



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

Bain Capital Asia Fund IV, L.P.

Private Equity Commitment

Michael Tyler
Manager

September 24, 2018



Recommendation:

Staff, together with Hamilton Lane, recommends the Board commit up to \$200 million to Bain Capital Asia Fund IV, L.P. ("Bain Asia" or the "Fund").

Firm Overview:

Bain Asia is an outgrowth of the successful Bain Capital model, focusing on pan-Asia opportunities. Bain Asia employs a rigorous strategic, analytical approach to identify, screen, acquire and manage businesses. Their management teams have proven ability to transform those businesses, creating value, with over 46 investments totaling \$8.3 billion and \$11.7 billion in realizations. Bain's large team in Asia, with offices in Hong Kong, Shanghai, Tokyo, Mumbai, Sydney and Seoul, allows them to execute a country-focused proactive sourcing effort. The team is thoughtfully positioned to originate and execute transactions across Asia. The team is multinational and multilingual, which helps to ensure deep sourcing coverage and differentiated access to local opportunities. Being local enhances the team's ability to have maximum impact with portfolio management teams. The Asia team is guided by Bain Capital's key principles of challenging conventional wisdom, accountability, conviction and partnership.

Fund Size & Commitment:

Bain Asia IV is seeking equity commitments of \$3.5 billion. Indications are the fund will be oversubscribed, and have a first and only close in December 2018. Their three Asian funds have an aggregate total commitment of \$6 billion. Bain Capital is targeting 10% investment in the fund; of which 25% is expected to be by Asia team members.

PSERS committed \$100 million to the \$2 billion Asia Fund II, and \$130 million to the \$3 billion Asia Fund III. We are recommending a commitment of \$200 million, and expect to be accepted for at least \$130 million. Additionally PSERS has committed \$225 million to two Bain Capital North America Funds, and over \$2 billion to six Bain Capital credit funds.

Investment Strategy:

Bain Asia's investment strategy focuses on leveraging the proven Bain Capital deal "archetypes" to source businesses in Asia. An "archetype" is a type of deal where Bain Asia feels it has a sustainable competitive advantage with conviction in substantial business transformation and/or a view on industry dynamics that challenges conventional wisdom. The execution of the strategy is powered by a combination of deep global vertical expertise and local market knowledge, leveraging differentiated diligence capabilities, and the ability to tackle complex situations. They invest where they feel they can use transformational insights and change capabilities to create value. This involves trying to understand where revenue and profits can be differentially grown, and where they can create the most impact in the owned companies. Systematically, Bain Asia investments have used consolidation platforms, operating improvements, research and development, and salesforce optimization to increase the probability of breakout growth. Bain Asia typically underwrites investments to targeted returns of 20%+ gross IRR and a +2.5x multiple of cost of capital. Optimally, the range of possible outcomes is enhanced by finding deals that offer asymmetrical upside where they could earn +30% and +3-5x the investment under the right conditions.

Bain Capital has global industry expertise in the following five verticals, and the Bain Asia success has followed that story. Examples in each of the verticals are below:

1. Consumer: Development of a 24-hour live TV shopping channel in Japan.
2. Financial & Business Services: Operating a call center with a leading position in China.



3. Healthcare: Investment in a Chinese private hospital group specializing in neurology, neuro-surgery, and oncology.
4. Industrials: Development of a Japanese independent wind power developer.
5. Technology: Investment in a Chinese online payment infrastructure provider, which provides payment, custodian and account management services.

Common themes with the investments are they are market leaders, scalable, serve either under-served or rapidly expanding markets, offer accretive expansion opportunities, best-in-class capabilities, downside protection, well-positioned brands, strong competitive differentiation and high barriers to entry.

Bain Asia has deep vertical expertise, built upon approximately 320 investments completed by Bain Capital Private Equity globally and 46 investments in Asia, allows Bain Asia to proactively identify attractive investment opportunities based on key industry themes and develop these leads, often long before they become formalized sale processes.

Team:

The Bain Asia team is experienced and stable. The total size of the Asia team is 70 private equity professionals. Included in the team are 13 dedicated operating professionals. The team has grown to emphasize on-the-ground local professionals. The senior team has an average tenure of 12 years at Bain. The core of the senior Asia dedicated team are the 12 Managing Directors listed below.

