



BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

James T. Strouse
Chairman of the Board
Robert Hooper
Vice-Chairman

****SPECIAL****

**Retirement Board Meeting Agenda
City Hall Conference Room 12
Thursday August 23, 2018 9:30am**

Stephanie Hanker
Retirement Administrator
802-865-7097
VT Relay – dial 711

1. Agenda
2. Public Forum
3. Elect Chair, Vice-Chair and Secretary of the Board
4. Approve Minutes of July 25, 2018
5. Approve Retirement Applications
6. Ratify Refund and Rollovers
7. Performance Presentation - UBS
8. Performance Presentation – Dahab Associates
9. Discussion of Rate of Return
10. Possible Executive Session
11. Adjourn

Non-Discrimination

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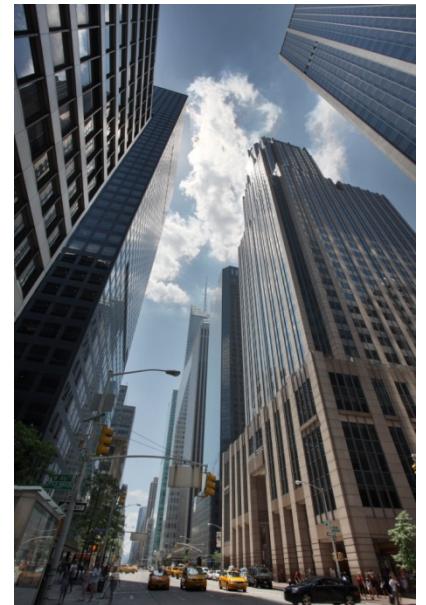
Trumbull Property Fund (TPF)

City of Burlington

Presented by:
Julie Pierro, Portfolio & Client Services

Real estate
investment funds

August 23, 2018



1177 Avenue of Americas, New York, NY

General risk disclosure

Certain sections of this presentation that relate to future prospects are forward looking statements and are subject to certain risks and uncertainties that could cause actual results to differ materially. This material is designed to support an in-person presentation, is not intended to be read in isolation, and does not provide a full explanation of all the topics that are presented and discussed.

An investment in real estate will involve significant risks and there are no assurances against loss of principal resulting from real estate investments or that the portfolio's objectives will be attained.

This is not a recommendation. Investors must have the sophistication to independently evaluate investment risks and to exercise independent judgment in deciding to invest in real estate funds. Investors must also have the financial ability and willingness to accept and bear the risks, including, among other things:

- **Risk of illiquidity.** Real estate is an illiquid investment and the account may not be able to generate sufficient cash to meet withdrawal requests from investors. Redemptions may be delayed indefinitely;
- **Risks of investing in real estate.** These risks include adverse changes in economic conditions (local, national, international), occupancy levels and in environmental, zoning, and other governmental laws, regulations, and policies;
- **Use of leverage.** Leverage will increase the exposure of the real estate assets to adverse economic factors, such as rising interest rates, economic downturns, or deteriorations in the condition of the properties or their respective markets and changes in interest rates; and
- **Limitations on the transfer of fund units.** There is no public market for interests in any of our funds and no such market is expected to develop in the future.
- **Legal & Taxation.** Investors should consult their own legal and tax advisers for potential US and/or local country legal or tax implications on any investment

Investors should evaluate all risk and uncertainties before making any investment decision. Risks are detailed in the respective fund's offering memorandum.

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Section 1

US overview

Real estate investment experience and mission

UBS Asset Management, Real Estate & Private Markets (REPM)

Real Estate¹

- Close to 75 years experience in real estate, managing assets in excess of USD 95 billion for over 3,000 professional / institutional clients worldwide
- Present in 14 countries worldwide with over 270 investment professionals with deep understanding of local markets dynamics
- Over 2,100 direct property holdings worldwide, in 19 countries

Real Estate - US

- Over 40 years of real estate investment experience
- USD 32.7 billion of assets for over 700 institutional clients
- 493 real estate investments managed including: multifamily, office, retail, hotels, industrial and farmland
- Real estate organization with 219 employees and offices in California, Connecticut, and Texas
- Quality people, properties and relationships

Our mission is to provide both superior risk-adjusted investment performance for our clients through private real estate investment strategies and outstanding client service.

Data as of June 30, 2018, unless otherwise noted. . ¹As of March 31, 2018.

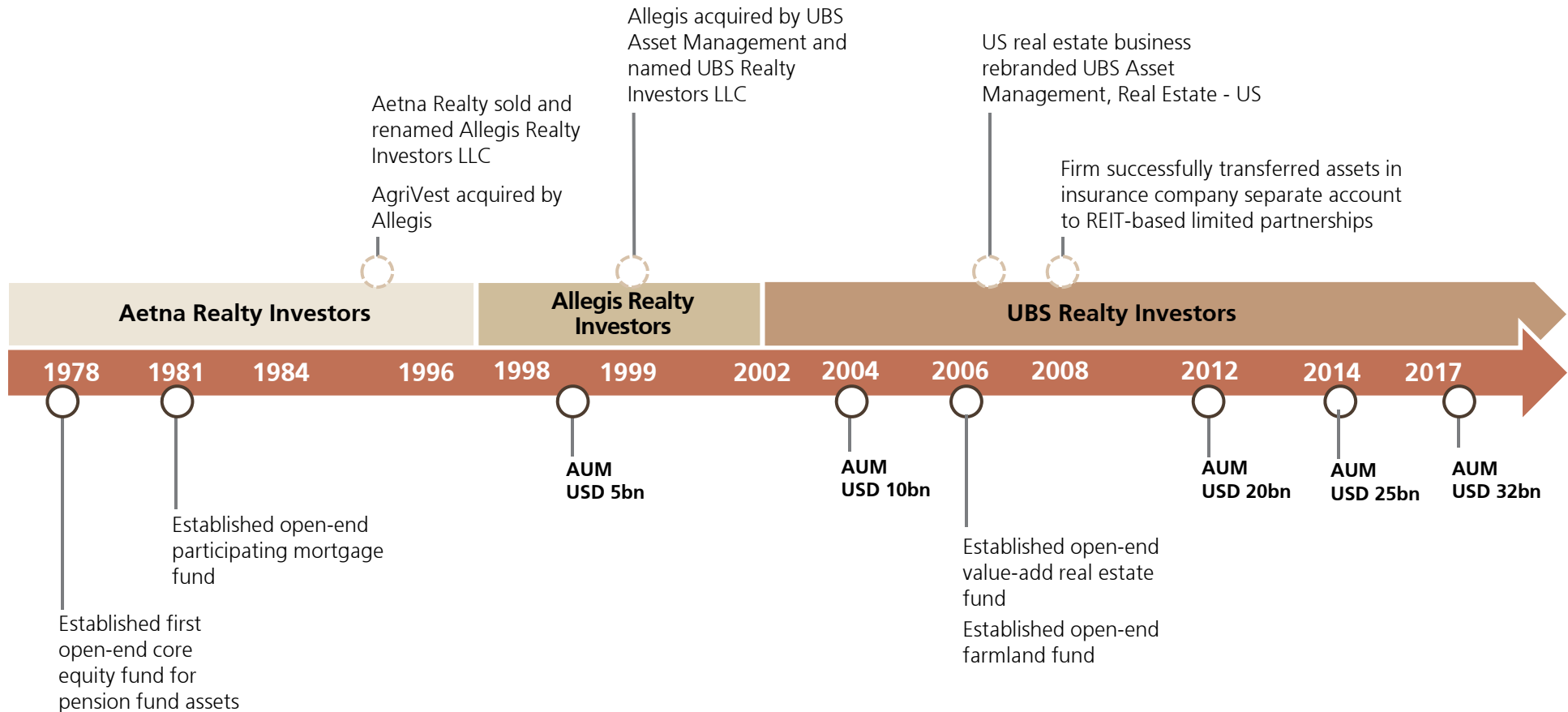
Source: UBS Asset Management, Real Estate & Private Markets (REPM). Includes UBS Farmland Investors LLC



The Post, Seattle, WA

UBS Realty Investors LLC history

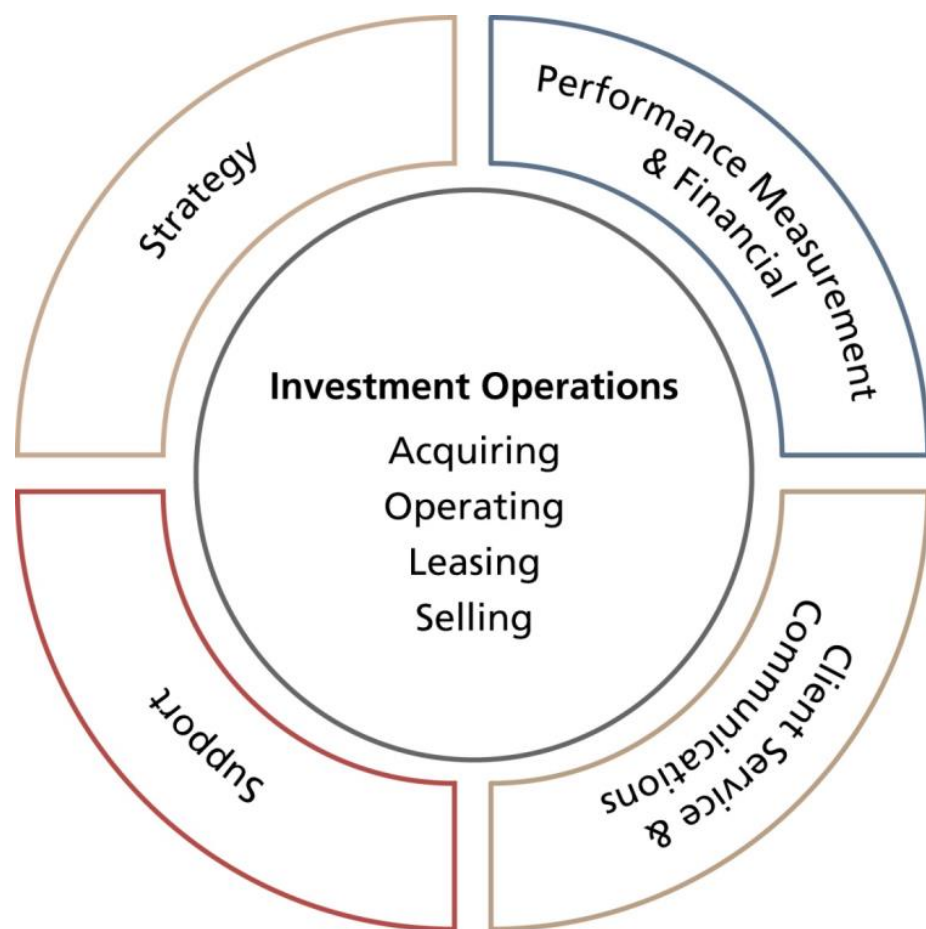
Long tenure – growing platform



Source: UBS Asset Management, Real Estate & Private Markets (REPM)

Notes: Allegis was a limited liability company comprising Aetna Realty senior management and a Massachusetts-based private equity company

US real estate - multidisciplined organization



	<u># of Employees¹</u>
Strategy	
- Senior Management	1
- Portfolio Management	14
- Research	9
Investment Operations	
- Acquisitions	23
- Asset Management	50
- Dispositions	4
- Engineering	4
Performance Measurement & Financial	
- Valuation	4
- Fund & Property Accounting	35
- Business Operations	6
Client Service & Communications	
- Portfolio & Client Services	11
- Client Service & Communications	9
Support	
- Information Technology	9
- Legal & Compliance	10
- Administrative	20
Total	209

Data as of June 30, 2018.

¹UBS Farmland Investors LLC consists of 10 additional employees that are not included in this count.

