



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

LLR Equity Partners V, L.P.

Private Equity Fund Commitment

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Portfolio Manager, Private Markets

November 18, 2016



Recommendation:

Staff, together with Portfolio Advisors, recommends to the Board a commitment of up to \$200 million to LLR Equity Partners V, L.P. ("Fund V" or the "Fund"). LLR ("LLR" or the "Firm"), a Philadelphia based investment firm, is sponsoring the Fund to provide capital to lower middle-market companies.

Firm Overview:

LLR is a private equity firm headquartered in Philadelphia, PA. As a continuation of its lower middle market platform, LLR is characterized by an established leadership position in an attractive market segment, a deep and experienced team led by a cohesive group of partners and a competitive historical investment performance achieved through multiple market cycles. Throughout its 16-year history, LLR has maintained a consistent investment strategy, supported by its repeatable and scalable investment and value creation processes.

Fund Size

Fund V is seeking equity commitments of up to \$950 million, with a hard cap of \$1.1 billion (excluding GP commitment).

Investment Strategy:

Since its founding in 1999, LLR has maintained a consistent strategy of investing in lower middle market growth companies, particularly in markets where LLR has dedicated expertise. They seek opportunities where they can partner with existing management teams in transactions that are characterized by attractive risk-reward profiles. LLR focuses on lower middle market companies, typically private companies with less than \$100 million of revenue. Within this segment, LLR seeks target companies that possess the potential for future growth, supported by defensible or differentiated leadership positions within their industry niche, attractive business models and a core team of talented and committed managers. These companies operate durable business models, with a focus on software and services businesses. The companies may be characterized by recurring revenue and attractive profit models that can support scalable and profitable growth plans to help drive fundamental enterprise value creation.

Investment Team:

Fund V will be led by nine partners who are a seasoned and cohesive group with deep experience investing in and advising lower middle market growth companies. LLR's nine partners have an average tenure at LLR of 14 years and average 18 years of experience in the private equity industry. The table below highlights the experience of the key investment professionals:

Name	Title	Yrs. Experience Firm / Total	Prior Experience
Mitchell Hollin	Partner	16 / 27	Advanta Partners
Seth Lehr	Partner	17 / 17	Legg Mason
Ira Lubert	Partner	17 / 30	TL Ventures
Todd Morrissey	Partner	12 / 17	Advanta Partners, Merrill Lynch
Scott Perricelli	Partner	15 / 19	Advanta Partners, William Blair
David Reuter	Partner	17 / 17	Arthur Andersen
Howard Ross	Partner	17 / 17	Arthur Andersen
Jack Slye	Partner	6 / 10	Sterling Partners, Deloitte
David Stienes	Partner	16 / 16	Arthur Andersen



Investment Instruments:

In light of LLR V's investment mandate, they may make investments using either equity and/or debt instruments.

Market Opportunity:

LLR's organization has been designed to facilitate the sourcing, execution and optimization of lower middle market investments. LLR believes its reputation, approach and experience will often position them as a partner of choice for lower middle market business owners and management teams raising capital for growth and/or liquidity. They believe the lower middle market (typically private companies with less than \$100 million in revenue) is an attractive segment of the North American economy, populated with a large number of companies that align with LLR's investment criteria and expertise. In LLR's view, lower middle market companies tend to have stronger growth prospects than larger businesses and may present more opportunities for LLR to add value through strategic, operational and talent enhancements as well as exit planning. The financing market for these businesses can also be less efficient than other segments of the market which can drive attractive entry valuations.

Investment Highlights:

Experienced and Stable Team
LLR's team is comprised of 44 employees. The partners are supported by a deep team of 21 professionals experienced in investing, managing and creating value in lower middle market growth companies.
Solid Investment Performance
Since 1999, LLR has generated (realized and unrealized) a Net IRR of 16.8% and a Net MOIC of 1.57X.
An Established Leader in an Attractive Market Segment
LLR's exclusive focus on the lower middle market over the past 16 years has provided them with a deep understanding of the marketplace. Their value creation processes have been tailored to meet the needs of lower middle market growth companies, based on the strategic, operational and financial practices that the LLR team has observed while working with hundreds of growth companies over the course of their careers.

Investment/Risk Considerations:

Higher Loss Ratio
Their loss ratio on the first four funds amounted to 22% on realized investments. Much of this loss was with companies in the early stage and/or small in size. The team has refined its strategy and has tightened its investment screening process as a result of this. LLR III and LLR IV have smaller loss ratios than the previous two funds.
Team Capacity
The LLR team is managing 37 unrealized investments across four funds. Given the concerns about the team's ability to monitor the existing deals as well as the new deals in Fund V, LLR has developed a solid back office function, which frees up time for many of the senior investment professionals to participate on value creating activities.