Name	Primary Location	Total/Bain Years Experience	Coverage: Industry Vertical, Education
David Gross-Loh	Tokyo, Co-Head Asia	26/18	Japan: General Mgt, MBA Harvard
Jonathan Zhu	Hong Kong, Co-Head Asia	25/12	China: Financial & Business Svcs, Healthcare, JD Cornell
Yugi Sugimoto	Tokyo	26/12	Japan: Financial & Business Svcs, Tech, MBA Harvard
Amit Chandra	Mumbai	30/10	India: Finance & Business Svcs, MBA Boston College
Edward Han	Sydney,	12/19	Australia, Korea: Tech, MBA Harvard
Pavninder Singh	Mumbai	19/17	India: Financial & Business Svcs, Industrials, MBA Harvard
Drew Chen	Hong Kong	15/13	China: Tech, MBA Harvard
Lihong Wang	Hong Kong	19/12	China: Consumer, Financial & Business Svcs., MBA Columbia
Samonnoi Banerjee	Mumbai	20/10	India: Healthcare, Tech, MBA Wharton
Ryuto Kobayashi	Tokyo	17/10	Japan: Consumer, Healthcare, MBA Harvard
Tetuji Okamoto	Tokyo	16/10	Japan: Tech, BS Yale
Jungwoo Lee	Hong Kong	15/3	Australia, Korea: Consumer, Tech, MBA Wharton



Market Opportunity:

Asia in general is maintaining solid economic footing in each of the core target markets. All regions showed steady growth, continuity in political leadership, and a reasonably benign economic outlook, but with consistently high valuations.

In Japan, the economic environment continues to exhibit slow growth, very modest inflation, and a focus on stability. The Abe government's favorable policy tilt towards corporate reform is serving as a catalyst for private equity opportunities as large corporates are increasingly shedding non-core assets and corporate boardrooms are showing greater independence.

China, under the strengthening central leadership of the XI government, has continued a systematic program of de-leveraging, state owned enterprise reforms, and anti-corruption policies aimed at managing China's growth transition and longer-term goals of enhanced global competitiveness and presence.

India's economy, under the Modi government, continues to show strong growth. Despite a decline in the government's fiscal spending, the Indian economy has benefitted from strong private consumption growth and a continued surge in investments. In addition to the opportunities from Modi's structural reforms (national build-ups, consolidation, and distressed deals) underpenetrated retail and consumer sectors such as retail banking, food, and telco services are exciting target areas.

South Korea, following the early presidential election in 2017, has stabilized quickly, with key macro indicators showing positive and steady trends. This is reflected in positive consumer sentiment, won appreciation, and a rising stock market. Reduced tensions in terms of geopolitical risks with North Korea have had a positive impact on all these measures.

In Australia, there appears to be a stable economic outlook allowing the deployment of an increase in cross-border deal opportunities with the China platform where Bain believes they are differentially positioned relative to local funds.

Investment Highlights:

- **Focused sourcing on specific verticals.**
- **Disciplined selection process.**
- **Extensive change capabilities.**
- **Ability to lever Bain Capital goodwill.**
- **Performance and Benchmarks.**

Investment / Risk Considerations:

- **Bain will continue to execute on unrealized portfolio companies.**
- **Activities in non-core markets will remain competitive.**
- **Teams will remain cohesive despite industry demand for Bain quality professionals.**
- **Fund size increase.**
- **Global trade.**

PSERS History & Performance:

The table that follows summarizes Bain Capital Asia Funds II, and III performance with 6/30/18 adjusted valuations. Both funds have generated consistent, attractive performance on a net IRR, DPI and MoC basis.



Fund (\$M)	Vintage	Fund Size	Commitment	Drawn	Distributed	NAV	DPI	MoC	Net IRR
Fund II	2012	2.0B	100	97.5	109.1	93.3	1.12	2.08x	25.3%
Fund III	2016	3.0B	130	93.6	8.9	72.2	0.52	1.29x	60.9%
Total			230	191.1	158.0	165.5	0.83	1.69x	27.7%

Portfolio Fit:

A commitment to Bain Capital Asia Fund IV, L.P. would be allocated to the Private Equity portfolio. An additional commitment will allow PSERS to continue the relationship with a high-conviction manager that is well positioned to execute on its investment strategy of making large cap investments in technology, healthcare, consumer, light industrial and business service companies where it feels it has a competitive advantages in the fast growing pan-Asian marketplace.

The table below summarizes PSERS' projected exposure at 6/30/18 inclusive of a recommended \$200 million commitment to the Fund:

Investment Type	Active Commitments ¹	%	Market Value	%	Unfunded ¹	%	Total Exposure ¹	%
Private Equity	\$ 15,675.2	67.3%	\$ 5,077.5	65.6%	\$ 3,664.6	73.1%	\$ 9,285.5	68.5%
Special Situations	4,231.5	18.2%	1,087.8	14.1%	709.0	14.1%	2,040.9	15.1%
Venture Capital	2,791.9	12.0%	1,004.5	13.0%	538.5	10.7%	1,570.9	11.6%
PE Internal	602.5	2.6%	564.7	7.3%	102.0	2.0%	654.4	4.8%
Total	\$ 23,301.1	100.0%	\$ 7,734.6	100.0%	\$ 5,014.1	100.0%	\$ 13,551.7	100.0%

(1) As of June 30, 2018. Includes post Q1'2018 pending/closed commitments.