Source: Source: UBS Asset Management, Real Estate & Private Markets (REPM)

Senior investment professionals - US

Investment Committee members average 33 years of industry experience

Senior investment professionals average 29 years of experience

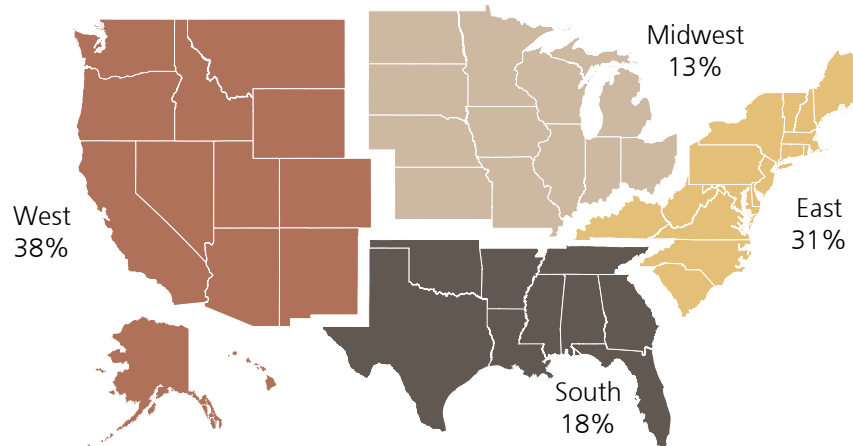
Investment Committee		Portfolio Management, Investment Operations & Client Services		
<u>Head of Real Estate US and Committee Chair</u>	Matthew Lynch	<u>Trumbull Property Fund (TPF)</u>	Paul Canning Nolan Henry Mario Maturo	Kevin Crean Pamela Thompson Peter Shaplin
<u>Portfolio Management</u>	Paul Canning Kevin Crean Gary Gowdy Jeffrey Maguire Timothy Walsh	<u>Trumbull Property Income Fund (TPI)</u>	Gary Gowdy	Chris Clayton
<u>Research & Strategy - Global</u>	William Hughes ⁽¹⁾	<u>Trumbull Property Growth & Income Fund (TPG)</u>	Timothy Walsh	Peter Juliani
<u>Transactions</u> ⁽²⁾	John Connelly ⁽¹⁾	<u>Separate Accounts</u>	Jeffrey Maguire	Peter Gilbertie
<u>Asset Management</u>	Thomas Enger ⁽³⁾ James Fishman ⁽³⁾ Alan Green	<u>UBS Trumbull Diversified Property Collective Fund (TDP)</u>	William Hughes ⁽¹⁾	Laurie Tillinghast
<u>Legal-General Counsel</u>	Steven Kapiloff ⁽¹⁾	<u>Portfolio & Client Services</u>	Thomas O'Shea ⁽¹⁾ Maria Bascetta Mia Dennis Ronald Lanier	David Lawson Julie Pierro Wayne Wallace Catherine Schuster
<u>Portfolio & Client Services</u>	Thomas O'Shea ⁽¹⁾	<u>Research & Strategy - US</u>	Tiffany Gherlone	
<u>Business Operations</u>	David Ingram	<u>Engineering</u>	Jeffrey Fraulino	
		<u>Valuation</u>	Thomas Gould	Christopher Taylor
		<u>Transactions</u>	John Connelly ⁽¹⁾ Michael Mistretta ⁽²⁾ William Robertson	Rodney Chu ⁽²⁾ William Moreno ⁽²⁾
		<u>Accounting</u>	Carol Kuta	Barbara Roy

As of July 2018. Notes: ⁽¹⁾Department head. ⁽²⁾The Acquisition Region Heads are voting members of the Investment Committee for any sale or disposition transaction. ⁽³⁾Co-Heads of Asset Management.

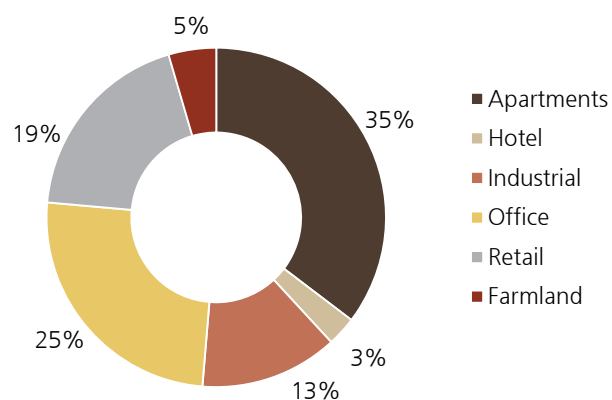
Real Estate funds in the US - Overview

Gross assets – USD 32.7 billion

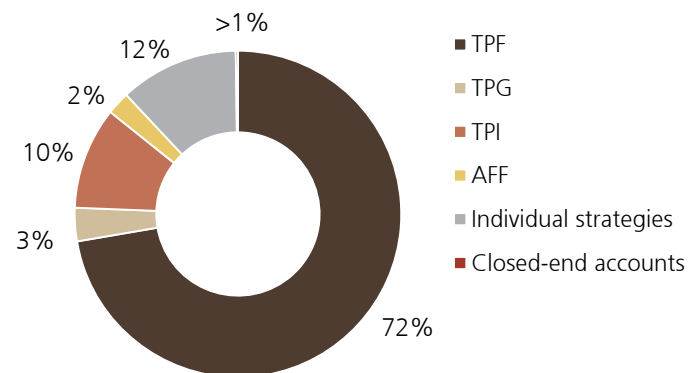
Assets by geographic region



Assets by property type



Assets by strategy



Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: Assets by property type and geographic regions represent real estate assets only and exclude other assets, such as cash, which are included in Gross Assets. Assets include UBS Farmland Investors LLC.

Section 2

Trumbull Property Fund (TPF)

Trumbull Property Fund

Representative assets



**Liberty Green / Liberty Luxe,
New York, NY¹**



**455 Market Street,
San Francisco, CA**



**1177 Avenue of the Americas,
New York, NY**



53 State Street, Boston, MA



1101 K Street, Washington, DC



Water Tower Place, Chicago, IL

Photographs of current TPF properties are shown for illustrative purposes. The properties within the Fund are expected to change over time as investments are acquired and sold.

¹Participating mortgage. Source: UBS Asset Management, Real Estate & Private Markets (REPM); January 1, 2017.

Dedicated and experienced team

Portfolio Managers average 25 years of industry experience

Paul Canning
Managing Director

Senior Portfolio Manager



38 years of industry experience, 27 with UBS

Mario Maturo
Executive Director
Portfolio Manager



19 years of industry experience,
13 with UBS

Peter Shaplin
Executive Director
Portfolio Manager



17 years of industry experience,
5 with UBS

Pam Thompson
Executive Director
Portfolio Manager



27 years of industry experience,
16 with UBS

Nolan Henry
Director



Financings
Reporting

Experience: 15 / 10

Lan Seto
Director

Portfolio Analytics



Experience: 13 / 11

Debby Sce
Associate Director

Portfolio Analytics



Experience: 13 / 11

Peter Juliani
Executive Director



Cash Management
Forecasting

Experience: 20 / 14

Source: UBS Asset Management, Real Estate & Private Markets (REPM).
Data as of July 1, 2018

Trumbull Property Fund

An established open-ended core fund that provides superior risk adjusted returns¹

Fund highlights

- »» 40 year track record
- »» USD 23.6 B in assets
- »» Gross Return Since Inception: 9.0%
- »» Gross Dividend Yield: 4.3%²
- »» Fund leverage: 17.4%
- »» 434 Investors
- »» 204 Investments

Stable income	▶	84% of total return from income since inception	Low end of real estate risk spectrum
Low Leverage	▶	Facilitate favorable acquisitions	
Diversification	▶	Research driven Proprietary Inventory Model	Competitive total returns across real estate cycles
Selective Value Added	▶	Build-to-core	
Sustainability	▶	Leader in US diversified funds ³ , economically justified	Consistently executed core strategy

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹Ranked #1 (out of 13 funds) for Sharpe Ratio and for Standard Deviation, on a 10-year basis, as calculated by NCREIF as of June 30, 2018. ²Gross dividend yield provided is a one-year gross rolling return. ³Source: GRESB as of 2017/TPF is ranked #2 out of 39 US diversified funds. Notes: The Fund's diversification is managed to our proprietary Inventory Model, and not the NFI-ODCE benchmark. The Inventory Model has outperformed the NPI 31 out of the past 39 years and with a lower standard deviation. Return supplements the Firm's Equity Composite previously provided or included herein. TPF since inception date is 1/13/1978. See required notes page at the end of this section or presentation. Past performance is not indicative of future results.

Diversification driven by proprietary inventory model

TPF does not seek to replicate NFI-ODCE

Proprietary inventory model

- USD 5.6 trillion, ten times NPI
- Twenty times larger than ODCE
- Outperforms NPI 32 of 40 years, with a lower standard deviation

By Property type vs NFI-ODCE

- More apartments
- Less office

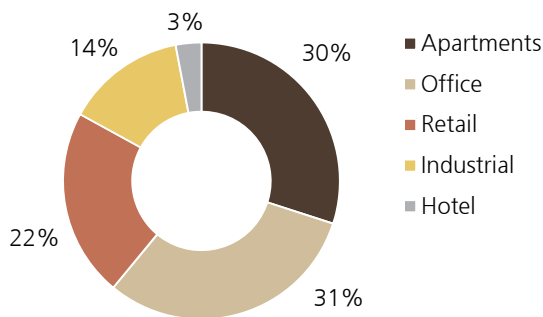
By Geography

- Coastal focus
- Balanced East & West

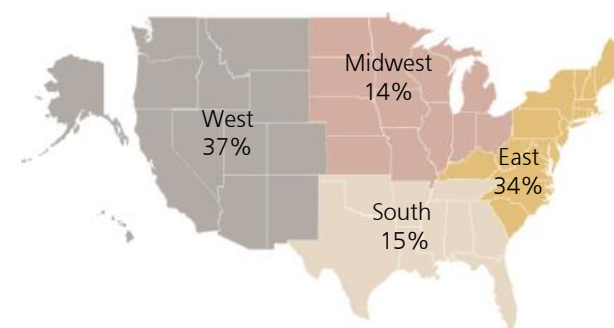
By Economic drivers

- Affirms diversification

Property type allocation (%)



Geographic region allocation (%)



	TPF target ranges	Current TPF allocation	NFI-ODCE
Apartments	27-45	30	25
Office	16-27	31	36
Retail	21-35	22	19
Industrial	11-18	14	16
Hotel/Other	0-10	3	4

	TPF target ranges	Current TPF allocation	NFI-ODCE
East	22-46	34	32
Midwest	8-16	14	9
South	13-27	15	18
West	22-46	37	41

Data as of June 30, 2018 unless otherwise indicated. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source for NFI-ODCE and NPI. Percentages may not sum due to rounding. Percentages are based on gross market value of real estate investments. The Investable Universe inventory model has provided superior investment returns (relative to NPI) for 32 of the past 40 years, and with a lower standard of deviation. Data for Investable Universe updated as of December 31, 2017 (updated annually). The Investable Universe as tracked by our Research team is an estimate of the market value of Institutional-quality commercial real estate in 64 of the largest US metro areas for the four primary property sectors: apartments, industrial, office and retail. It provides a larger sample size (approximately USD 5.57 trillion) of assets as compared to the USD 559.8 billion tracked by NPI (as of December 31, 2017).

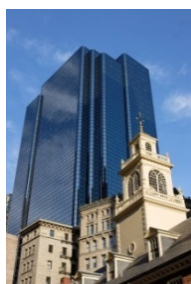
TPF 10 largest markets and assets

Major market exposure and low property concentration risk

Markets by % of Fund

New York	14%
Chicago	11%
Los Angeles	9%
San Francisco	8%
Boston	7%
Washington DC	6%
Dallas	5%
Denver	5%
Portland, OR	4%
Miami	3%
	74%

Assets	Location	Property type	Gross Market Value (USD Mil)	% Portfolio
53 State Street	Boston	CBD Office	832.0	4%
CambridgeSide Galleria ⁽¹⁾	Boston	Regional Mall	622.9	3%
Galleria Dallas	Dallas	Regional Mall	602.9	3%
135 West 50th Street ⁽¹⁾	New York	CBD Office	585.0	3%
120 Broadway	New York	CBD Office	566.0	3%
Liberty Green-Liberty Luxe ⁽¹⁾⁽²⁾	New York	High-rise Apartments	530.0	2%
35 West Wacker	Chicago	CBD Office	520.9	2%
US Bancorp Tower	Portland	CBD Office	492.0	2%
1177 Avenue of the Americas	New York	CBD Office	491.3	2%
Water Tower Place	Chicago	Regional Mall	448.4	2%
			5,691.5	25%



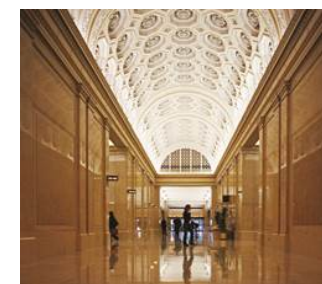
53 State Street



Water Tower Place



CambridgeSide



120 Broadway

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ⁽¹⁾Converted to Core from an initial Value-added strategy. ⁽²⁾Participating mortgage investment. Notes: Percentages are based on gross market value of real estate investments. See required notes page at the end of this section or presentation. Amounts may not sum due to rounding. Past performance is not indicative of future results.

