

COMMONWEALTH OF PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

TCI Real Estate Partners Fund III LP

High Yield/Private Credit Commitment

James F. Del Gaudio Portfolio Manager

September 14, 2018

Recommendation:

PSERS Investment Professionals, together with Aksia, LLC, recommend to the Board a commitment of up to \$400 million to TCI Real Estate Partners Fund III LP ("REP III", "Fund III", or the "Fund"). TCI Fund Management Limited ("TCI" or the "Firm") is sponsoring the Fund to originate first mortgages and senior secured debt backed primarily by U.S. and Western European commercial real estate (CRE), with a focus on generating both current interest income and accrued income in the form of interest paid-in-kind (PIK).

Firm Overview:

Christopher Hohn founded the business currently carried on by TCI Fund Management Limited in 2003. TCI is headquartered in London and employs 61 people within the group. As of June 30, 2018, TCI is the investment manager of the following vehicles:

Vehicle	Description
The Children's Investment Master Fund (TCI Master Fund)	\$19.8 billion long-biased, value-orientated fund primarily investing in global equities and opportunistically in debt.
Talos Capital DAC (Talos)	The investment vehicle for The Children's Investment Fund Foundation (UK) (CIFF). Talos invests across a range of assets including equities, fixed income and real estate loans. CIFF was established by Christopher Hohn in 2002. CIFF is one of the largest charities in the United Kingdom and is registered with the Charity Commission of England and Wales. CIFF is dedicated to improving the lives of children in developing countries by achieving large-scale, sustainable impact.
TCI Real Estate Partners Fund I (REP I) and related Co-Investments	The first in the series of TCI REP Funds (2014 vintage), with aggregate capital commitments of \$1.3 billion.
TCI Real Estate Partners Fund II (REP II) and related Co-Investments	The second in the series of TCI REP Funds (2016 vintage), with aggregate capital commitments of \$2.0 billion.
TCI Real Estate Partners Fund III (REP III)	The third in the series of TCI REP Funds (2018 vintage), with closed aggregate capital commitments of \$2.1 billion.

Funds managed by TCI have been investing in real estate loans since 2010 and have originated loans in excess of \$11.8 billion since 2011. TCI Real Estate Partners was founded by Martin Fräss-Ehrfeld in 2014 and is a joint venture between TCI and Martin Fräss-Ehrfeld. To date, REP III has closed on \$2.1 billion in capital commitments relative to a \$3 billion total fund target.

Market Opportunity:

According to TCI, the following factors summarize current market conditions supporting the rationale for a commitment to Fund III:

- Historic capital providers such as banks have reduced total real estate lending creating a financing void
- Banks have lowered their loan to value ratios increasing the equity needed for deals
- Few lenders can make commitments of greater than \$250 million. Currently, loans of greater than \$250 million require a bureaucratic consortia of lenders to be formed with the added complexity of both senior and mezzanine financing
- Banks typically require long due diligence and approval processes and are often inflexible
- Banks often struggle to interact with entrepreneurs with difficult personalities
- Entrepreneurial lenders are often direct equity competitors of the borrower
- The price of a loan is often secondary in importance to certainty and speed of execution

Portfolio Fit:

A commitment to the Fund allows PSERS to further expand its relationship with a high-conviction manager. The Fund's return target 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, targeting ~10% net returns. All considered, the combination of expected performance, senior-secured risk/return and fund structure, gives PSERS Investment Professionals confidence that this offering will be accretive to the High Yield/Private Credit portfolio. In addition, PSERS' High Yield portfolio is currently weighted to managers focused on corporate lending which has become more competitive in the current market environment. A commitment to the Fund will help further diversify and increase PSERS' High Yield/Private Credit portfolio to real asset lending.

REP III will be allocated to the Real Assets bucket of PSERS' High Yield/Private Credit portfolio and the table below summarizes PSERS' projected exposure inclusive of a recommended \$400 million commitment:

Investment Type (\$M)	Active Commitments ¹	%	Market Value	%	Unfunded ¹	%	Total Exposure ¹	%
Opportunistic	\$ 3,750.0	36.3%	\$ 2,203.7	45.0%	\$ 825.2	24.7%	\$ 3,028.9	36.8%
Senior Loans	3,514.8	34.1%	1,521.3	31.1%	978.0	29.3%	2,499.3	30.3%
Real Assets	1,926.2	18.7%	622.6	12.7%	1,070.5	32.1%	1,693.1	20.6%
Mezzanine	1,128.4	10.9%	550.6	11.2%	463.9	13.9%	1,014.5	12.3%
Total	\$ 10,319.3	100.0%	\$ 4,898.2	100.0%	\$ 3,337.6	100.0%	\$ 8,235.8	100.0%

⁽¹⁾ Include post Q1'2018 pending/closed commitments.

