PSERS

PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

SSG Capital Partners V, L.P.

High Yield/Private Credit Commitment

James F. Del Gaudio
Senior Portfolio Manager

July 5, 2019

Recommendation:

PSERS Investment Office Professionals, together with Aksia, LLC ("Aksia"), recommend the Board commit up to $150 million to SSG Capital Partners V, L.P. (the "Fund", "Fund V", or the "Main Fund") and up to $150 million to SSG Capital Partners V Sidecar, L.P., the Fund's dedicated overage sidecar vehicle (the "Sidecar"), for a total commitment of $300 million. SSG Capital Management Limited ("SSG" or the "Firm") is targeting $1.5 billion in capital commitments for Fund V and ~$750 million for the Sidecar, to continue the Firm's strategy of investing principally in special situations and distressed investments in the Asia-Pacific region.

Firm Overview:

SSG was established in 2009 by Edwin Wong, Shyam Maheshwari and Andreas Vourloumis (the "Partners") to continue the team's strategy it developed while at Lehman Brothers Asia Special Situations Group ("LBASSG") of investing principally in special situations and credit investments in the Asia-Pacific region. Since 2009, SSG has invested heavily in its local infrastructure platforms including local licenses, offices and platform, with the aim to provide it with access and the ability to execute unique investment opportunities. This local infrastructure is critical to SSG's ability to be a flexible solutions provider of capital in both onshore and offshore transactions. Today, SSG has a total of 173 professionals that operate out of nine offices (Hong Kong, Singapore, Shanghai, Bangkok, Jakarta, Mauritius, and affiliate offices in Mumbai, New Delhi and Sydney), with 38 investment professionals, 41 legal, operations and support professionals and 94 AMC (asset management company) professionals.

Strategy	AUM[1]	Focus
SSG Capital Partners	$3.2B	Special Situations & Distressed
SSG Secured Lending Opportunities	$1.3B	Secured Lending
	$4.5B	

Note: SSG AUM as of December 31, 2018 and represents the sum of fair value plus uncalled capital.

Fund V is seeking to raise $1.5 billion in capital commitments to continue Fund IV's strategy of investing principally in special situations and distressed investments in the Asia-Pacific region ("Asia-Pacific") with a focus on China, India and South-East Asia. Fund V held an initial close on $610 million in January 2019, has closed on $1.36 billion as of May 2019, and is on track to exceed its $1.5 billion target by its final close in late Q3 2019.

Market Opportunity:

The composition of Fund V's portfolio is expected to be approximately 60% distressed assets and 40% special situations investments. Geographically, Fund V expects to invest in Asia–Pacific, with a focus on investments located in India, China and Southeast Asia.

Distressed Assets (~60% Fund V Target):
Increased leverage in Asian economies, a tightening credit environment and a reduced ability for banks to hold illiquid assets are all drivers for credit investment opportunities. SSG may acquire stressed single name credits or portfolios from financial institutions across the region.

<u>India</u>: Stressed assets are now close to 13%[1] of total assets and the Reserve Bank of India ("RBI") projects capital adequacy to decline further. The RBI is focusing on asset quality recognition, forcing the rise in bad loan recognition and more aggressive write-downs. This removes a major disincentive to selling non-performing loans ("NPLs"). The country's new Insolvency and Bankruptcy Code ("IBC") has accelerated the process and timeline for companies to restructure and created more distressed opportunities.

[1] *Source: Reserve Bank of India (RBI), as of December 31 2017*

China: Leverage has continued to rise until recently with corporate debt peaking at 167% of GDP in mid-2017 (currently 160%). The Government has a long-term target to delever and has implemented a range of policy measures, such as stricter bank underwriting standards and limitation on asset management company (AMC) mandates (AMC's have been instructed to cease new lending and concentrate on cleaning up their current NPL portfolios). There is mounting evidence that new borrowing and refinancing is becoming more challenging for borrowers, driving increased opportunities for special situations lending and single asset restructuring opportunities.