TPF positioning

Current environment

- Mature economy
- Lower appreciation returns
- Slowing NOI growth

TPF composition

- Greater allocation apartments/lower allocation office vs NFI-ODCE
- Increasing industrial allocation
- Balanced coastal (East/West) concentration

TPF risk profile

- Lower leverage
- Well-leased portfolio
- Low volatility/standard deviation

TPF growth potential

- Forecasted 2018 same-property NOI growth of 5.9%
- Future value creation from existing assets

TPF disposition focus

- De-emphasize hotels
- Reduce office allocation
- Sell older, non-accretive assets



2828 Zuni, Denver, CO



1221 Broadway, Oakland, CA



Monarc at Met 3, Miami, FL

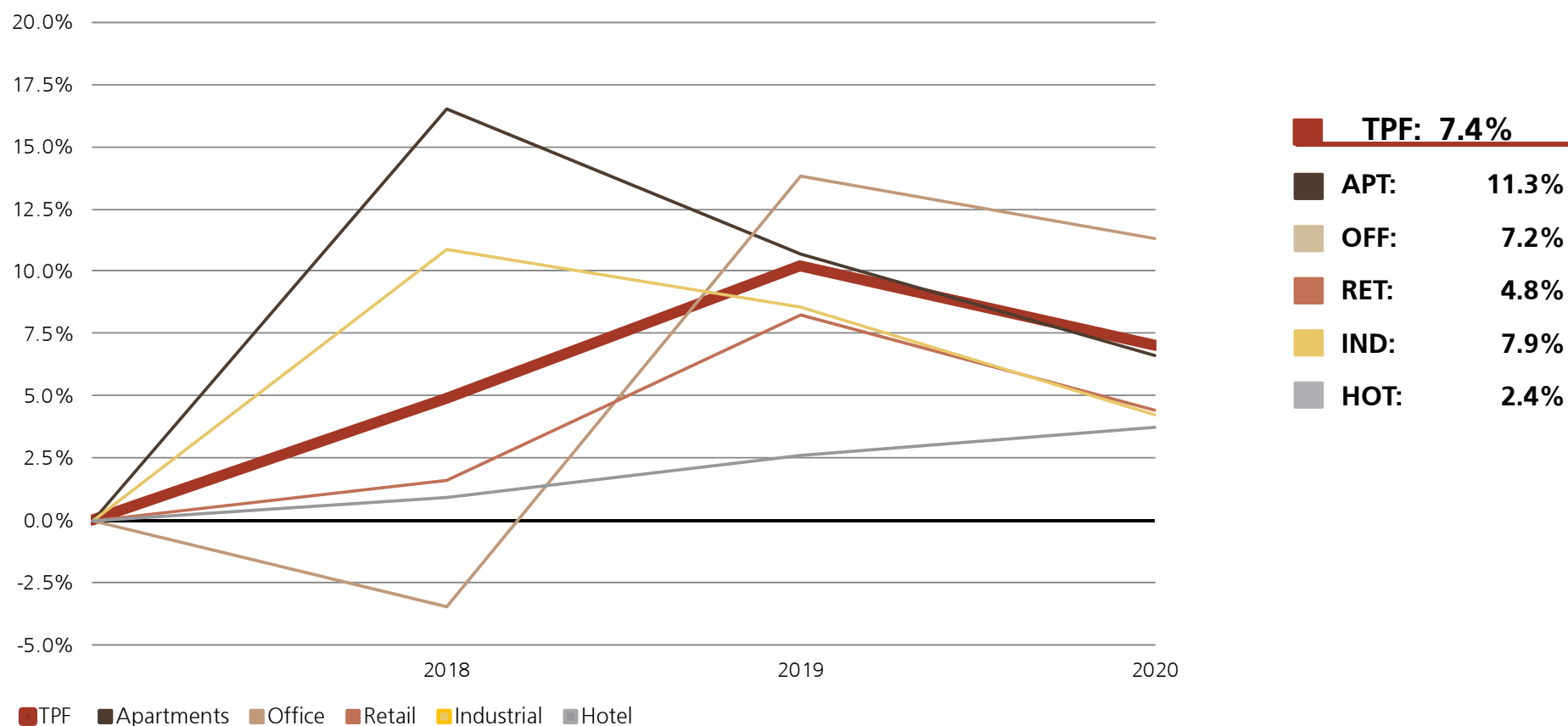


Water Tower Place, Chicago, IL

All data as of June 30, 2018, unless otherwise indicated below. Source: UBS Asset Management, Real Estate & Private Markets (REPM) and NCREIF. The manager seeks to achieve the stated objective. There can be no assurances those objectives will be met. See Required notes page at the end of this section or presentation.

TPF Net Operating Income Forecast

NOI growth currently forecasted at an average annual rate of 7.4% next three years



Data as of March 31, 2018. The TPF NOI forecast is not intended to be a projection of fund returns and should not be relied upon as such. NOI growth above includes both stabilized and value-added assets. The data in the forecasts is unleveraged and at the 100% property level. The 3-year NOI growth forecasts include all of the assets held in the Fund as of 3/31/18, except for any assets actually sold by 4/30/18. Individual cash flows contain the actual lease terms of existing tenants and in-place operating expenses, and include assumptions about lease renewals and costs, as well as income and expense growth rates. The Advisor bases these measurements on assumptions that it believes are reasonable and consistent with industry standards. All forecasts contained in the presentation are opinions only and are based on available information at the time of writing. Accordingly, such statements are inherently speculative as they can be affected by incorrect assumptions or known or unknown risks and uncertainties. The outcomes ultimately achieved may differ substantially from the forecasts.

TPF acquisition activity - previous 12 months

Build-to-core for value creation potential; strategic existing investments for in-place income

Sample acquisitions



Pacific Freeway Center, Fontana, CA

- Industrial development of two assets totaling 527,000 sf in market with limited supply
- Partnership with prominent developer and repeat partner to build quality, modern distribution product
- USD 66.4 million committed



Becknell, Commerce City, CO

- Development of 540,800 sf of warehouse/distribution space
- Opportunity to expand presence in the desirable market at a preleased asset
- USD 35.2 million committed



Becknell – Red Rock 200, Reno, NV

- 200,000 sf Class A distribution facility, part of Becknell portfolio
- Located in a major industrial submarket, with strong tenant demand and rent growth.
- USD 12.1 million committed



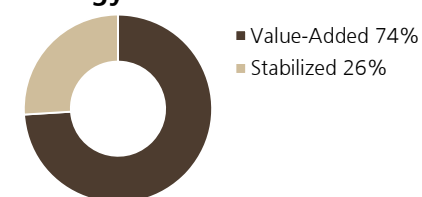
The Caruth, Dallas, TX

- 338-unit townhome apartments in affluent area
- Partnership with established developer to generate incremental yield from property upgrades
- USD 81.9 million committed and USD 44.6 million in debt assumed

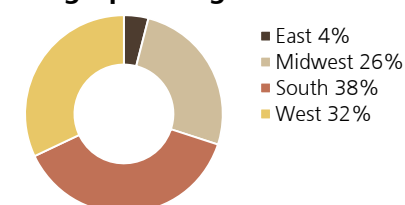
Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Investments shown either reflect a unique investment opportunity or are the largest, based on gross asset value, acquired during the past 12 months.

USD 363.1 M committed in 27 transactions

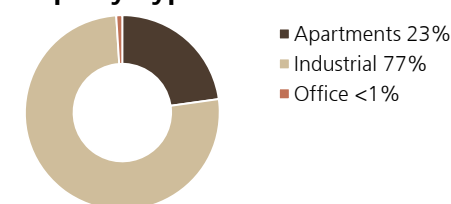
Strategy



Geographic Region



Property Type



Current pipeline over USD 600 M

TPF disposition activity – previous 12 months

Sample dispositions



Corporate Center Pasadena, Pasadena, CA

- One of the largest sales in the Fund's history
- Reduced office exposure
- 78% leased at closing
- Small submarket with limited growth prospects (demand drivers)
- USD 254 million



Pinnacle and Dakota at McDowell Mountain Ranch, Scottsdale, AZ

- 25 year old properties
- Significant near-term capital necessary
- Potential renovation not expected to provide sufficient return on investment
- USD 160 million



Meridian at Carlyle Apartments, Alexandria, VA

- Reduced exposure of Washington, DC apartments
- Successful build-to-core strategy realized through operations and sale
- Potential renovation not expected to provide sufficient return on investment
- USD 119 million

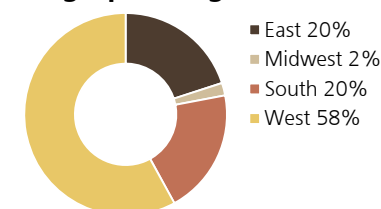


Westcore Industrial Properties, Denver, CO

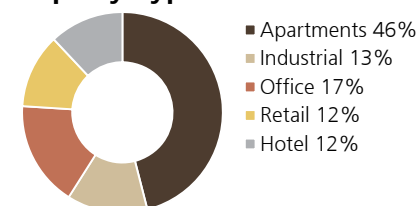
- Portfolio of three industrial assets in the Denver area totaling 485,984 sf
- Achieved sale price significantly above total investment
- Non-strategic assets, identified as near-term sale candidates at Q3 2015 acquisition
- USD 51 million

USD 1.5 B closed
in 32 transactions

Geographic Region



Property Type



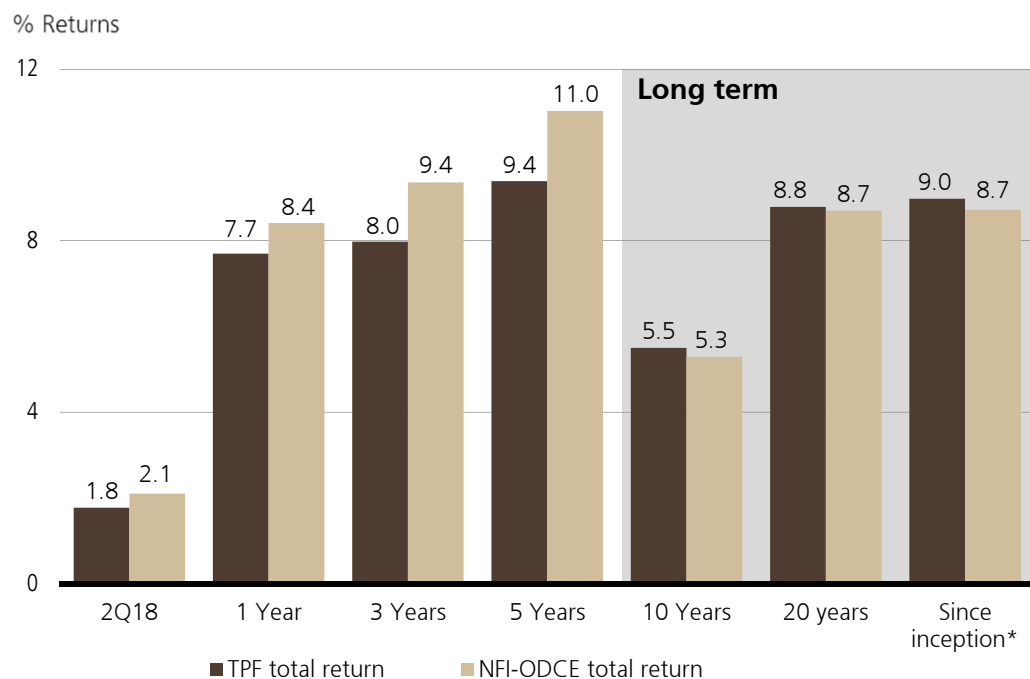
Current pipeline over
USD 1.0 B

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Investments shown either reflect a unique investment opportunity or are the largest, based on gross asset value, sold during the past 12 months. Sale prices shown are TPF's share of gross sale price.