Investment Committee Disclosure:

Disclosure issue:	Disclosure:
Relationship with Hamilton Lane:	None disclosed
Placement Agent:	Not used
PA Political Contributions:	None disclosed
PA Impact:	None disclosed
Conflicts:	None disclosed
First Time Fund With PSERS:	No, PSERS committed \$100M to Fund II and \$130M to Fund III
PSERS AIC Approval:	September 24, 2018

Oversight Responsibility:

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



Hamilton Lane

August 23, 2018

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

Re: Bain Capital Asia Fund IV, L.P.

Dear Trustees:

Bain Capital ("Bain") was founded in 1984 as the private equity spin-off of Bain & Company, a global management consulting firm, and has since grown in scope across products and geographies. The private equity business is managed by the Global Private Equity Board, which includes David Gross-Loh and Jonathan Zhu as Asian businesses representatives; the Asian team is mature and stable and has been well integrated with the broader global platform since Bain established a local presence in 2005. Bain seeks to maintain an integrated investment platform by cross-staffing in order to ensure comprehensive expertise; as such, deal teams often include senior investment professionals from different offices. The Asian private equity team is well-staffed, comprising 58 investment professionals and 13 dedicated operating professionals. The local team has grown significantly since inception as Bain has emphasized building on-the-ground relationships to enhance deal execution and value creation; the senior investment team remains stable with an average tenure of 12 years. Bain operates in dedicated industry verticals, allowing for proactive identification of industry specific themes and relevant market trends; the Asian investment team is supplemented with 13 dedicated operating professionals who work directly with portfolio companies. The Asian Portfolio Group drives post-investment value creation and is often involved in early due diligence as Bain seeks to employ an integrated team approach. Bain is targeting \$3.5 billion in commitments for its fourth Asia-focused buyout fund, Bain Capital Asia Fund IV, L.P. (the "Fund"). Bain expects to hold a first and final close in December 2018. The General Partner will commit at least 0.1% of commitments to invest in the Fund; however, Bain employee co-investment will be the lesser of \$350 million and 10% of commitments.

The Fund will target investments in Asian companies across Bain's five core industries: financial & business services, consumer, industrials, healthcare and technology. Consistent with prior funds, Bain will continue to focus on investments in China and Japan; however, it does not maintain a fixed geographic allocation and pursues investments across Asia that offer attractive risk-return opportunities. The General Partner is recognized as a value-add investor due to its track record of generating growth for portfolio companies, which allows it to originate a majority of deals directly from founders and corporates. Despite increased competition in the private equity market, Bain has maintained reasonable entry multiples across various sourcing channels. Bain targets control investments to effectively drive value post-investment, but may selectively pursue minority opportunities with significant governance rights; the General Partner has secured a lead or co-lead role in all transactions. Although the Portfolio Group drives value creation initiatives, the deal team remains involved throughout the holding period; value creation plans are developed at an early stage or prior to acquisition to accelerate transformation at portfolio companies. The Portfolio Group typically creates value through strengthening the management team, enhancing operational efficiency, providing strategic guidance and facilitating M&A and post-investment integration. The Fund will primarily target equity investments in the range of \$100 million to \$400 million in an estimated 15 to 18 investments. The General Partner has generated attractive net performance across prior funds; Funds I – III have generated top-quartile or near top-quartile returns on a net IRR basis.

Bain Capital Asia Fund IV's investment thesis can be summarized as follows:



Hamilton Lane

- The General Partner's brand and resources facilitate sourcing, execution and value creation
- Bain has consistently targeted Asian buyout investments within its core industry vehicle
- The General Partner has a proven and attractive track record

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 initial review was completed June 30, 2018; the on-site due diligence was conducted July 25, 2018; the Fund was approved by Hamilton Lane's Investment Committee on August 20, 2018 and the recommendation to PSERS was issued August 23, 2018.
- 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.
- Detailed Operational Due Diligence, including interviews with Bain's back office team to review the controls and processes surrounding the firm's finance, fund administration, tax, legal, compliance, IT, HR, and accounting functions.
- 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:

Mingchen Xia – Managing Director, Hong Kong Office

Vivienne Watganai – Senior Associate, Hong Kong Office

Stefanie Chan – Analyst, Hong Kong Office

Based on the above, Hamilton Lane recommends that PSERS commit up to \$200 million in Bain Capital Asia Fund IV, 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,
Chief Client Officer

Corina English,
Principal