Indonesia & Thailand: A period of economic slowdown between 2014 and 2016 has weakened corporate balance sheets and, as economic growth resumes, offers opportunities for growth and acquisition financing. SSG seeks to partner with and finance strong operators to take advantage of growth opportunities. Additionally, banks are left with a significant NPL problem. The Thailand market offers a regular flow of NPL portfolios with local banks selling $1.5 to $2.0 billion of NPLs each year in 2016 and 2017. While some banks are attempting NPL portfolio sales, SSG believes single name distressed situations currently offer more attractive investment opportunities.

Special Situations (~40% Fund V Target):
Asia's financing market is dominated by bank lending, which is inefficient and often policy (rather than market) driven. Asia's rapidly growing shadow banking sector is a symptom of this inefficient lending environment which precludes many healthy companies from obtaining credit, but may lead to compelling investment opportunities for private credit investors such as SSG. The Asian Development Bank estimates that while small and medium enterprises ("SMEs") account for 62% of the labor force and 42% of GDP across the region, SMEs only receive 18.7% of total bank lending. While Non-Bank Financial Institutions ("NBFIs") have grown rapidly to address this credit gap, NBFI assets are still far less than the banks, resulting in a large opportunity for private lending.

Moderating macro-economic growth and a reduced ability for banks to hold illiquid assets may also further drive credit investment opportunities across the region. According to SSG, growing NPLs in India, China and South East Asia have started to drive disposals by local, regional, and global financial institutions in the form of NPL portfolios or single names. Overall, SSG anticipates increased demand for private financing transactions with enhanced pricing and compelling risk-reward profiles, as well as an increase of supply of performing or non-performing assets sold by financial institutions.

Portfolio Fit:

A commitment to the Fund allows PSERS to establish a relationship with a high-conviction manager that is focused on the Asia-Pacific region, a region in which PSERS lacks dedicated exposure. The Fund's return target (net mid-teen IRR) is in-line with PSERS' objective for the High Yield/Private Credit portfolio of generating double-digit net returns over the life of the investment. Fund V will be allocated to the Opportunistic bucket of PSERS' High Yield/Private Credit portfolio and the table below summarizes PSERS' projected exposure inclusive of a recommended $300 million commitment:

Investment Type ($M)	Market Value	%	Unfunded[1]	%	Total Exposure[1]	%
Opportunistic	$ 2,229.7	43.7%	$ 1,256.1	39.7%	$ 3,485.8	42.2%
Senior Loans	1,592.6	31.2%	668.3	21.1%	2,260.9	27.4%
Real Assets	782.0	15.3%	873.0	27.6%	1,655.0	20.0%
Mezzanine	494.0	9.7%	366.1	11.6%	860.1	10.4%
Total	**$ 5,098.3**	**100.0%**	**$ 3,163.5**	**100.0%**	**$ 8,261.8**	**100.0%**

(1) As of March 31, 2019. Includes post Q1'2019 pending/closed commitments.

Investment Strategy:

SSG seeks to focus on deep-value investments in companies whose securities are afflicted by dislocations in pricing or market liquidity. Specifically, SSG expects to build a portfolio of: (1) secondary special situations; and (2) new private lending investments. Investment opportunities may include restructuring situations, deep value acquisitions arising from balance sheet stress of borrower or motivated bank sellers, last-mile financing, acquisition financing, and growth capital financing. SSG seeks to create value at entry by making investments at a significant discount to their intrinsic value.