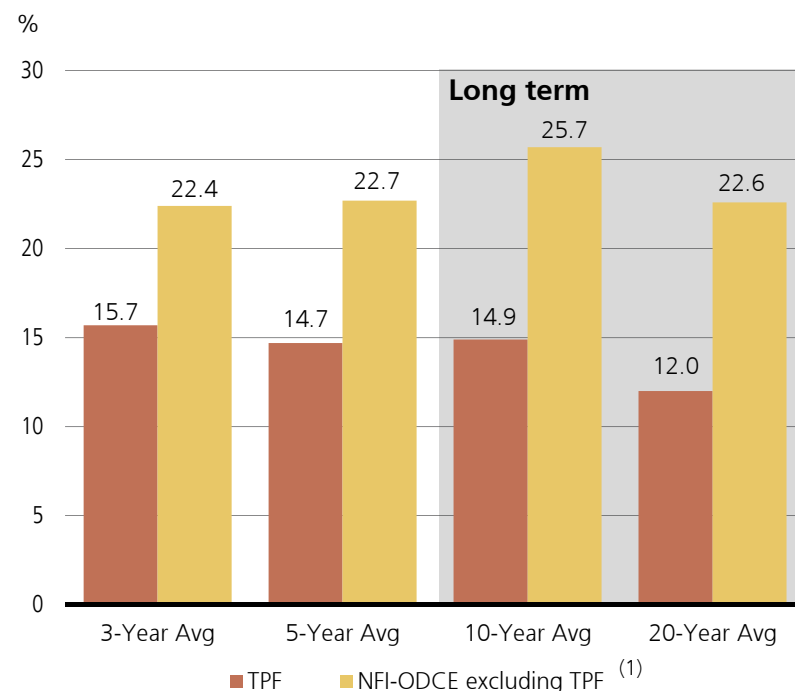
TPF performance vs. NFI-ODCE

Long-term outperformance with lower leverage

**TPF total return vs NFI-ODCE total return
as of June 30, 2018**



**Weighted Average Leverage Percentage
as of June 30, 2018**

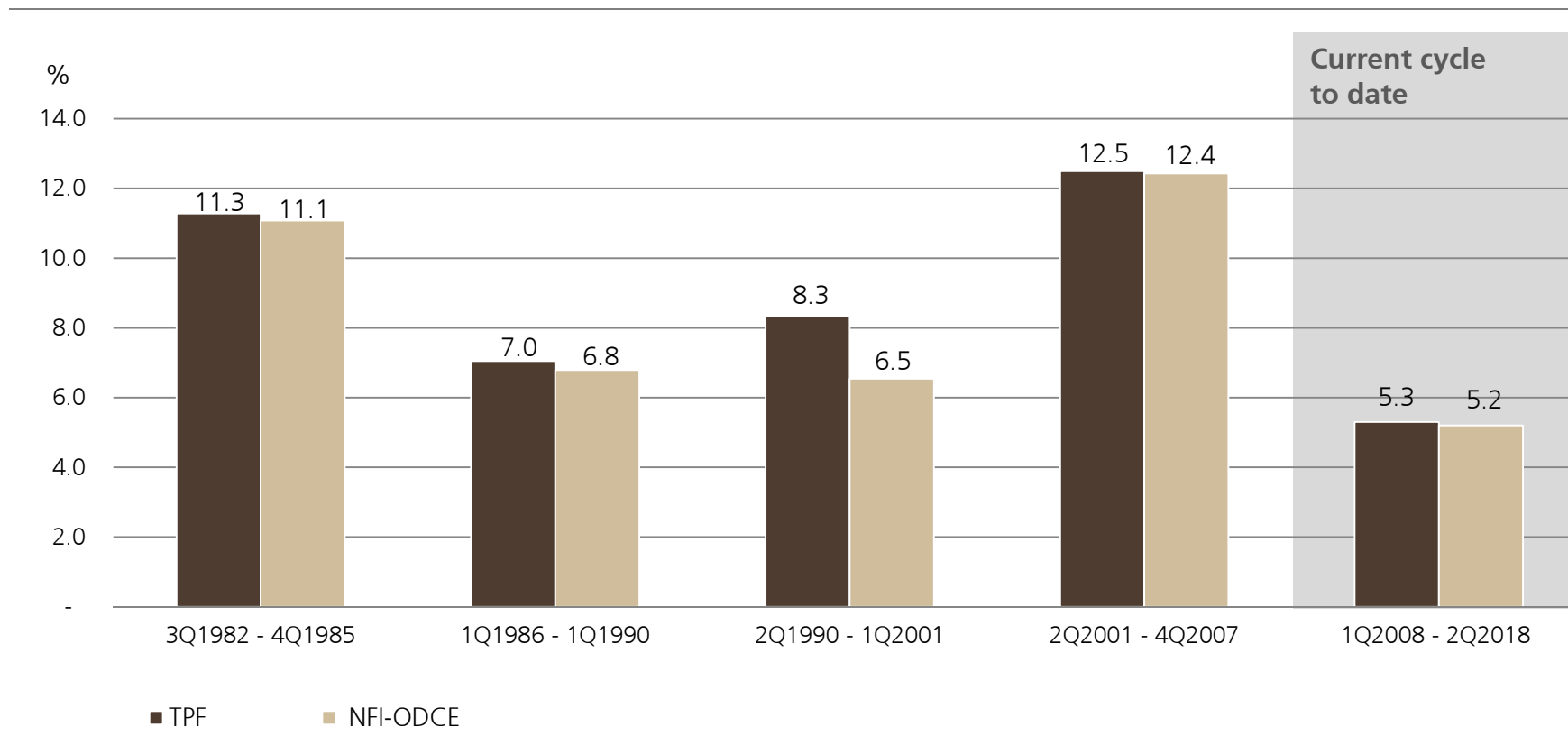


Sources: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Notes: *January 1978 inception date. Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results.

⁽¹⁾Leverage ratios of NFI-ODCE including TPF are as follows: 3-year average 21.6%, 5-year average 21.7%, 10-year average 24.3%, and 20-year average of 21.1% as of June 30, 2018

Full market cycle total returns – peak to peak

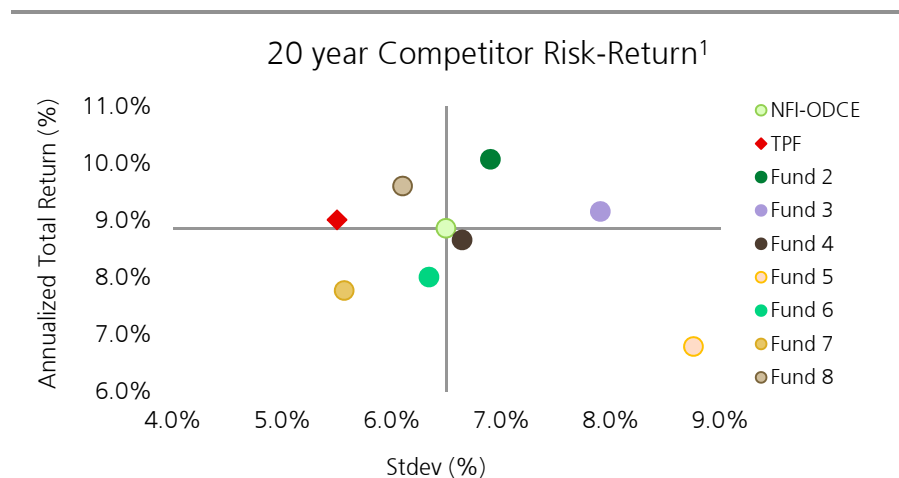
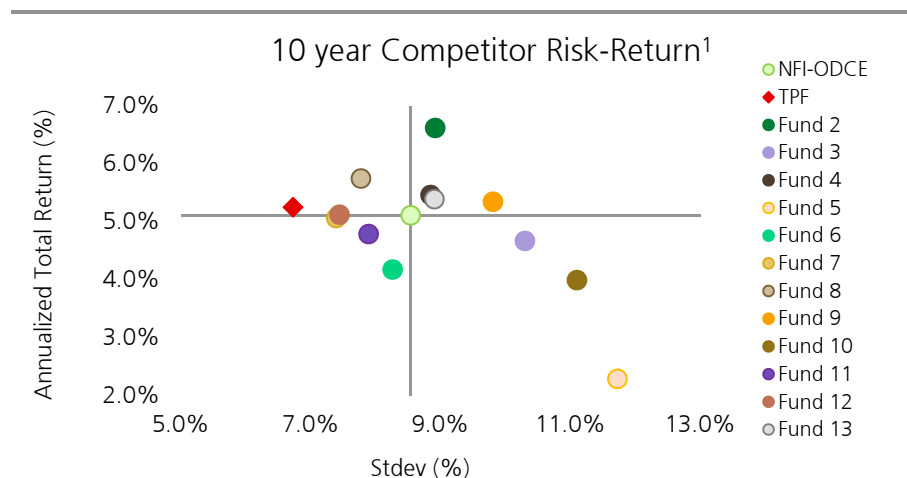
TPF outperformed NFI-ODCE in all full market cycles



Data as of June 30, 2018. Data shown is back to 1982. All returns are annualized and are gross of fees. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Notes: For purposes of measuring these performance objectives, a "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak. The Advisor bases these measurements on assumptions that it believes are reasonable and consistent with industry standards. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results.

TPF risk-return profile vs. NFI-ODCE peers

TPF delivers superior risk adjusted returns across real estate cycles



NCREIF-Reported Risk Characteristics for TPF²

Measure	10 year value	Ranking (out of 13 Funds)
Sharpe Ratio	0.79	#1
Standard Deviation	6.7%	#1
Jensen Alpha	1.23%	#2
Beta	0.78	#1



New Village Apartments, Patchogue, NY

Data as of June 30, 2018 unless otherwise noted. Source: UBS Asset Management, Real Estate & Private Markets (REPM) and NCREIF. ¹Competitor Risk-Return as of March 31, 2018. ²TPF Risk Characteristics: Sharpe Ratio measures return per unit of risk. Standard Deviation is an annualized standard deviation that measures the variability of fund returns. Jensen Alpha measures the excess fund return adjusted for systematic risk (risk-free rate and beta). Regression Beta measures the variability of returns in relation to NFI-ODCE. Please note that Beta is used as a portfolio construction tool, and therefore a ranking may not be relevant. Total returns are annualized and are reported gross of management fees. Notes: Please see the Required Notes page for additional information. Past performance is not indicative of future results.

TPF 2018+ investment direction

Where we see value

Investment direction

Apartments	Industrial	Retail	Office	Other
				
• Both stabilized and development • Demand high, tracking new supply by submarket	• Both stabilized and development • Key relationships provide pipeline	• Both stabilized and repositioning assets • Internet-resistant retail formats and tenants	• Invest selectively, primarily urban locations • Diversified tenant base + expirations, upside in rents	• De-emphasizing hotels



US Bancorp, Portland, OR



Charleston at Boca Raton, Boca Raton, FL



Becknell – Glendale Heights, IL



Bay Street Emeryville, Emeryville, CA

Source: UBS Asset Management, Real Estate & Private Markets (REPM).

Proven manager and a proven product

Successful track record managing core real estate for forty years

Highly experienced team, disciplined investment process and comprehensive research support

Clearly defined and consistently executed core real estate strategy

Well diversified exposure across assets, sectors and geography

Large relative fund size provides access to major market investments

✓ Robust income

84% of total return since inception has come from income

Income return greater than NFI-ODCE for all time periods tracked

✓ Low volatility

Over last 10 years, ranked #1 for Sharpe Ratio and for Standard Deviation¹

✓ Competitive returns

Superior risk-adjusted returns, achieving 9.0% since-inception gross return

Delivering superior risk-adjusted investment performance across real estate cycles

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Past performance is not indicative of future results. Notes: ¹Ranked #1 (out of 13 funds) for Sharpe Ratio and for Standard Deviation, on a 10-year basis, as calculated by NCREIF as of June 30, 2018.

Trumbull Property Fund

Representative assets



73 East Lake, Chicago, IL



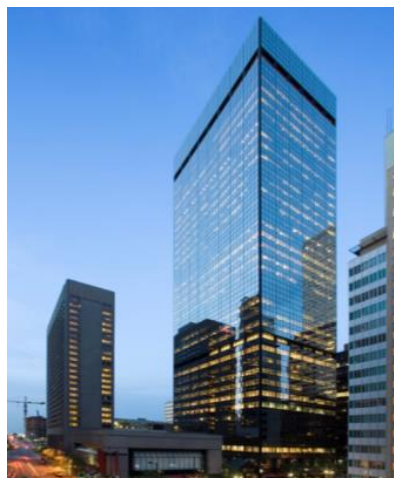
CambridgeSide, Cambridge, MA



**US Bancorp Tower,
Portland, OR**



1221 Broadway, Oakland, CA



555 17th Street, Denver, CO



Apex I, Los Angeles, CA

Photographs of current TPF properties are shown for illustrative purposes. The properties within the Fund are expected to change over time as investments are acquired and sold.
Source: UBS Asset Management, Real Estate & Private Markets (REPM); January 1, 2017.

