COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

AG Europe Realty Fund II, L.P.

Real Estate Commitment

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May 12, 2017

Recommendation:

Staff, together with Courtland Partners, Ltd., recommends the Board commit up to $100 million to AG Europe Realty Fund II, L.P. ("Fund" or "AG Europe II"). Angelo, Gordon & Co ("AG" or the "Firm") seeks to acquire sub-performing real estate assets in Europe and employ value-added strategies to achieve their return target.

Firm Overview:

Angelo, Gordon & Co., L.P. is a privately held firm founded in 1988 by John Angelo (deceased) and Michael Gordon that specializes in global alternative (non-traditional) investments with an absolute return orientation. As of December 31, 2016 the Firm assets under management ("AUM") was approximately $27 billion, managed by over 400 employees, including 150 investment professionals. With headquarters in NYC and offices in Chicago, Houston, Los Angeles, San Francisco, London, Amsterdam, Frankfurt, Milan, Hong Kong, Tokyo, and Seoul, capital is managed for eleven different strategies. In each area, AG seeks to generate absolute returns in all market environments with less volatility than the general market by exploiting inefficiencies and capitalizing on situations that are not considered mainstream investment opportunities. The Firm is currently 100% owned by the founders and over ninety senior employees or related parties.

Over the past twenty-three years AG has acquired over $25 billion of real estate assets in over 475 transactions with over $10 billion in equity across various core-plus, value-added and opportunistic equity and debt investment vehicles. Approximately two-thirds of the transactions have been fully realized, achieving an 18% gross IRR including leverage of approximately 55-60%. The AG real estate platform, including net lease and real estate debt, represents 36% of the overall AG AUM. AG opened their London office in 2000, Amsterdam in 2006, and Frankfurt and Milan in 2016, and has purchased approximately $1.7 billion of real estate and over $2.6 billion of debt securities (corporate and asset-backed) in Europe.

Real EstateSector	AUM as of 9.30.16 (000)
Pan European	$710
Core Plus – US focused	$2,065
Opportunistic	$2,650
Asian – Japan, Korea, Greater China	$1,015
Net Lease – US focused, Industrial/Office	$1,705
Closed end Debt – US focused	$265
Open end Debt – US focused	$205
Debt Separate Account	$40
Total	**$8,595**

Market Opportunity:

The European market continues to offer an attractive macro-investing environment, with (i) prices still below peak levels, (ii) attractive fundamentals including stable demand, low vacancy, and limited new supply, and (iii) continued deleveraging by the financial institutions. The current European environment is similar to that experienced in the U.S. post-financial crisis. The decline in available mortgage debt and equity capital for value-add assets has resulting in lower pricing. While equity returns have recovered since the Brexit announcement, real estate returns have generally remained at lower levels. Recovery is occurring in strong prime-markets, with office rental growth in markets such as Berlin and Munich, and high pricing for stabilized properties. This recovery is expected to spread to outlying areas and, similar to the recovery in the United States, provide a period of strong real estate opportunities.

Prior to the 2008 peak, European banks were the primary source of debt for commercial real estate. Seventy percent of the current outstanding European debt is legacy paper issued prior to the peak and held by the banks. As these debts mature over the next few years there will be a portion that will have difficulty refinancing or will trigger loan defaults due to new lending requirements. This is expected to provide a solid source of deal flow to AG as they use their lending relationships to source attractive real estate hampered by loan defaults, short sales or borrower recapitalization needs.

Portfolio Fit:

A commitment to the Fund will be allocated to the Real Estate portion of PSERS' Real Assets portfolio. Using the net market value from September 30, 2016, and adjusting the unfunded to include commitments from the prior and current Board meetings, the Real Estate portfolio would be 44.8% Opportunistic, 39.4% Value-Added, and 15.9% Core. Investment in this Fund will increase PSERS' Value-Add real estate exposure, which is currently below a long term target of 50%.