Investment Strategy:

REP III is an asset-backed alternative to traditional fixed income with interest income. TCI intends to build a relatively concentrated portfolio of loans (8-12) to 'trophy' assets in prime locations across core markets: London, New York, Milan, Paris, Rome, Venice, Boston, Chicago, San Francisco, West Los Angeles and Washington, DC and in respect of any hotel investment, the key tourism locations in North America, the United Kingdom, Italy, France, Germany, Austria and Switzerland. Loans are predominantly first mortgages and senior secured. TCI will only work with experienced, institutional and well capitalized equity partners/borrowers.

Investment Instruments:

The primary investment instrument will be first mortgage loans secured by CRE assets and occasionally mezzanine loans.

Instrument	Description
First Mortgage	The primary loan that pays for the property and which has priority over all other liens or claims on a property in the event of default. Approximately 90% of TCl's loans are first mortgages.
Mezzanine	Junior loans will only be considered in the rare cases where they have a risk profile comparable to Fund III's targeted first mortgage & senior secured debt risk.

Investment Team:

Martin Fräss-Ehrfeld retains day-to-day management of the Fund and is responsible for originating all deals and negotiating key terms with borrowers. Mr. Fräss-Ehrfeld is supported by 16 middle and back office professionals. These professionals are further supported by external counsel and specialist advisers (i.e. construction consultant, loan servicer and insurance consultant). All proposed acquisitions and dispositions of Portfolio Investments will be reviewed and approved or recommended unanimously by the Investment Committee (Martin Fräss-Ehrfeld and Christopher Hohn).

Martin Fräss-Ehrfeld is an Investment Committee Member of the TCI REP Funds. Martin is the founder and chairman of TCI Real Estate Partners Limited, through which he advises TCI Fund Management Limited ("TCI") in respect of the TCI Real Estate Funds ("TCI REP I", "TCI REP II", the Co-Invest funds and "TCI REP II"). TCI REP I, II and III are real estate debt funds focused on prime assets in gateway cities in North America, the United States and Western Europe. In addition, Mr Fräss-Ehrfeld provides advice to TCI via his own firm, AVE Capital Limited, relating to TCI Master Fund and Talos Capital DAC. Mr Fräss-Ehrfeld joined TCI from The Blackstone Group, where he worked from 2001 to 2009 in the Private Equity and Real Estate Groups in London and New York. Prior to this, Mr Fräss-Ehrfeld was at Merrill Lynch in London working as an analyst in Mergers and Acquisitions. Mr Fräss-Ehrfeld studied Economics at the Vienna University's School of Economics, and then gained a Master of Economics and Management from Ecole Européenne des Affaires in Berlin, and is fluent in German, French and English.

Christopher Hohn is the Founder, Managing Director and Portfolio Manager of TCI Fund Management Limited and Investment Committee Member of the TCI REP Funds. He is based in London and has over 20 years' experience in the investment industry and has managed equity portfolios for over 15 years. Mr Hohn was the Portfolio Manager of the European event driven investment strategy at Perry Capital from 1997 to the start of 2003. This strategy employed capital in the main Perry Partners L.P. fund from 1997 to 2003 and from June 2000 to May 2003 in the separate Perry Capital European Fund. Mr Hohn led the establishment of a London office for Perry Capital in 1998. From 1994 to 1995 Mr Hohn was an Associate at Apax Partners in London and from 1989 to 1991 he was a Manager in the Corporate Finance Division of Coopers and Lybrand in London. Mr Hohn graduated from Harvard Business School in 1993 with an MBA (high distinction) and from Southampton University (UK) in 1988 with a BSc. in Accounting and Business Economics (1st Class Honours). He is a Chartered Financial Analyst charter holder.