Section 2.A

Trumbull Property Fund (TPF)

Appendix

TPF strategy and guidelines

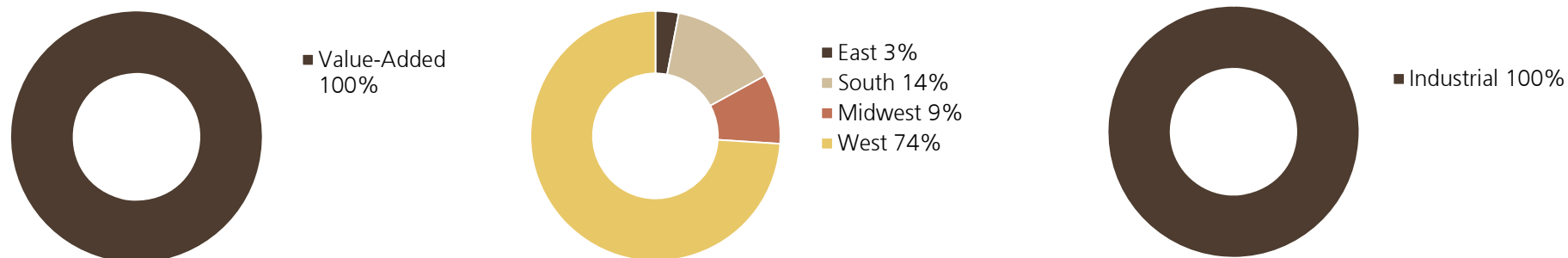
Strategy	Provide broad real estate market diversification to maximize risk adjusted returns
Fund Style & Liquidity	Open-end fund, with quarterly liquidity (subject to available capital); USD 5 million minimum
Financial Objective ⁽¹⁾	• Seek to outperform the NFI-ODCE index over a full market cycle • Seek to achieve at least a 5% real rate of return (i.e. inflation- adjusted return) before management fees, over any given 3-5 year period
Fund Investment Guidelines ⁽²⁾	• Equity investments at least 70% of Gross Asset Value ("GAV") • Third Party Joint Ventures limited to 50% of GAV • Debt investments maximum of 30% of GAV (construction loans limited to 10% of GAV) • Publicly traded real estate securities or debt instruments limited to 5% of GAV • Combination of all value-added assets will generally range between 5-15% of total Portfolio Assets
Property type and geographic spread	• Apartments, hotels, industrial, retail and office throughout the US • NCREIF property type maximum 50% of GAV • NCREIF region maximum 50% of GAV • Local market (CBSA) maximum of 20% of GAV • Single investment maximum 10% of GAV
Leverage	• Mortgage debt generally not to exceed 20% of GAV • Short-term debt generally not to exceed 15% of GAV
Standard of care	Advisor subject to ERISA Fiduciary standard of care

Data as of March 31, 2018.

Source: UBS Asset Management, Real Estate & Private Markets (REPM).

Notes: ⁽¹⁾ There is no assurance that the financial objective will ultimately be realized and the possibility of loss does exist. There is no guarantee that the investment strategy will perform as expected. ⁽²⁾ The Advisor may permit temporary and/or immaterial deviations from the Investment Guidelines from time to time, in its discretion, if the Advisor believes that such deviations are in the best interest of the Fund.

TPF 2018 investments

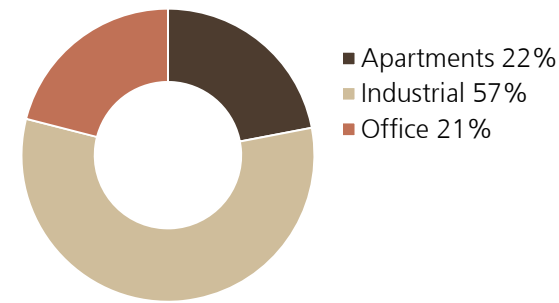
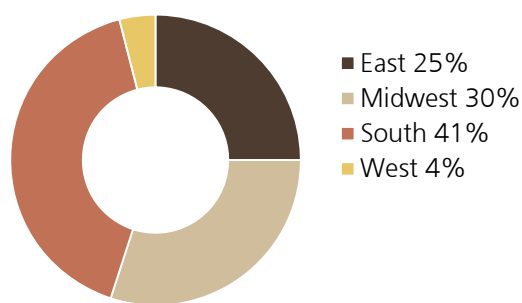
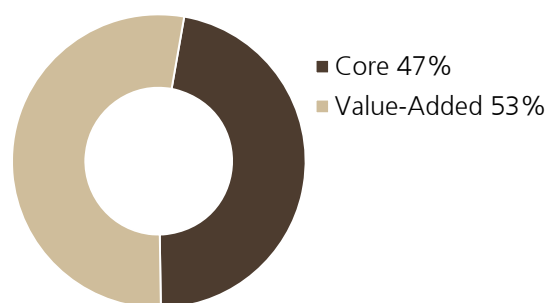


Property	Property type	Location	Strategy	Date closed	Size	Gross investment (USD millions) ¹
Becknell (5)	Industrial	CO, FL, GA, IN	Value-Added	2018	1,017,300 sf	65.6
Becknell land (4)	Industrial	Richmond, VA	Value-Added	6/2018	61 acres	4.5
Pacific Industrial/ Freeway Center	Industrial	Fontana, CA	Value-Added	6/2018	527,000 sf	66.4
Total						136.5

Data as of June 30, 2018

Source: UBS Asset Management, Real Estate & Private Markets (REPM). These types of investments may not be available or selected by the Fund in the future. ¹Gross Sales Price is the Fund's share of the investment. Numbers may not sum due to rounding.

TPF 2017 investments

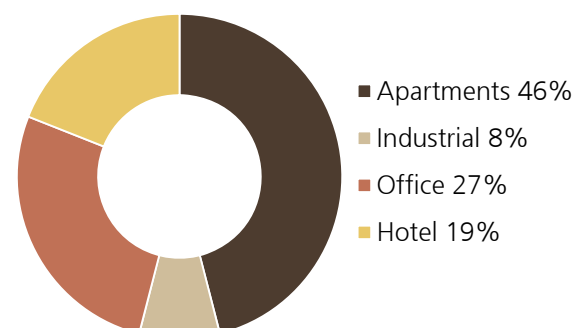
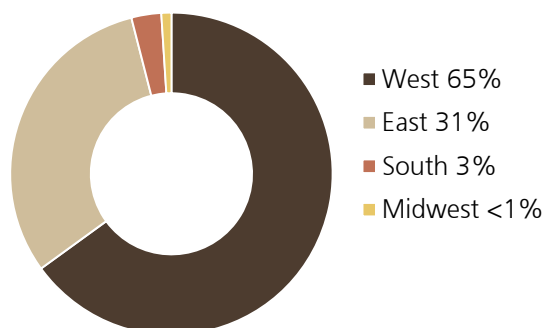


Property	Property type	Location	Strategy	Date closed	Size	Gross investment (USD millions)
Becknell (15)	Industrial	FL (5), GA, IN (3), NV, OH (3), VA (2)	Value-Added	2017	2,994,261sf	166.2
Becknell-land parcels (5)	Industrial	CO (1), IN (2), OH, SC	Value-Added	2017	62 acres	3.9
CenterPoint (2)	Industrial	WI, IL	Value-Added	2017	977,164 sf	45.6
Stony Brook Technology Center (8)	Office	East Setauket, NY (8)	Core	4/2017	261,824 sf	77.0
Pleasanton Corporate Commons	Office	Pleasanton, CA	Core	7/2017	1 acre	1.8
The Caruth	Apartments	Dallas, TX	Core	11/2017	338 units	81.9
Total						376.4

Data as of December 31, 2017

Source: UBS Asset Management, Real Estate & Private Markets (REPM). These properties represent some examples of fund investments. These types of investments may not be available or selected by the Fund in the future. Numbers may not sum due to rounding.

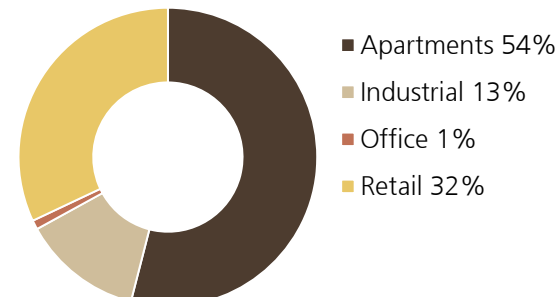
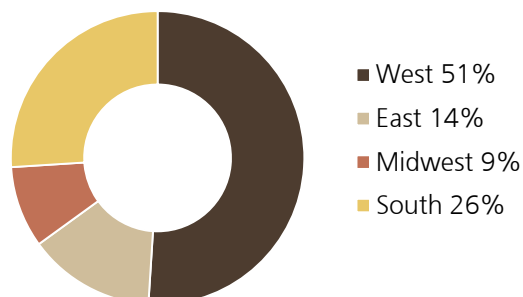
TPF 2018 dispositions



Property	Property type	Location	Acquisition Date	Date closed	Size	TPF Gross Sales Price ¹ (USD millions)
Meridian at Carlyle Apartments	Apartments	Alexandria, VA	3/2001	3/2018	403 units	119.2
CenterPoint – Lakeview Land 51	Industrial	Pleasant Prairie, WI	9/2007	3/2018	6 acres	0.5
The Lodge at Napa Junction	Apartments	American Canyon, CA	12/2006	3/2018	216 units	67.3
North Pointe Apartments	Apartments	Vacaville, CA	5/2012	3/2018	312 units	85.5
Pinnacle at McDowell Mountain Ranch	Apartments	Scottsdale, AZ	5/1998	4/2018	368 units	80.7
Dakota at McDowell Mountain Ranch	Apartments	Scottsdale, AZ	3/1999	4/2018	368 units	79.4
Becknell – land (2)	Industrial	AZ, IN	Various	2018	78 acres	0.7
Corporate Center Pasadena	Office	Pasadena, CA	5/1984	5/2018	639,970 sf	254.0
Becknell (2)	Industrial	AZ, FL	12/1997	2018	262,392 sf	29.3
Kato II	Industrial	Fremont, CA	2/2016	6/2018	302,400 sf	46.9
The Quin Hotel	Hotel	New York, NY	6/2010	6/2018	208 rooms	175.0
Total						938.4

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹ TPF Gross Sales Price is gross of debt and closing costs and is the Fund's share of the investment. These types of investments may not be available or selected by the Fund in the future. Numbers may not sum due to rounding.

TPF 2017 dispositions



Property	Property type	Location	Acquisition Date	Date closed	Size	TPF Gross Sales Price ¹ (USD millions)
Becknell (5)	Industrial	FL, GA, (2) IL, OH	Various	2017	377,069 sf	20.6
CenterPoint (2)	Industrial	IL, WI	9/2007	2017	19 acres	1.9
Greenpoint Business Park—land parcel	Industrial	Elmhurst, IL	7/1997	1/2017	3 acres	1.8
Estates at New Albany	Apartments	Columbus, OH	6/2002	1/2017	428 units	53.3
Alexan CityCenter	Apartments	Englewood, CO	4/2003	4/2017	438 units	97.0
Riverside Plaza	Retail	Riverside, CA	9/2012	4/2017	403,922 sf	143.4
Prospect Center	Office	Rancho Cordova, CA	9/1989	5/2017	128,247 sf	12.4
Orchard Town Center—land parcel	Retail	Westminster, CO	12/2013	5/2017	3 acres	1.8
Villas at Old Concord	Apartments	Billerica, MA	2/2007	6/2017	324 units	86.5
Cumberland Crossing	Apartments	Cumberland, RI	1/2006	6/2017	288 units	57.5
Alexan Lenox	Apartments	Atlanta, GA	9/2005	7/2017	305 units	59.3
Spectrum Towne Center	Retail	Chino, CA	12/2005	7/2017	459,989 sf	138.5
Subtotal						476.2

Data as of December 31, 2017. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹ TPF Gross Sales Price is gross of debt and closing costs and is the Fund's share of the investment. These properties represent some examples of fund investments. These types of investments may not be available or selected by the Fund in the future. Numbers may not sum due to rounding.

TPF 2017 dispositions

Property	Property type	Location	Acquisition Date	Date closed	Size	TPF Gross Sales Price ¹ (USD millions)
Mesa Spectrum Towne Center	Retail	Mesa, AZ	12/2005	7/2017	241,057 sf	40.9
Solano at Miramar	Apartments	Miramar, FL	9/2007	8/2017	512 units	119.8
St. Paul Business Center	Industrial	Maplewood, MN	12/1996	9/2017	185,750 sf	14.4
Seneca at Cypress	Apartment	Lutz, FL	8/2012	10/2017	451 units	78.9
1400 Busse Road	Industrial	Elk Grove Village, IL	10/2008	11/2017	2 acres	1.1
766 Watervliet Shaker Rd	Industrial	Latham, NY	2/2005	11/2017	39,686 sf	1.6
7200 West Buckeye Rd	Industrial	Phoenix, AZ	12/2013	12/2017	400,000 sf	31.2
Harris Warehouse Properties (2)	Industrial	IL	2/1996	2017	145,186 sf	8.6
Westcore (3)	Industrial	CO	9/2015	12/2017	485,984 sf	51.0
Total						1,021.4

Data as of December 31, 2017. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹ TPF Gross Sales Price is gross of debt and closing costs and is the Fund's share of the investment. These properties represent some examples of fund investments. These types of investments may not be available or selected by the Fund in the future. Numbers may not sum due to rounding.