The table below summarizes PSERS' projected exposure inclusive of a recommended $100 million commitment to the Fund:

Investment Type ($M)	Market Value	%	Unfunded	%	Total Exposure[1]	%	Long Term Target (%)
Opportunistic	2,816.0	48.8%	1,075.3	36.9%	**3,891.2**	**44.8%**	**30%**
Value-Add	1,864.5	32.3%	1,556.2	53.3%	**3,420.6**	**39.4%**	**50%**
Core	1,094.5	19.0%	285.7	9.8%	**1,380.2**	**15.9%**	**20%**
Total	**$ 5,774.9**	**100%**	**$ 2,917.15**	**100%**	**$ 8,692.0**	**100%**	**100%**

[1] Includes Gross PTRES Exposure

Investment Strategy:

AG will continue their program of investing in sub-performing real estate assets from owners that lack the capital, patience or expertise to improve cash flow and value. Purchases will be in sub-performing and distressed assets or debt along the value-add investment spectrum. Business plans will range from modest lease-up and operation improvement to complete capital restructuring or asset repositioning to stabilization. These assets are typically inefficiently priced due to information gaps, lender involvement, attributes of the asset or a unique approach that AG expects to pursue. Focusing on the largest, most liquid markets in Western Europe assets will fall into the typical real estate categories of office, retail, residential, industrial and hotel. Leverage will be limited to 75% at the fund level, but AG has historically conservatively used debt and expects a range of 55-65%. Europe Fund I leverage peaked at 42% loan to value. Since 2009, AG has purchased approximately $1.7 billion of real estate equity and debt in Europe. They have fully realized eight investments resulting in a gross 33% IRR and gross 2.1x multiple of invested capital.

Working in tandem with their joint venture partners, whom also invest equity into the deals, the sub-performance will be corrected, the property stabilized and held for a total of three to seven years. These stabilized assets will be marketed as highly sought after core real estate investments, typically to traditional large institutional real estate investors. Diversification by Region and Property type is expected in the estimated ranges below:

Region	% exposure
United Kingdom	30-40
Germany	15-25
France	10-15
Netherlands	10-15
Other Western Europe	5-15

Property Type	% exposure
Office	40-60
Retail	10-20
Hotel	10-20
Apartment	10-20
Industrial	10-20
Other	0-10

Investment Structure:

PSERS will invest as a Limited Partner in AG Europe Realty Fund II, L.P., a Cayman Islands Exempted Limited Partnership.

The Fund's Advisor/Manager is Angelo, Gordon & Co, L.P., an investment adviser registered with the SEC, and the General Partner of the Fund is AGR Europe II LLC, a Delaware limited liability company. Both are privately owned by the estate of John Angelo, Michael Gordon, over 90 senior employees and their related parties.

Investment Instruments:

Investments are expected to be interests in real estate properties, real estate debt, or real estate companies.

Investment Team:

Adam Schwartz, Managing Director and Head of U.S and Europe, and Anuj Mittal, Managing Director in London will operate as co-portfolio managers for the Fund. There are fourteen additional professionals on the Europe team located in London, Amsterdam, Milan, Frankfurt and New York. The Fund will establish and invest through joint venture arrangements, of which they have already established a network of forty groups. The JV operator is retained for their specialized expertise and experience to operate, administer and manage the day-to-day business. AG will retain major decision rights (budgets, leases, large vendor/construction contracts, refinances, and disposition) and strict cash controls.

Anuj Mittal splits his time between London and Amsterdam and has been with AG for a total of ten years; in NYC from 2004 to 2006, and then he rejoined AG in 2008 as the European real estate opportunity set improved. The Firm made its first European investment in 2009. Adam Schwartz has been with AG since 2000 and has been directly responsible for over $10 billion in real estate investments.