- **Distressed Assets:** Fund V will seek to acquire loans, securities and claims of Asian corporates at attractive valuations. Assets purchased may include performing credits at distressed prices, as well as defaulted or distressed loans, bonds, convertibles, trade/legal claims and equity that are undervalued by the market. These assets may be acquired as single-credits or in concentrated asset pools. In the past, typical sellers have included commercial banks and asset reconstruction companies; however, SSG believes this group will expand to include alternative investment managers and investment banks as they respond to regulatory pressure and exit non-performing or non-core investments. Distressed assets are typically sold through privately negotiated transactions or limited auctions. SSG's deep knowledge of the regional credit, distressed and private financing space enables the team to effectively pursue these opportunities. Post-acquisition, if necessary, SSG has the expertise to further unlock the value of these investments through a capital and operational restructuring where SSG leads the turnaround with a "hands-on" approach.

- **Special Situations:** Fund V will also seek to invest in special situations, where a new private lending opportunity is priced at a significant discount to SSG's estimate of its intrinsic value. SSG expects Asia–Pacific companies to increasingly take advantage of special situations financing amidst a shortage of sources of capital and a selective credit environment for mid-market enterprises. SSG typically provides new capital in the form of private debt to companies with specific capital needs, such as growth, acquisition or restructuring. Exits for these investments vary widely, and may include repayment from the portfolio company's operating cash flows, sale to strategic buyers, contractual arrangements with credible counterparties, and the capital markets.

SSG expects Fund V to invest $50 million to $100 million, per investment, across 20 to 25 investments. Generally SSG's investment approach is industry agnostic, but focused on the ability of businesses to generate free cash flow. However, sectors SSG expects to be more prevalent include infrastructure, real estate, consumer retail and resources. The final industry composition will be driven by the opportunity set. SSG expects the three core geographies, India, China and Southeast Asia to take up 80% to 85% of the portfolio, with India continuing to represent the largest share amongst the core geographies. The remaining 15% to 20% will likely be in South Korea, Australia, and other Asian markets.

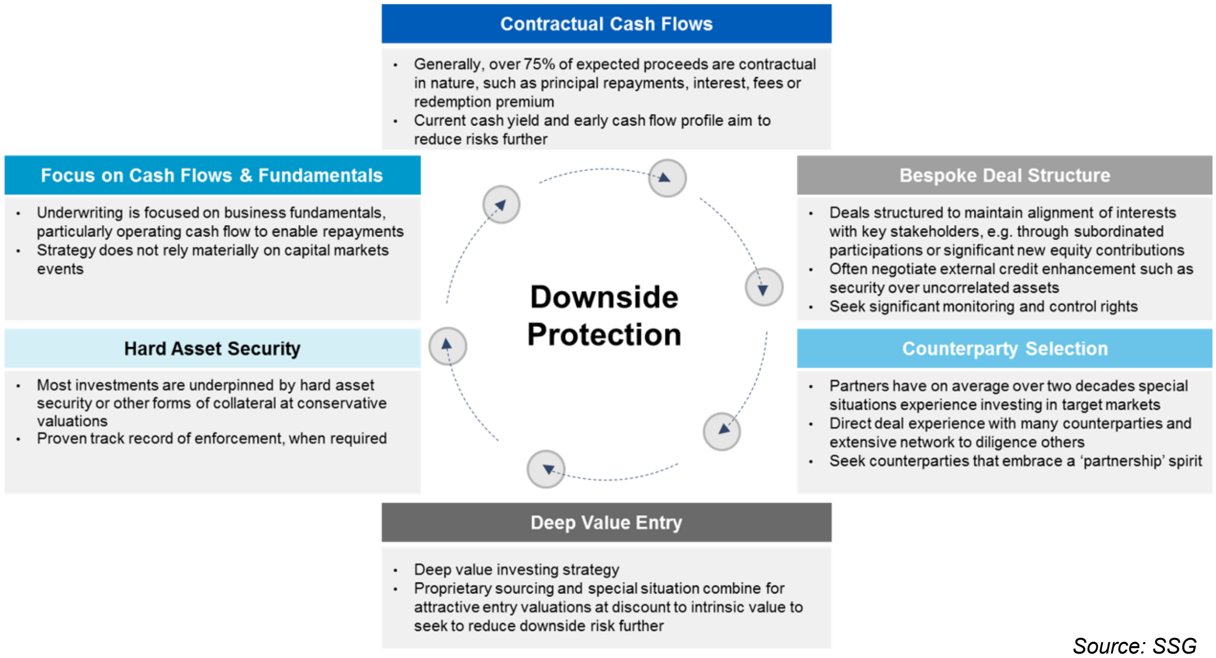
SSG does not rely on capital markets to exit its investments and expects a high percentage of the Fund's investments to be structured with contractual cash flows both on principal and interest and so the Fund should see strong cash flows throughout its life. Exits could be in the form of repayment from the portfolio companies' operating cash flows, sale to strategic buyers, contractual arrangements with credible counterparties and selectively, the capital markets. SSG expects returns on the portfolio to be further enhanced through equity or equity warrants that the investment team strives to acquire while structuring a transaction.