TPF total sales

Year	Number of properties	Sales proceeds (USD in thousands)	Last independent appraised value
1982	4	8,845	8,744
1983	8	34,977	34,531
1984	10	61,732	60,340
1985	13	68,425	65,569
1986	10	94,339	89,612
1987	8	198,001	176,560
1988	4	71,330	67,550
1989	14	349,075	306,360
1990	0	-	-
1991	2	24,400	25,100
1992	8	67,575	65,006
1993	6	32,347	31,250
1994	3	87,983	86,444
1995	2	12,317	11,902
1996	4	43,896	39,508
1997	2	49,058	47,830
1998	0	-	-
1999	1	1,597	1,648
2000	5	75,191	58,319

Year	Number of properties	Sales proceeds (USD in thousands)	Last independent appraised value
2001	1	16,994	14,896
2002	4	53,126	48,868
2003	2	17,806	16,194
2004	6	25,472	24,771
2005	10	353,876	332,024
2006	9	143,904	134,162
2007	15	599,515	580,395
2008	9	384,975	366,466
2009	6	207,855	209,122
2010	5	35,482	34,692
2011	2	35,750	34,500
2012	6	292,338	290,640
2013	14	311,059	298,667
2014	2	57,771	55,612
2015	16	864,806	830,920
2016	10	372,007	366,110
2017	29	1,021,386	1,009,744
2018	13	927,140	903,888
Total	263	7,002,350	6,727,944

Data as of June 30, 2018.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: Number of properties sold may include portions of multi-parcel investments, and therefore may not tie to difference in total properties from year to year. Sales proceeds and appraised values are net of debt. From 1982-2007, sales proceeds and appraised values are also net of closing costs. The properties included in the calculation of total sales had been independently appraised or the appraisal reviewed and updated if necessary by an independent appraisal firm generally within six months of the date of sale.

TPF leasing

Percentage leased - end of period

	2010	2011	2012	2013	2014	2015	2016	2017	2Q2018
Apartments	95	95	94	94	95	94	94	93	96
Industrial	87	91	95	96	97	97	97	97	98
Office	92	90	92	91	94	95	89	88	89
Retail	95	93	94	95	95	95	94	94	93
Total	93	93	93	93	95	95	93	92	94



Orchard Town Center, Westminister, CO



Cumberland Park Apartments, Orlando, FL



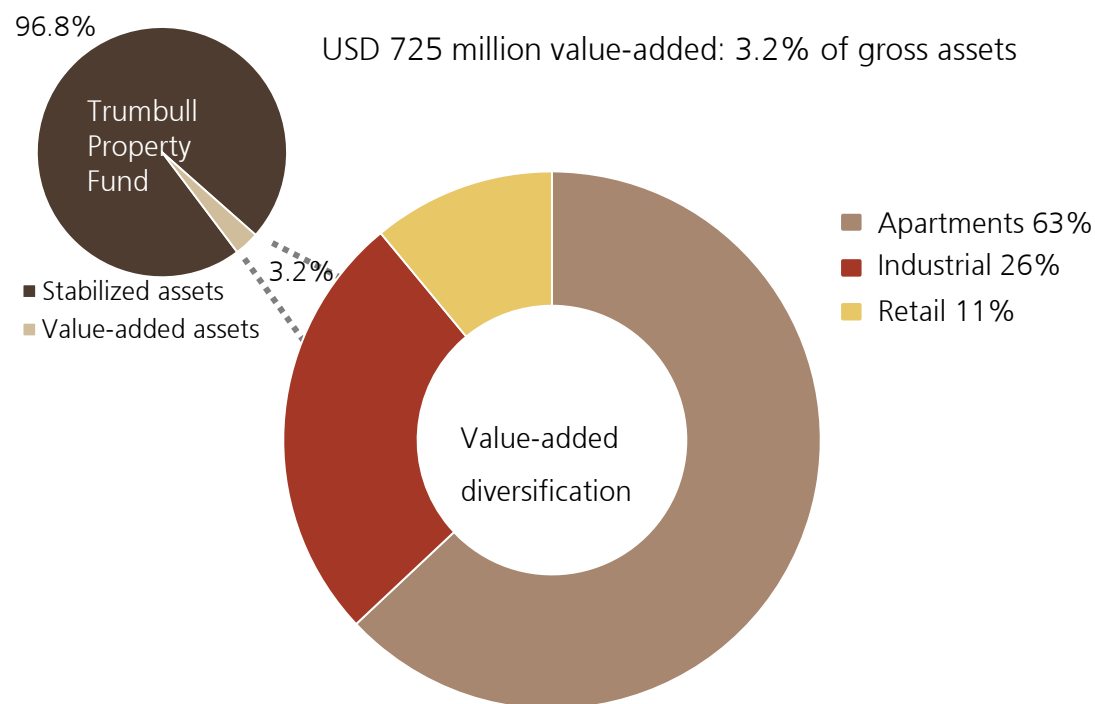
Burbank Empire Center, Burbank, CA

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM).

Notes: Leasing numbers exclude hotels. As of June 30, 2017, the leasing data methodology excludes land and development assets less than 60% leased (and available for lease less than one year), but includes all other assets.

TPF value-added risk management

Value creation through "building to core" with experienced developers



Value creation:

- Multifamily 38% average
- Industrial 20% average

Active risk management:

- Value-added level tailored to economy and market
- Partners cover cost overruns backed by guarantees
- External & internal engineering reviews
- No entitlement or zoning risk

Data as of March 31, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Percentages are based on gross market value of real estate investments. Percentage totals may not sum due to rounding. Past performance is not indicative of future results. As of June 30, 2017 the value-added methodology for TPF was changed to align with the NCREIF Life Cycle definitions. As a result, development assets will be included in the value-added allocation until they are completed and they have achieved 60% leased status (or have been available for lease for one year).

TPF financing update

TPF debt well positioned for current environment

TPF debt relative to benchmark¹

	TPF	NFI-ODCE
• Lower weighted average interest rate	3.4%	4.0% ¹
• Greater percent fixed rate debt	94%	83% ¹

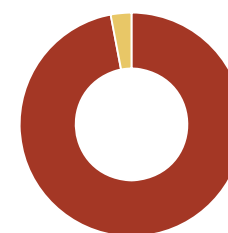
Lower leveraged fund

- Manage to 20% max / current 17.4%
- NFI-ODCE ratio (excluding TPF) at 21.5%

Financing management

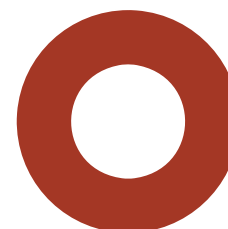
- Manage future interest rate risk & maturities
- Minimize overall financing costs
- Lines of credit provide efficient cash management

Low risk debt profile



94%
fixed rate
debt

Leveraged TPF assets – 34% LTV



100%
non-recourse
property debt

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. NFI-ODCE leverage ratio including TPF is 21.1%. ¹Chatham Financial Debt Mark to Market Benchmark Report as of June 30, 2018, includes 17 of 25 NFI-ODCE funds (86% of NFI-ODCE net asset value).

Sustainability – A leadership position in ODCE

TPF's Green Philosophy - Reduce environmental impact, maximize total returns

- ★ #2 of 39 for 2017 US Diversified – Non-listed peer funds, GRESB 5-Star rating
- ★ Established goals for reductions in energy, water, waste and greenhouse gas (GHG).
Reduced GHG emissions by 5.7% last year
- ★ LEED designations achieved for 91% of urban office properties, most new high-rise multifamily properties
- ★ UBS Realty Investors LLC recognized as a Premier Member by Energy Star in 2014
- ★ Sustainability case studies for three TPF properties published by GRESB and ULI, two for innovation and one on resilience



53 State Street, Boston, MA



455 Market Street,
San Francisco, CA



1670 Broadway, Denver, CO



All data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM) and GRESB. See required notes page at the end of this section or presentation.

Our corporate sustainability mission consists of delivering superior risk-adjusted investment performance by integrating sustainability considerations into our investment processes; implementing sustainable practices through innovation and the sharing of best practices; and addressing environmental impacts while enhancing property operations and values. As such, sustainability plays a major role in corporate-, fund- and property-level decisions.

TPF value-added stabilized assets (apartments)

Value creation through "building to core"

Page 1 of 2

Property Name	Property Type	City/State	Development cost (USD millions)	Stabilized property value (USD millions)	Stabilized valuation date	Stabilized value increase over development costs
RiverTrace at Port Imperial	Apartments	West New York, NJ	116.9	166.0	6/30/15	42%
73 East Lake	Apartments	Chicago, IL	116.7	197.7	6/30/15	69%
Element Uptown	Apartments	Charlotte, NC	69.8	105.1	12/31/15	51%
New Village Apartments	Apartments	Patchogue, NY	96.2	121.0	3/31/16	26%
The Boulevard	Apartments	Woodland Hills, CA	112.0	153.0	6/30/16	37%
The Brand	Apartments	Glendale, CA	157.8	195.0	9/30/16	24%
The Colony at the Lakes	Apartments	West Covina, CA	151.9	180.0	12/31/17	19%
NV	Apartments	Portland, OR	101.4	134.0	12/31/17	32%
The Reserve at Tinner Hill Apt	Apartments	Falls Church, VA	81.8	94.7	12/31/17	16%
Monarc at Met 3 Apt	Apartments	Miami, FL	138.8	203.0	3/31/2018	46%
Element Music Row	Apartments	Nashville, TN	99.6	164.0	3/31/2018	65%
Total Apartments			1,242.9	1,713.5		38%

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Percentages are based on gross market value of real estate investments. Percentage total may not sum due to rounding. Past performance is not indicative of future results.

TPF value-added stabilized assets (industrial)

Value creation through "building to core"

Page 2 of 2

Property Name	Property Type	City/State	Development cost (USD millions)	Stabilized property value (USD millions)	Stabilized valuation date	Stabilized value increase over development costs
Becknell Industrial – 2013	Industrial	Various locations	19.4	21.2	2013	9%
Becknell Industrial – 2014	Industrial	Richland, MS	2.1	2.6	12/31/2014	22%
Becknell Industrial – 2015	Industrial	Various locations	44.5	52.3	2015	17%
PI Sierra Business Park	Industrial	Fontana, CA	59.7	75.3	12/31/2015	26%
PI 5119 District Boulevard	Industrial	Vernon, CA	25.1	27.6	6/30/2016	10%
Becknell Industrial – 2016	Industrial	Various locations	30.1	35.0	2016	16%
Becknell Industrial – 2017	Industrial	Various locations	145.3	175.5	2017	21%
PI Sierra Business Park – Phase II	Industrial	Fontana, CA	65.9	83.3	9/30/2017	26%
Becknell Industrial – 2018	Industrial	Various locations	74.4	92.6	2018	24%
CenterPoint Industrial	Industrial	Pleasant Prairie, WI	19.3	21.9	3/31/2018	14%
PI Bandini	Industrial	Vernon, CA	39.0	55.1	6/30/2018	41%
Total Industrial			524.9	642.4		22%
TOTAL Apartments and Industrial			1,767.7	2,355.9		33%

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Percentages are based on gross market value of real estate investments. Percentage total may not sum due to rounding. Past performance is not indicative of future results.

