at the lowest rate in eight years. The European economy remains the largest economic region in the world, generating GDP of over \$17 trillion in 2016. As a global leader in many industries and a producer of leading products and services, the European Union is the world's largest exporter.

Europe comprises a broad and deep corporate landscape, with over 45,000 companies with annual sales in excess of €100 million. The mid-market segment of companies with revenue of €100M to €1.2B is three times as large as the United States. These markets are fragmented, with significant similarities but dislocated by language, culture and political boundaries.

Investment Highlights:

Good Performance
PAI has very good realized performance of 2.6x MoC (multiple of cost) and a 29.8% Gross IRR since inception as of March 31, 2017. On exits since 2011, they have a 2.7x MoC and a 22.6% Gross IRR. Overall historical performance is 2.2x Gross MoC and a 27.9% Gross IRR as of March 31, 2017. PSERS' PAI composite net IRR was 33.5% and DPI (distributions to paid in capital) was 2.2x as of March 31, 2017.
Strong, Well-experienced Sector Team
PAI's sector professionals combine many years of experience in building businesses in their target industries. The sector teams are responsible for developing extensive knowledge about the opportunities and growth drivers in their sectors, tracking companies over the long term and working together with their country teams in Europe to unlock target transactions.
Buy and Builds – Value-add
A core focus of PAI's investment strategy is on driving growth in its portfolio companies through acquisitions. These may be transformational by taking advantage of the opportunity to extend a company's product or service offering through acquiring a company at a lower purchase multiple (price), generating synergies and deepening leadership in a core geography or extending into a new one. PAI has completed 173 add-ons in the last two funds across 22 portfolio companies, acquiring €778M of EBITDA at an average entry multiple of 6.7x.
Strong Banking Network
PAI has a strong banking network through its origin as the private equity investing arm of BNP Paribas in Paris, France. PAI spun-out in 2002, but the relationships from strong networks helps them syndicate debt on their investments, and to buy and sell companies through various investment banking firms.

Investment / Risk Considerations:

Competition From Other Middle Market Firms
PAI sees competition in Europe from country specific funds, pan-European funds and global mega-cap funds. PAI is differentiated in that it is one of the largest firms in continental Europe. PAI has a strong network with its offices in Europe and from its origin as part of BNP Paribas (bank) pre-2002.
Liquidity & Leverage Profile
PAI will seek to use appropriate leverage to optimize the capital structure of its portfolio companies to enhance returns. While equity levels vary by company and industry, PAI anticipates that equity will typically account for 30%-50% of the initial capital structure.



Importantly, 76% of PAI's returns have been generated through EBITDA growth. This reflects PAI's core focus on driving fundamental value in its portfolio companies.

At the fund level, it should be noted that the Fund will make use of a capital call bridging facility. This is an efficient use of capital and allows capital to be called from LPs less frequently and in a more structured manner.

PSERS History & Performance:

The table that follows summarizes PAI Europe's performance with 3/31/17 reported valuations. The investment strategy of PAI Europe is a multi-sector approach in Western European companies.

Fund (Euros M's)	Portfolio	Vintage	Commitments	Contributions	Distributions	NAV	Net IRR	MoC
PAI Europe III	PE	2001	300.0	298.7	827.7	-	29.6%	2.76x
PAI Europe IV	PE	2005	100.0	102.2	134.3	12.1	8.2%	1.43x
PAI Europe V	PE	2008	100.0	92.9	79.1	87.4	10.8%	1.79x
PAI Europe VI	PE	2015	100.0	39.3	3.2	45.8	15.6%	1.25x
Total			600.0	533.1	1,093.3	145.3	26.1%	2.22x

Portfolio Fit:

A commitment to the Fund will be allocated to the private equity portfolio. An additional commitment to PAI allows PSERS to continue its relationship with a high-conviction manager. PAI executes an investment strategy, which uses add-on acquisitions to their platform companies to make market-leading companies in Europe. PAI has been a good co-investment partner for PSERS.

The table below summarizes PSERS' projected exposure inclusive of a recommended €125 million commitment to the Fund: (adjusted to 6/30/17)

Investment Type (\$mm)	Active Commitments	%	Market Value	%	Unfunded	%	Total Exposure	%
Private Equity	\$ 14,696.9	65.3%	\$ 5,357.8	67.6%	\$ 3,406.8	70.5%	\$ 8,764.6	68.7%
Special Situations	4,554.8	20.2%	1,033.0	13.0%	791.7	16.4%	1,824.7	14.3%
Venture Capital	2,797.0	12.4%	973.8	12.3%	574.8	11.9%	1,548.6	12.1%
PE Internal	465.4	2.1%	555.3	7.0%	61.6	1.3%	616.9	4.8%
Total	\$ 22,514.1	100.0%	\$ 7,710.7	100.0%	\$ 4,834.9	100.0%	\$ 12,754.8	100.0%