Investment Highlights:

Proven, Long-Term Investment Strategy
Over the past 23 years AG has consistently applied the same approach to their investments. Purchasing sub-performing real estate assets from owners that lack patience, capital, or expertise; causing distress or inefficiencies that are correctable with competent management and adequate resources.
Sourcing Synergies
The European real estate and debt teams have together invested $4.3B in Europe, and work closely to generate off-market leads and share deal flow from key trading and lending relationships. The forty existing joint venture partners also provide a steady stream of opportunities for consideration.
Reputation and Resources of AG
In Europe and domestically AG prides itself on the importance of closing deals put under letter of intent. They perform their extensive due diligence prior to making an offer, and are then able to respond quickly to close. This is especially valued by lenders who are looking to sell distressed assets. As a leader in the alternative field with $27B AUM, AG has been able to build a core business with deep resources that is responsive to investor needs and SEC requirements. They have fully built-out systems and backups, compliance, and internal control procedures.

Investment / Risk Considerations:

Non-US Investment and Currency
International relations may change, depending on the current United States leadership and potential insular actions. Regulatory risk may apply both in the U.S. and in Europe, depending on any changes to Dodd Frank, the Volcker Rule, etc. Britain's recent withdrawal from the U.K. resulted in buying opportunities for AG; however, there is still risk of broader economic and currency impact. *AG has been investing globally through many cycles, and has realized over two-thirds of their real estate transactions with returning a gross 18% IRR. They will maintain their underwriting approach and believe that over the period of the Fund any of these impacts would be somewhat mitigated by time, and demand for quality real estate. The AG Europe funds are dollar denominated and will typically hedge the equity investment of an asset plus approximately 50% of the Fund's projected profit for the full projected holding period. As valuation adjustments are made in subsequent quarters, the amount of the Fund's hedges will generally be revised to reflect the greater of (1) NAV or (2) equity invested plus 50% of the expected profit over the life of the investment.*

Currency is normally hedged through the use of standard forward contracts.
Development and Redevelopment
Any development of real estate brings additional risk to the investment, including cost escalation and lease-up risk. *AG expects that development will represent 0-5% of the fund equity. Europe Fund I did not have any ground-up development. They do anticipate that there will be multiple redevelopment projects, some that may involve a complete change to the property and a period of time without cash flow. AG relies on experience learned over their history of successfully employing similar strategies.*
Joint Venture Partners
Not all joint venture partnerships are successful, and resolution of disputes can be time consuming. *AG has been investing in this format for their entire 23 year history of real estate investing. They are comfortable with a high number of relationships, which results in a good source of deal flow. They typically are able to remove a partner without cause. In Europe these partners generally co-invest an amount significant to that partner, from 2-20% of the capital). Their investment is alongside the Fund, and they are able to earn incentive with outperformance (generally starting above a 15% return)*

PSERS History & Performance:

PSERS previously committed to two AG funds, both primarily U.S. value-add funds with a similar strategy to the Europe Fund series. The table below summarizes PSERS' investments in the AG Core Plus Realty funds as of September 30, 2016:

Fund ($,M)	Vintage	Commitment	Contributions	Distributions	NAV	Net IRR	Net MOIC
AG Core+ Fund III	2011	75.0	70.0	89.4	31.1	24.8%	1.7x
AG Core+ Fund IV	2015	100.0	37.6	0	39.7	7.0%	1.1x
Total		**$175.0**	**$107.6**	**$89.4**	**$70.8**	**23.1%**	**1.5x**

PSERS did not invest in AG Europe Realty Fund I, L.P., a $570 million 2014 vintage fund. Currently the fund is returning a net IRR of 16% and a 1.2x net multiple and projects a 23% gross IRR and 1.8x multiple based on 57% of the fund invested at December 31, 2016.

Finance Committee Disclosure:

Relationship with Courtland Partners, Ltd.:	None Disclosed
Introduction Source:	Fund Sponsor
Placement Agent:	The firm has not engaged a placement agent for AG Europe Realty Fund II and has never used a placement agent in connection with any investments by PSERS
PA Political Contributions:	None Disclosed
PA Presence:	Over time, Angelo, Gordon has made several real estate investments in Pennsylvania, most of which have been sold. The one asset currently held is Edgmont Residential, 183 acres primarily zoned for single family residential development located in Edgmont, PA, which is held by AG Realty Fund IX (opportunistic strategy, not a PSERS investment).
Potential Conflicts:	We are not aware of AG having any investment conflicts
First Time Fund With PSERS:	No
PSERS Allocation Implementation Committee Approval:	May 12, 2017

Oversight Responsibility:

Investment Office:	Charles J. Spiller	Deputy CIO, Non-Traditional Investments
	Laurann H. Stepp	Senior Portfolio Manager
External Consultant:	Courtland Partners, Ltd.	