TPF annual performance

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Percent %																
Net investment income	8.42	9.97	9.68	9.96	9.05	8.87	8.86	8.40	7.53	6.80	5.60	6.06	6.36	7.38	7.95	8.60
Net realized/unrealized gain (loss)	0.77	3.39	7.47	7.02	0.67	3.76	4.00	1.04	0.17	0.08	0.13	1.89	(10.12)	(12.47)	(12.01)	(6.76)
Total, before management fee	9.24	13.61	17.69	17.49	9.76	12.87	13.12	9.51	7.71	6.88	5.74	8.04	(4.25)	(5.78)	(4.78)	1.41
Total, net of management fee	8.26	12.58	16.65	16.42	8.71	11.80	12.07	8.45	6.67	5.84	4.68	6.97	(5.14)	(6.48)	(5.47)	0.70

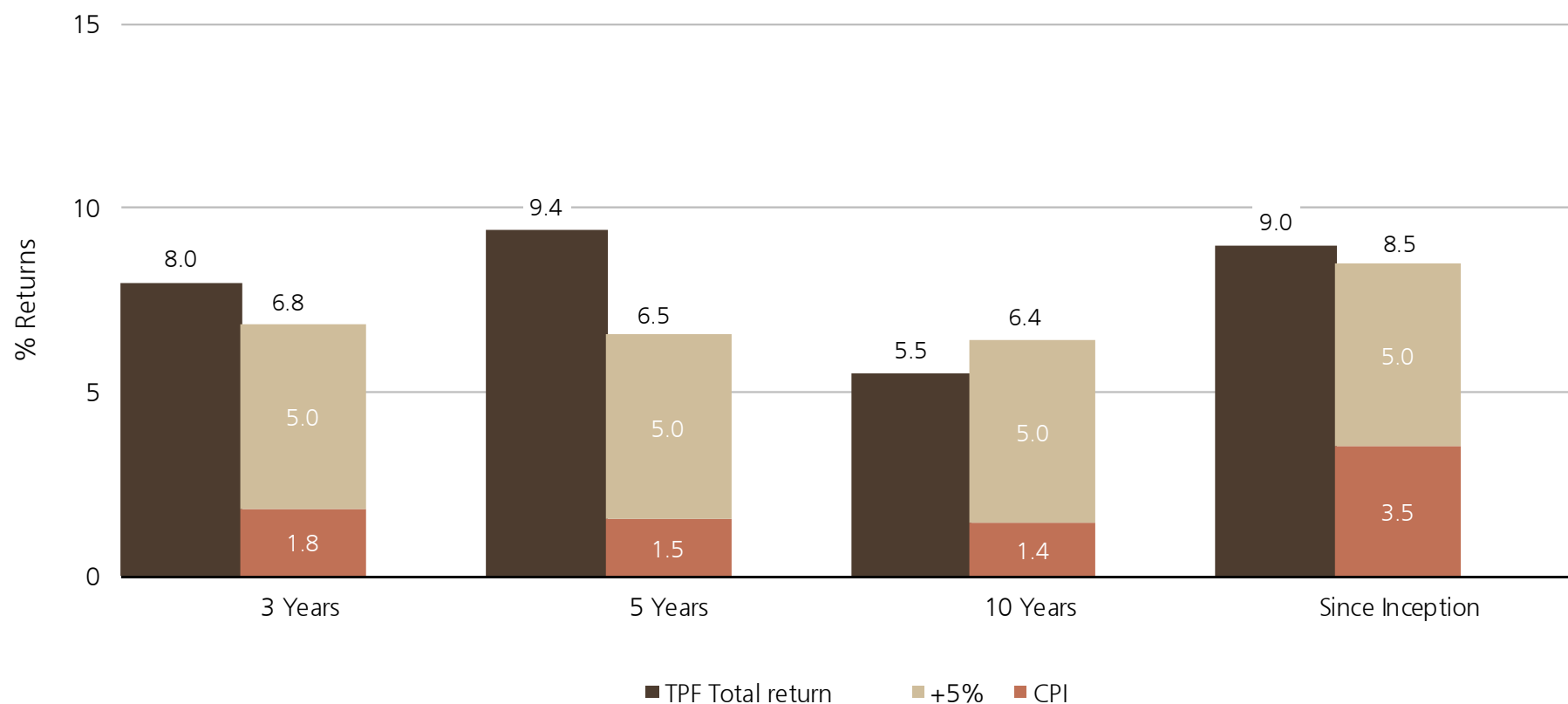
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Percent %														
Net investment income	9.70	9.88	10.33	9.88	8.59	8.73	8.99	8.99	8.38	7.91	7.28	6.85	6.07	5.12
Net realized/unrealized gain (loss)	2.42	2.14	5.59	12.56	7.33	3.97	7.59	(6.74)	0.51	1.52	6.89	13.61	10.12	8.49
Total, before management fee	12.30	12.18	16.34	23.34	16.39	12.96	17.08	1.79	8.93	9.52	14.54	21.13	16.65	13.93
Total, net of management fee	11.38	11.09	15.23	22.22	15.33	11.89	15.96	0.86	8.13	8.55	13.49	20.05	15.58	12.84

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD 2018	Since Inception	% of total return
Percent %													
Net investment income	4.96	6.69	7.05	5.36	5.35	5.13	5.16	4.97	4.72	4.64	2.29	7.46	84%
Net realized/unrealized gain (loss)	(11.98)	(27.55)	9.32	7.55	4.62	5.12	6.29	7.69	2.40	1.61	1.38	1.44	16%
Total, before management fee	(7.46)	(22.30)	16.85	13.21	10.15	10.44	11.69	12.94	7.21	6.30	3.69	8.98	100%
Total, net of management fee	(8.29)	(22.94)	15.89	12.08	9.04	9.32	10.56	11.83	6.14	5.42	3.28	7.99	N/A

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes page at the end of this section or presentation. Past performance is not indicative of future results. TPF began operations on January 13, 1978, thus the 1978 return is not for a full year. Returns are annualized.

TPF real return performance objective

Seek to provide at least a 5% real rate of return, before management fees, over any given three- to five-year period



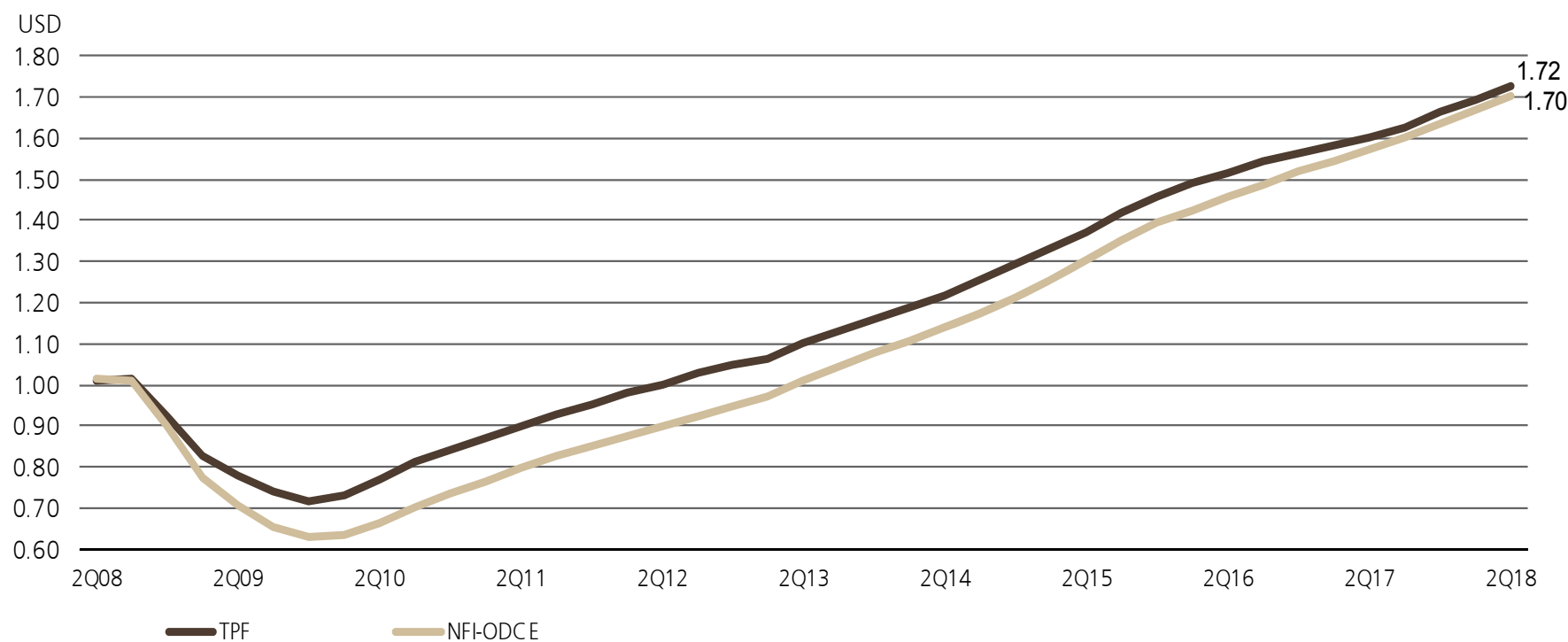
Data as of June 30, 2108. Source: UBS Asset Management, Real Estate & Private Markets (REPM). The source of CPI is Bureau of Labor Statistics. Notes: CPI is the Consumer Price Index, an inflationary indicator of the standard of living in the US. It is also referred to as the "cost of living" index. Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes slide at the end of this section or presentation. Fund Inception date January 13, 1978. Past performance is not indicative of future results.

TPF outperformance across real estate cycles

A dollar invested in TPF is worth more than a dollar invested in NFI-ODCE

Wealth comparison current cycle to date¹

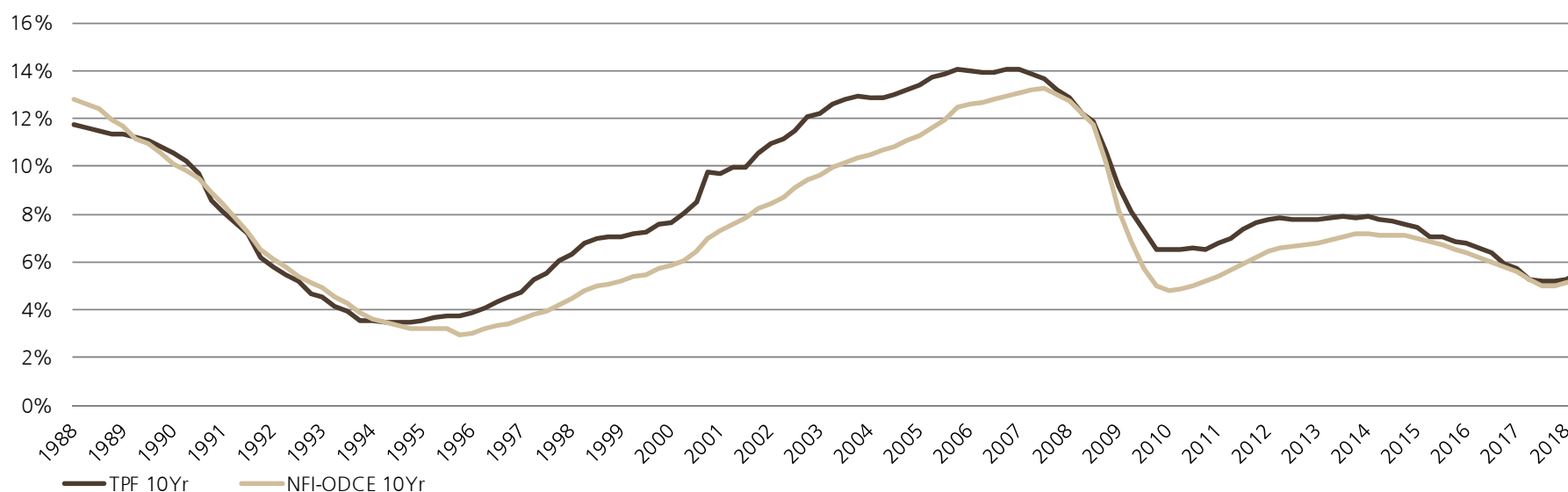
Peak to current



Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. ¹The Wealth comparison charts show how USD 1.00 invested in TPF/NFI-ODCE on 1/1/2008 would have grown over time before fees are deducted. Past performance is not indicative of future results. For purposes of measuring these performance objectives, a "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak. The Advisor bases these measurements on assumptions that it believes are reasonable and consistent with industry standards.

TPF rolling performance

Ten-year rolling performance vs NFI-ODCE (total return)



Rolling time periods	TPF income return outperformance ¹	TPF total return outperformance ²
3-year	85%	57%
5-year	88%	68%
10-year	100%	83%

Data as of June 30, 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE.

Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. ¹Represents the percentage of quarters that TPF's rolling income return outperformed NFI-ODCE. ²Represents the percentage of quarters that TPF's rolling total return outperformed NFI-ODCE. Past performance is not indicative of future results.