Investment Committee Disclosure:

Relationship with Hamilton Lane:	Hamilton Lane has a seat on the LP advisory board on PAI Europe V; They are an alternate LP advisory board member with one of their clients in PAI Europe VI
Placement Agent:	Rede Partners – Globally, Evercore – Asia (xJapan), Ark – Japan, LarrainVial (South America), all placement agent fees are paid directly by PAI and not by LPs in the Fund
PA Political Contributions:	None Disclosed
PA Impact:	None
Conflicts:	None Disclosed
First Time Fund With PSERS:	No, PSERS has committed to the following PAI Europe Funds: €300M to Fund III, €100M to Fund IV, €100M to Fund V and €100M to Fund VI
PSERS Allocation Implementation Committee Approval:	9/8/2017



Oversight Responsibility:

Investment Office:	Charles J. Spiller Deputy CIO, Non-Traditional Investments Darren Foreman Senior Portfolio Manager
External Consultant:	Hamilton Lane



Hamilton Lane

September 5, 2017

Board of Trustees
Commonwealth of Pennsylvania
Public School Employees' Retirement System
5 North 5th Street
Harrisburg, PA 17101

Re: PAI Europe VII, L.P.

Dear Trustees:

PAI Partners ("PAI") was originally formed in 1994 as the principal investing arm of Paribas Affaires Industrielles and raised its first third-party fund in 1998, formally spinning out in 2002. PAI has built a longstanding organization and well-tenured senior investment team that has established a distinctive brand name in France and continental Europe. Investment teams are organized by sector and by geographic focus, with each deal team consisting of Partners from both the sector team and geographic team. PAI is targeting €4.0 Billion in commitments from limited partners for its seventh buyout fund, PAI Europe VII L.P. (the "Fund"). PAI expects to hold a first close in December 2017 and a final close in Q1 2018. The General Partner will commit at least 2% of commitments to invest in or alongside the Fund.

The Fund will primarily pursue investments in upper middle-market continental European companies, with a continued emphasis on investments falling in the General Partner's five core sectors of focus: (i) business services, (ii) food & consumer goods, (iii) general industrials, (iv) healthcare and (v) retail & distribution. The General Partner's consistent focus on these five core sectors has allowed it to develop expertise and a competitive advantage in intermediated processes. PAI seeks to be the lead investor and acquire controlling stakes in its portfolio companies and is willing to pay moderate entry multiples in order to achieve a control position. Post investment, PAI will use add-on acquisitions in order to lower the effective entry multiple. The Fund will leverage PAI's sector expertise in its five core sectors and the General Partner's dedicated portfolio performance professionals when providing strategic and operational value-add to its portfolio companies. Value creation levers include, but are not limited to, top line growth through salesforce and pricing, post-merger integration and carve-out, and improving purchasing performance. The Fund will primarily target equity investments in the range of €150 million to €400 million, targeting companies with enterprise values between €300 million and €1.5 billion. PAI estimates that the Fund will make approximately 15-17 investments. PAI has generated consistent returns across its prior funds on a TVPI basis and has focused on net IRR and DPI performance in Fund VI, which has generated attractive metrics through enhanced cash management and early exits.

PAI Europe VII's investment thesis can be summarized as follows:

- PAI is a longstanding European General Partner with a distinctive brand name in France and continental Europe
- The General Partner's broad and well-tenured senior team has sector and geographic specialization which helps to drive sourcing and post-investment value-add
- PAI has proven its ability to generate consistent returns across its prior funds



Hamilton Lane

Hamilton Lane's recommendation is based upon the following analytical factors and is made within the context of Commonwealth of Pennsylvania Public School Employees' Retirement System's ("PSERS") investment guidelines.

- Detailed due diligence, including interviews with industry peers and private equity professionals. The on-site due diligence visit was performed on July 27, 2017.
- Evaluation of the composition of the investment team, how they work together, compensation structure and other factors that help determine whether a group is likely to be able to replicate past successes as currently configured.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- The strategy proposed for the Fund is appropriate for the Private Equity Partnership component of the portfolio.

The individuals at Hamilton Lane who were involved in the due diligence process for the Fund are:

Jim Strang – Managing Director, London Office
Tarang Katira –Principal, London Office
Nina Kraus –Senior Associate, London Office
Patrick Donegan –Analyst, London Office

Based on the above, Hamilton Lane recommends that PSERS commit up to €125 million in PAI Europe VII, L.P. Hamilton Lane makes this recommendation considering the General Partner's qualifications and PSERS' overall investment guidelines.

This recommendation is given solely for the benefit of PSERS and cannot be relied upon by other investors, considering an investment in the Fund, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of the Fund. Hamilton Lane does not provide legal or other non-investment-related advice.

Sincerely,

Michael Koenig,
Managing Director

Corina English,
Vice President