Investment Instruments:

SSG will primarily invest fund assets in secured loans extended to Asia-Pacific borrowers. Loans may also be acquired as a single asset purchase or in a portfolio transaction with a bank. The Fund may also invest in other instruments, including bonds, convertibles, trade/legal claims, and other debt or equity/equity-linked instruments.

Investment Structure:

SSG's investment strategy and approach places great emphasis on downside protection through attractive entry valuations, bespoke deal structuring, hard asset security and careful alignment of interest with key stakeholders.



Source: SSG

Investment Team:

SSG has a total of 173 professionals that operate out of nine offices (Hong Kong, Singapore, Shanghai, Bangkok, Jakarta, Mauritius, and affiliate offices in Mumbai, New Delhi and Sydney), with 38 investment professionals, 41 legal, operations and support professionals and 94 AMC (asset management company) professionals. The table below summarizes the experience of SSG's senior investment professionals (Executive Director-level and above) and Advisor Investment Committee members:

Name ***(Office Location)***	**Role**	**Yrs. Experience SSG / Total**	**Prior Experience**
Edwin Wong* *(Hong Kong)*	Managing Partner & CIO (North Asia Focus) Member, Sub-Advisor Advisory Committee	**10 / 27**	• Lehman Brothers • JP Morgan • Coopers & Lybrand
Shyam Maheshwari* *(Singapore)*	Partner (India Focus) Member, Sub-Advisor Advisory Committee	**10 / 19**	• Lehman Brothers
Andreas Vourloumis* *(Hong Kong)*	Partner (SE Asia Focus) Member, Sub-Advisor Advisory Committee	**10 / 19**	• Lehman Brothers • Deutsche Bank
Sharad Bajpai *(Hong Kong)*	Managing Director - Head of Asset Management Member, Sub-Advisor Advisory Committee	**3 / 25**	• Bank of America Merrill Lynch • RZB (Austria) • Bank of Amercia, N.A. • FleetBoston Financial • The ICICI Bank • Larsen and Toubro Limited