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May 12, 2017

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

Re: AG Europe Realty Fund II, L.P.

Dear Trustees:

Courtland Partners, Ltd. ("Courtland"), having been duly authorized by the Board of PSERS, has evaluated AG Europe Realty Fund II, L.P. (the "Fund"). The Fund's strategy will emphasize the purchase of a range of sub-performing and distressed real estate assets and debt which fall along a value-add spectrum in terms of the requisite business plan for each asset. Business plans may range from modest lease-up and operations improvement to a more significant value-add strategy which may require complete capital restructuring or asset repositioning to stabilize. The Fund intends to focus on the largest, most liquid and institutional markets in Western Europe – notably, the UK, Germany, France, Ireland, Spain, Italy and Benelux countries. Assets are expected to typically fall in the traditional categories of office, retail, residential, industrial and hotels.

Angelo, Gordon typically purchases assets from owners who lack the capital, the patience or the expertise to improve cash flow and value. The assets are often attractively priced due to inefficiency of the sale process, information gaps due to lender control, specific attributes of the asset, or a unique angle or creative approach which Angelo, Gordon may take with regard to the acquisition process or the eventual repositioning of the underlying asset. Generally, the Fund will form an alliance and work in tandem with a local operating partner to correct the asset's sub-performance, increase cash flow and add significant value. In many cases local operating partners are able to source opportunities which are off-market. In addition, Angelo, Gordon expects that it will be able to utilize the firm's deep network of relationships with leading European banks, loan servicers and bankruptcy liquidators to acquire many properties in a privately negotiated process.

The Fund's targeted holding period for assets will range from three to seven years, depending upon the length of time needed to correct an asset's underperformance. The Fund will seek to invest in a portfolio of assets that, after stabilization, will be highly sought after by traditional institutional real estate investors. Critical to the exit strategy, Angelo, Gordon is very careful to invest in properties and markets with a proven abundance of buyers or end users. When it has seen speculative and excess buyer demand, Angelo, Gordon has moved quickly to sell assets earlier than the business plan may have dictated.

Angelo, Gordon is mindful of diversification and is careful not to become overly concentrated. However, the firm takes a "bottom-up" approach in creating its portfolios, whereby it finds attractive opportunities that meet its criteria and buys them without specific preconceived notions of how each portfolio should look. Angelo, Gordon believes that this approach reduces the potential of making investments that theoretically sound good, but do not really possess the best risk/reward opportunities in the marketplace.

The Fund will pursue predominately equity investments and may acquire debt, most often with the intent to gain control of the underlying asset. Angelo, Gordon expects 0-5% of the Fund's investments to be ground-up developments. The targeted leverage for the Fund is 55-65%, with a maximum fund level leverage of 75%.

The targeted investment size is in the range of $15 to $75 million of contributed equity, and the range of values of targeted properties is approximately $25 to $200 million. These general expectations are subject to market conditions and are not formal investment restrictions.

Courtland's recommendation is based upon the following factors and is made within the context of PSERS' investment guidelines.

- Detailed due diligence, including interviews with key Angelo, Gordon management team members, and review of all relevant materials provided by Angelo, Gordon.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- Evaluation of Angelo, Gordon's track record and organizational resources.
- Discussion and review of the market conditions in markets relative to the proposed investment strategy.
- The strategy proposed for the Fund is appropriate for the real estate component of the portfolio.

Based on the above factors, Courtland recommends that PSERS commit up to $100 million to the Fund. Courtland makes this recommendation considering Angelo, Gordon'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. Courtland does not provide legal or other non-investment-related advice.

Sincerely,

Steven Novick
Managing Principal

COURTLAND PARTNERS, LTD.