PSERS History & Performance:

Since 2000, PSERS has committed approximately \$525 million to four LLR managed partnerships. As of June 30, 2016, they have generated a 16.8% net IRR and a 1.57x net MOIC for PSERS. The table below summarizes PSERS' historical performance by partnership:



<u>Fund (\$mm)</u>	<u>Portfolio</u>	<u>Vintage</u>	<u>Commitment</u>	<u>Contributions</u>	<u>Distributions</u>	<u>NAV</u>	<u>Net IRR</u>	<u>Net MOIC</u>
LLR Equity Partners I	PE	1999	62.5	61.2	131.3	0.7	21.7%	2.16x
LLR Equity Partners II	PE	2004	75.0	75.0	121.9	14.3	12.7%	1.82x
LLR Equity Partners III	PE	2008	187.5	168.2	163.4	100.2	13.7%	1.57x
LLR Equity Partners IV	PE	2013	200.0	124.0	6.3	133.1	11.1%	1.12x
Total			\$ 525.0	\$ 428.2	\$ 422.9	\$ 248.3	16.8%	1.57x

Portfolio Fit:

A commitment to Fund V will give PSERS' Private Markets portfolio continued exposure to the lower middle market growth companies that LLR invests in. We believe that LLR offers a unique strategy of focus in the software and services business models. These investments will be in their five (business to business, education, financial services, healthcare and security) vertical markets. LLR will make investments mostly in the mid-Atlantic, Midwest or Southeast regions of the U.S. We also believe this is a clear, consistent and repeatable investment strategy that PSERS has been investing with since 2000.

Finance Committee Disclosure:

Relationship with Portfolio Advisors:	Portfolio Advisors has invested in LLR
Placement Agent:	No
PA Political Contributions:	None Disclosed
PA Presence:	Yes
Conflicts:	None Disclosed
History with PSERS:	Yes
PSERS AIC Meeting Approval:	November 18, 2016

Oversight Responsibility:

Investment Office:	Charles J. Spiller Deputy CIO, Non-Traditional Investments	Luke M. Jacobs, CFA Portfolio Manager
External Consultant:	Portfolio Advisors LLC	



October 27, 2016

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

Re: LLR Equity Partners V, L.P.

Dear Trustees:

LLR Management, L.P. (“LLR” or the “Firm”) is organizing its fifth private equity fund, LLR Equity Partners V, L.P. (“LLR 5” or the “Fund”). The Firm is targeting \$950 million in commitments for the Fund, with a hard cap set at \$1.1 billion. The General Partner will be committing at least \$30 million to LLR 5, or approximately 3% of total commitments. The Fund is expected to hold a first close in the December 2016 and will hold a final close in the second quarter of 2017. Over its 16-year history, LLR has maintained a consistent investment strategy of investing in lower middle market growth companies that LLR believes operate attractive business models in sectors with strong fundamentals. Below are the main components of LLR’s investment focus.

- ◆ **Lower Middle Market Growth.** LLR focuses on lower middle market companies, typically private companies with less than \$100 million of revenue. Within this segment, LLR seeks to invest in companies that possess the potential for future growth, supported by defensible or differentiated leadership positions within their industry niche, attractive business models and a core team of talented and committed managers.
- ◆ **Business Model Expertise.** LLR pursues companies that operate durable business models, with a focus on software and services businesses, which are often characterized by recurring revenue and attractive profit models that can support scalable and profitable growth plans to drive fundamental enterprise value creation.
 - *Software.* Companies that develop proprietary on-premise, software as a service and/or cloud-based solutions that solve complex business problems or organize and process data. These businesses provide application software or infrastructure software.
 - *Services.* Companies that combine proprietary and/or multi-site delivery modalities with technology-enabled processes to provide domain or functional expertise in administrative areas (e.g., infrastructure management, HR and finance) or areas of specialized expertise (e.g., IT consulting, information and data management and market research).
- ◆ **Vertical Market Specialization.** LLR supplements its business model experience with an understanding of select vertical markets, based on its belief that such specialization results in a differentiated understanding of the opportunities it pursues and allows the Firm to efficiently identify



and react to investment opportunities, while driving value-added activities throughout the holding period of an investment. LLR's professionals develop investment theses within sub-sectors of industries where the Firm has dedicated expertise, including the B2B, Education, Financial Services, Healthcare and Security markets.

Portfolio Advisors' 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 October 11, 2016.
- 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 Portfolio Advisors who were primarily involved in the due diligence process for the Fund are:

Adam Clemens – Managing Director, Darien Office

Elizabeth Campbell – Senior Vice President, Darien Office

Based on the above, Portfolio Advisors recommends that PSERS commit to up to \$200 million in LLR Equity Partners V, L.P. Portfolio Advisors 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. Portfolio Advisors does not provide legal or other non-investment-related advice.

Sincerely,

WILLIAM J. INDELICATO

MANAGING DIRECTOR