Investment Highlights:

- Initial Fund III Investments / Strong Pipeline
- Strong Alignment of Interests / Attractive Fee Structure
- Highly Differentiated Investment Strategy
- Strong Historical Track Record / No Losses to Date
- Focus on High Quality Borrowers / Equity Sponsors

Investment / Risk Considerations:

- Strategy Dependence on Martin Fräss-Ehrfeld
- Early Repayments
- Allocation of Investments Across TCI REP Funds, Talos, and TCI Master Fund
- Liquidity & Leverage Profile

PSERS History & Performance:

In November 2017, Staff, together with Aksia, recommended that PSERS invest up to \$400 million in The Children's Investment Master Fund as part of PSERS' global equity allocation. PSERS began funding the mandate in May 2018 and to date, has funded \$250 million. From May through July 2018 (PSERS most recent capital account statement), TCI is up 8.23% vs. 3.72% for the MSCI World Total Return Index (Bloomberg: NDDUWI).

Investment Committee Disclosure:

Relationship with Aksia, LLC:	As of July 31, 2018, Aksia has no discretionary clients with allocations to TCI REP funds. Aksia has discretionary clients with an aggregate NAV of \$25.8 million allocated to TCI Master Fund.
Introduction Source:	Aksia, LLC
Placement Agent:	None Disclosed
PA Political Contributions:	None Disclosed
PA Presence:	None Disclosed
Potential Conflicts:	We are not aware of TCI having any investment conflicts.
First Time Fund With PSERS:	No (TCI), Yes (TCI REP fund series)
PSERS Allocation Implementation Committee Approval:	September 14, 2018

Oversight Responsibility:

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



Manager Recommendation Memo

September 11, 2018

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

Re: TCI Real Estate Partners Fund III LP

Dear Trustees:

Aksia LLC, having been duly authorized by the Board of PSERS, has evaluated and hereby recommends a direct allocation to TCI Real Estate Partners Fund III LP ("Fund III") in line with PSERS' Investment Policy Statement, Objectives, and Guidelines. It is further recommended that PSERS invest up to \$400 million in Fund III.

TCI Real Estate Partners ("TCI REP" or the "GP") is one of the few investment managers focused on major market construction lending and likely the only one that focuses exclusively on loans over \$250 million in size. It believes its strategy can earn an excess spread by offering borrowers simpler execution, more flexibility in asset management, and lower process risk than a bank syndicate.

TCI REP has historically focused on primarily for sale residential assets at the upper end of the market in a limited set of markets (historically with a significant concentration in New York). The GP has historically offered financing only to well-capitalized sponsors with significant development experience in the asset types and markets in which the GP is lending. In addition, as TCI REP does not leverage or syndicate any of its loans, the GP has been willing to hold individual investments which account for over 10% of a given Fund's committed capital. With respect to staffing, TCI REP has also operated differently from peers, maintaining a lean internal team while leveraging third parties for loan structuring, construction due diligence, and asset management. This approach to-date has resulted in a strong realized track-record: \$3.2 billion in commitments generating a ~13% gross IRR. Investors should consider, however, that the GP's approach to asset management has not been meaningfully tested, that many of the largest assets are still in early stages of development (though in some cases meaningfully de-risked) and that it may be more difficult to maintain the same quality of pipeline as has been achieved historically.

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

- Due diligence of Fund III's investment process, including a review of the sponsor, investment strategy, market positioning, investment personnel, and risk management;
 - Most recent investment due diligence meeting conducted August 1, 2018 with an initial meeting on Dec 4, 2017 and subsequent meeting on June 6, 2018.
- Due diligence of Fund III's operations, including a review of its organizational structure, service providers, regulatory and compliance, trade flow process, PPM & LPA, and financial statement analysis;
 - Most recent on-site operational due diligence onsite conducted on August 8, 2018 and a subsequent call with the fund administrator on August 30, 2018
- Evaluation of Fund III's strategy within the context of the current investment environment; and
- Appropriateness of Fund III 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 Fund III, 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 Fund III. Aksia manager recommendation memos should be reviewed with other Aksia due diligence materials, including the full Investment Review and Operational Review. Recommendations are not provided as a proxy for an investor's own comprehensive due diligence nor should they be relied upon as the exclusive basis of any investment decision. 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