Name *(Office Location)*	**Role**	**Yrs. Experience SSG / Total**	**Prior Experience**
Antares Au* *(Shanghai)*	Managing Director	10 / 18	• Lehman Brothers • San Shan Capital Partners • Fortress Investment Group • Goldman Sachs
Raymond Chan *(Hong Kong)*	Managing Director	2 / 28	• ICG • RAB Capital • D.B. Zwirn • HSBC
Luke Chun *(Hong Kong)*	Managing Director	2 / 22	• Tor Capital • Mount Kelllett Capital • Beacon • Houlihan Lowkey
Dinesh Goel* *(Singapore)*	Managing Director	10 / 17	• Lehman Brothers
Tobias Damek* *(Hong Kong)*	Managing Director	10 / 18	• Lehman Brothers • Flaschengeist Asia • Morgan Stanley • Bain & Company
Manish Jain *(Mumbai)*	Managing Director	5 / 18	• Clearwater Capital Partners • International Finance Corporation, World Bank (Mumbai)
Pradeep Mohinani *(Hong Kong)*	Managing Director	4 / 23	• Lehman Brothers / Nomura International • JP Morgan Chase Hong Kong • Goldman Sachs London • Bankers Trust Hong Kong
Ravi Singhvi *(Singapore)*	Executive Director	2 / 19	• Apollo Global Management • Bain Capital • Citigroup • HSBC
Jacob Samuel *(Hong Kong)*	Executive Director	5 / 13	• Deutsche Bank Hong Kong • Nomura International Hong Kong • Lehman Brothers Hong Kong • Wipro Technologies Bangalore
Yaqing Gao *(Shanghai)*	Executive Director	5 / 13	• CITIC Securities International • Clearwater Capital Partners
Peter Cairns* *(Hong Kong)*	Chief Operating Officer	10 / 32	• Wellington Management Company • Baring Asset Management
Advisor Investment Committee Members			
Nigel David Stead *(Singapore)*	Advisor Investment Committee	10 / 30	• Member, Institute of Chartered Accountants (England and Wales), CFA Charterholder, and member, Institute of Directors (UK and Singapore). • >30 years experience managing trustee and fund administration services, supporting wide range of fund structures, including PE, single and multi-strategy hedge funds and traditional FI and equity funds.
Isatou Smith *(Cayman)*	Advisor Investment Committee	<1 / 13	• Significant regulatory experience in the area of investments and securities. • Professionally accredited director, Institute of Chartered Secretaries (Canada). • Member, Association of Certified Anti-Money Laundering Specialists and Cayman Islands Directors Association.

** Denotes employee equity owner of SSG, of which employees own 98.02% effective interest, with the three senior partners owning 100% of the voting interest. The remaining 1.98% effective interest is owned by a third party.*

SSG utilizes a two-tiered investment approval process consisting of:

1. Approval by the Sub-Advisor Advisory Committee ("SAC"); and
2. Final review and approval by the Advisor's Investment Committee ("AIC")

It is important to note that the detailed investment and risk-return analysis is undertaken at the first-tier SAC (comprised of Edwin Wong, Shyam Maheshwari, Andrew Vourloumis, and Sharad Bajpai) in Asia, with the AIC comprised of the Firm's offshore directors (Cayman). The AIC reviews each investment to ensure the investment committee memo meets SSG standards, it supports the investment recommendation, the investment makes "sense" to a reasonable experienced independent investment advisor, and the investment complies with the Fund's partnership agreement, investment guidelines, and strategy.

Investment Highlights:

- Experienced and Cohesive Senior Investment Team
- Strong Track Record, Generating Significant Alpha Above PME Indices
- Consistent, Flexible Investment Strategy
- Strong Sourcing Capabilities
- Differentiated Exposure to PSERS HY/Private Credit Portfolio
- Dedicated Fund V Overage Sidecar Vehicle

Investment / Risk Considerations:

- Investment Decision Making Process
- Onshore Currency Investments / FX Management
- Increase in Fund Size
- Emerging Market Jurisdictional Risk
- Sidecar Overage Vehicle Discretion
- Liquidity & Leverage Profile

PSERS History & Performance:

A commitment to Fund V will represent PSERS' first commitment to SSG.

Investment Committee Disclosure:

Relationship with Aksia:	Aksia has non-discretionary clients committed to SSG Secured Lending Opportunities II, L.P. and SSG Capital Partners V, L.P.
Introduction Source:	Fund Sponsor
Placement Agent:	Yes, Mercury Capital Advisors ("Mercury"). While the Fund's offering documents do permit placement fees as a partnership expense accompanied with a 100% management fee offset, SSG has stated that any and all fees due to the placement agent will be fully borne by SSG Capital Management Limited directly and will not flow through the partnership.
PA Political Contributions:	None Disclosed
PA Presence:	No
Potential Conflicts:	We are not aware of SSG having any investment conflicts.
First Time Fund With PSERS:	Yes
PSERS Allocation Implementation Committee Approval:	July 3, 2019

Oversight Responsibility:

Investment Office:	Charles J. Spiller	Deputy CIO, Non-Traditional Investments
	James F. Del Gaudio	Senior Portfolio Manager, Private Credit & Special Situations
External Consultant:	Aksia, LLC	

Aksia

Manager Recommendation Memo

June 18, 2019

Board of Trustees
Commonwealth of Pennsylvania, Public School Employees' Retirement System ("PSERS")
5 North Fifth Street
Harrisburg, PA 17101

Re: SSG Capital Partners V, L.P.

Dear Trustees:

Aksia LLC ("Aksia"), having been duly authorized by the Board of PSERS, has evaluated and hereby recommends, in line with PSERS' Investment Policy Statement, Objectives, and Guidelines, a direct allocation of $150 million to SSG Capital Partners V, L.P. ("SSG V" or the "Fund"), and up to $150 million to the Fund's dedicated co-investment vehicle, for a total commitment of $300 million.

SSG Capital Management Limited ("SSGCM" or the "GP") is one of the largest local private credit managers in Asia with more than $4 billion of assets under management. Headquartered in Hong Kong, SSGCM is an Asia/Pacific-focused credit and special situations investment management company founded in early 2009 by Edwin Wong and five other professionals. Prior to SSGCM, the team worked together at Lehman Brothers Asia Special Situations Group. The senior team at SSGCM is experienced, with more than 18 years of relevant experience on average.

The GP closed its prior fund for the SSG strategy, SSG IV, in December 2017 with $1.2 billion of total commitments, plus a sidecar vehicle of $500 million for co-investments. Due to a strong investment opportunity set, particularly in India, SSG IV was 78% deployed as of December 2018. As a result, the GP is coming back to the market with SSG V with a target size of $1.5 billion, plus a sidecar vehicle for co-investments. As of May 2019, SSG V has raised $1.36 billion for the Fund and $475 million for the sidecar vehicle. The GP expects to have a final close in August 2019.

Capital markets in Asia are less developed than in the US and Europe, and can be difficult to access for many businesses, especially small and medium-sized businesses. Bank lending decisions may be policy driven, or may require a bureaucratic approval process, which creates an unmet demand for credit and thus an attractive market environment in Asia. Aksia views SSGCM as one of the most established private credit investment firms in the region given its longstanding local relationships, its ability to originate/structure proprietary deals, and an experienced and sizable investment team with low turnover. SSGCM's edge comes from both its on-the-ground breadth (9 offices in total across the Asia/Pacific region) and its ability to act as an onshore player through its local licenses and infrastructures. These local licenses allow the GP to obtain opportunities with local investor protections, which are usually not available to foreign parties.

Aksia's recommendation is based upon the following analytical factors and is made within the context of PSERS' investment guidelines:

- Due diligence of SSG's investment process, including a review of the sponsor, investment strategy, market positioning, investment personnel, and risk management;
  - Most recent on-site investment due diligence visits conducted October 15, 2018 and November 13, 2018.
- Due diligence of SSG's operations, including a review of its organizational structure, service providers, regulatory and compliance, trade flow process, PPM, and financial statement analysis;
  - Most recent on-site operational due diligence visit conducted October 15, 2018.

- Evaluation of SSG's strategy within the context of the current investment environment; and
- Appropriateness of the Fund as a component of PSERS' portfolio.

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. Aksia manager recommendation memos should be reviewed with other Aksia due diligence materials, including the due diligence reports. In addition, please consult your tax, legal and/or regulatory advisors before allocating to any private investment fund.

Please feel free to contact us should you have any questions about this recommendation.

Respectfully,

Patrick Adelsbach
Partner, Head of Credit Strategies

Simon Fludgate
Partner, Head of Operational Due Diligence