TPF advisory fees

Investor's Share of NAV ⁽¹⁾	Annual Base Fee
First USD 10 million of investment	95.5 bps
Next USD 15 million	82.5 bps
Next USD 25 million	80.5 bps
Next USD 50 million	79.0 bps
Next USD 150 million	67.0 bps
Next USD 150 million	60.0 bps
Next USD 200 million	56.0 bps
Above USD 600 million	52.0 bps

- Investors with assets in other designated Funds will benefit from participation in the "Family of Funds" program, which aggregates total assets in designated Funds for purposes of the base fee calculation.
- If average cash for the quarter exceeds 7.5% of the Fund's average NAV, the base fee for the excess will be reduced to 20 bps (pro-rated for the quarter).
- **The TPF fee has historically included a variable fee but this portion of the fee has been waived through March 31, 2020.** The variable fee ranged from 0 bps to a maximum of 25 bps and was earned at a rate of 7.5 bps per 1% of the Fund's real return in excess of 3% for the previous rolling four quarters.⁽²⁾

As of April 2018. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: ⁽¹⁾ Net Asset Value. ⁽²⁾ See Fee section of Confidential Private Offering Memorandum for details.

UBS Realty Investors Equity Composite

Year	Year-end			Gross of fees (%)			Benchmark return (%)	Net of fees (%)		Range of		Asset weighted standard deviation	% of Composite assets valued externally ⁽¹⁾
	Number of accounts	Composite	Total Firm					Total	Total	Gross Returns (%)			
		Net Assets (USD millions)	Net Assets (USD millions)	Income return	Appreciation (depreciation)	Max				Min			
2008	9	10,445	13,285	4.99	(12.21)	(7.67)	(10.01)	(8.47)	(4.2)	(41.0)	1.91	100	
2009	9	7,995	10,232	6.68	(27.91)	(22.69)	(29.76)	(23.32)	(11.8)	(62.2)	4.23	100	
2010	8	9,687	12,107	7.10	9.37	16.95	16.36	15.92	42.0	4.7	3.20	100	
2011	8	12,404	15,241	5.57	8.20	14.10	15.99	12.96	35.3	8.6	2.88	100	
2012	9	14,679	17,325	5.45	5.07	10.73	10.94	9.63	25.8	(2.5)	2.53	100	
2013	9	16,114	19,206	5.22	5.40	10.83	13.94	9.71	26.5	(38.7)	2.68	100	
2014	9	18,788	22,252	5.21	6.61	12.07	12.50	10.94	35.8	6.7	2.46	100	
2015	7	21,383	25,379	5.06	8.11	13.47	15.02	12.33	26.3	8.6	2.05	100	
2016	7	22,534	26,744	4.77	2.99	7.86	8.77	6.80	23.2	7.2	2.15	100	
2017	7	22,455	26,974	4.61	1.93	6.61	7.62	5.75	14.5	2.7	1.20	100	

1. Compliance Statement Real Estate & Private Markets, Real Estate US (the "Firm") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. The Firm has been independently verified since January 1, 1993. Verification assesses whether (1) the Firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the Firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The UBS Realty Investors Equity Composite has been independently examined for the periods January 1, 2008 through December 31, 2017. The verification and performance examination report is available upon request.

2. The Firm The Firm is defined as UBS Realty Investors LLC and UBS Farmland Investors LLC, together Real Estate & Private Markets, Real Estate US. Both entities are registered with the US Securities and Exchange Commission as investment advisors. Prior to January 1, 2017, the Firm was known as Global Real Estate - US. The Total Firm Gross Assets at December 31, 2017 were USD 32.4 billion, representing the fair value of total Firm assets held under management. Total Firm Net Assets represent the Total Firm Assets held under management less the fair value of liabilities.

3. The Composite The UBS Realty Investors Equity Composite (the "Composite") was created in 2005. All results are presented in US dollars. A complete list and description of Firm composites is available upon request. The Composite comprises all fee-paying, non-taxable discretionary accounts that invest primarily in equity real estate including, but not limited to, the following property types: apartments, office, retail, industrial, and hospitality. Starting in 2017, the Firm eliminated the required account minimum asset size of USD 30 million for inclusion in the Composite. The strategy of the accounts in the Composite is to acquire investments in US commercial and multifamily real estate (core and value-added properties) expected to provide attractive risk-adjusted returns consisting of current income and capital appreciation. Since October 2003, a sub-adviser has managed the cash for some pooled accounts included in the Composite. Composite dispersion for any year is represented by both the range and the asset-weighted standard deviation of the gross total returns of the accounts that were in the Composite for the entire calendar year. Discretion is broadly defined as the Firm having discretion over the selection, capitalization, asset management, and disposition of investments within the parameters of a given mandate.

4. Valuation An independent appraisal of the underlying real estate for each investment is performed at least annually and includes a complete property inspection and market analysis. Starting October 1, 2009, independent appraisals are generally completed every quarter for most of the underlying real estate investments. For real estate investments that are held in funds where appraisals are not performed on a quarterly basis and prior to October 1, 2009, the underlying real estate is typically scheduled to be appraised twice a year. In the interim quarters, updated property and market information is reviewed. If this review indicates a potential material change in the value, the valuation is then updated by the independent appraiser. If this review indicates that any change in value is likely not material, the value is determined to remain unchanged. Valuations of real estate and debt use significant unobservable inputs. In general, each annual property appraisal includes at least an income approach using a discounted cash flow model and a sales comparison approach, which are considered in determining a final value conclusion. All appraisals are certified by members of the Appraisal Institute who hold the MAI designation. Third-party debt is stated at fair value. The valuation of debt is taken into consideration when determining the estimated fair value of the equity in the related investment.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Past performance is not indicative of future results. ⁽¹⁾Generally for those assets held longer than six months.



UBS Realty Investors Equity Composite

5. Calculation of Performance Returns reflect the impact of leverage, which averaged approximately 15.7% of gross asset value (net asset value plus debt) during 2008 through 2017, and approximately 17.0% in 2017. Leverage has consisted primarily of mortgage loans payable that are collateralized by the related real estate investment. The extent to which leverage is used varies by account strategy and may include either portfolio or property level debt. Expenditures, including tenant improvements and leasing commissions, that extend the useful life or represent additional capital investments benefiting future periods, are capitalized as a component of cost. Annual returns are time-weighted rates of return calculated by linking quarterly returns. The sum of income and appreciation (depreciation) may not equal total returns due to the linking of quarterly returns. Gross of fees returns are presented before all management fees, but after third-party expenses. Net returns are presented net of the management fees, performance fees and third-party expenses. All returns are presented before any applicable insurance company contract charges in effect on certain funds through February 29, 2008. The policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

6. Investment Management Fees Management fees differ by account and reflect the complexity and value of services chosen, anticipated size, and the number and type of investments involved. Depending upon the services, the fee may represent any one or a combination of: fixed flat amounts; a percentage of purchase price, earnings, assets under management, or of sales proceeds; or incentive fees based on performance. The fee for investment in one of the Firm's commingled funds can be up to 190 bps per annum on net asset value based upon the fee scale and the investor's share of net asset value in the fund and other UBS Realty sponsored funds as of the beginning of the quarter with an incentive fee charged on various performance hurdles, for example, 15% above a 7% real return over sequential 3-year periods, subject to certain clawback provisions depending on the performance of the fund. Please see the applicable fee schedule(s) appropriate to the product or services being presented.

7. Benchmark Effective May 2009, the Firm changed the benchmark retroactively from the property-level National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") to a fund-level Index, the NCREIF Fund Index-Open End Diversified Core Equity ("NFI-ODCE" or the "Index"). The Firm believes a fund-level index provides a more meaningful comparison for a fund-level composite. The NFI-ODCE, first published mid-2005, is a capitalization-weighted, time-weighted, fund-level return index beginning as of the first quarter of 1978, inclusive. It is presented gross of fees. As of December 31, 2017, the NFI-ODCE consisted of 24 active funds with total net assets of USD 178.0 billion. The NFI-ODCE leverage ratio at December 31, 2017 was 21.4%.

8. Market Conditions (Supplemental Information) Over the past two decades, commercial real estate experienced historic highs and lows. Fundamental recovery following the 2001 recession, along with a dramatic increase in the availability and reduction in the cost of debt capital propelled commercial and multifamily performance to the highest level in NCREIF history. In 2005, the NCREIF Fund Index – ODCE returned 21.4%, its highest calendar total return since its inception in 1978. A worldwide credit crisis initiated a new recession during 2008. Liquidity evaporated in most asset classes, including commercial real estate. Total returns turned negative in mid-2008, with 2009 producing the lowest performance on record at negative 29.8%. The downturn was swift, and 2010 through 2013 reflected a period of recovery. By late-2013, expansion was underway as total returns on stabilized properties had recouped losses, led by steady income growth and low supply growth across the broad market. After six years of double-digit returns led by above-average appreciation, the NFI-ODCE produced a gross return of 8.8% during 2016, and moderated further in 2017 to 7.6%. Since inception in 1978, the NFI-ODCE produced a gross return of 8.7%.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Past performance is not indicative of future results.

TPF Required notes

Returns herein, unless otherwise noted, are presented gross of fees.

The Fund's participating mortgages and those construction loans converting to participating mortgages are secured by properties operated by sponsors that the advisor has deemed creditworthy. The Fund does not own these properties.

Returns for periods greater than one year are annualized. For the period ending June 30, 2018 TPF's net total returns for the quarter, one-, three-, five-, ten-, twenty-year periods and since inception were 1.58%, 6.85%, 7.00%, 8.36%, 4.52%, 7.79% and 7.99% respectively, after the deduction of management fees, but before the deduction of contract charges. Contract charges were only applicable through February 29, 2008. TPF returns reflect the reinvestment of income. Returns and dollars are USD denominated.

Information on fees is available in the ADV Part 2 for UBS Realty Investors LLC and is also available upon request. As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, on an account with a 1% annual fee, if the gross performance is 10%, the compounding effect of the fees will result in a net performance of approximately 8.93%.

The Total Expense Ratio (TER) of the Trumbull Property Fund for the rolling four quarters ended June 30, 2018 would be:

TER before performance fees (Fund expenses before performance fees / Average GAV) = 0.67%. TER after performance fees (Fund expenses after performance fees / Average GAV) = 0.70%. (a) Returns are based on a time-weighted rate of return methodology. (b) The TER is prepared for informational purposes only based on our understanding of the calculation. (c) TPF is accounted for in conformity with U.S. generally accepted accounting principles (U.S. GAAP). (d) TER expenses primarily include Fund level advisory fees (both deducted by the Fund and directly billed to investors), audit and tax fees, appraisal and other third-party valuation service fees for the Trumbull Property Fund. Property level expenses (e.g., utilities, maintenance, real estate taxes) are excluded from the TER calculation.

NFI-ODCE (Source NCREIF) is a fund-level, capitalization weighted index of open-ended diversified core equity commercial real estate funds that includes cash balances and leverage and is reported gross of fees. The degree of leverage used varies among the funds included in NFI-ODCE. As of June 30, 2018 the NFI-ODCE consisted of 25 active funds with total net assets of USD 190.4 billion.

There is no assurance that the financial objective will ultimately be realized and the possibility of loss does exist. There is no guarantee that the investment strategy will perform as expected. Property photos shown in this presentation represent some examples of Fund investments. These types of investments may not be available or selected by the Fund in the future.

GRESB, which was formerly known as the Global Real Estate Sustainability Benchmark, is an industry-driven organization committed to assessing the environmental, social and governance (ESG) performance of real assets globally, including real estate portfolios (public, private and direct), real estate debt portfolios and infrastructure. More than 250 members, including over 60 pension funds and their fiduciaries, use GRESB data in their investment management and engagement process, with a clear goal to optimize the risk/return profile of their investments. In 2017, the survey was completed by 850 entities in 62 countries across six continents, representing a total property value of USD 3.7 trillion (GAV).

Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. To celebrate the 15th Year of ENERGY STAR for Buildings, the EPA recognized UBS Realty Investors LLC as a Premier Member of the 2014 ENERGY STAR Certification Nation for certifying 38 buildings this year. To earn certification, a building must achieve an Energy Star rating of 75 or higher.

Please note that past performance is not a guide to the future. The value of investments and the income received may go down as well as up, and investors may not get back the original amount invested.

Risks

Investors should be aware that return objectives are subject to a number of assumptions and factors, a change in any of which could adversely affect returns. Accordingly, investors should note the limitations of an objective.

Investments in direct real estate and real estate funds involve a high degree of risk. For instance, events in 2008 and 2009 such as the deterioration of credit markets and increased volatility have resulted in a historically unprecedented lack of liquidity and decline in asset values. The value of investments and income from them may increase or decrease. Investors must have the financial ability and willingness to accept and bear the risks (including, among other things, the risk of loss of investment) that are characteristic of real estate investing and investing in commingled fund for an indefinite period of time. Among the risks to be considered are:

Risks of investing in real estate. Risks include adverse changes in market and economic conditions, zoning, and other governmental laws, regulations, and policies, occupancy levels and the ability to lease space, and environmental risks, and risk of uninsured losses.

Debt investment risk. Risk includes risks of borrower defaults, bankruptcies, fraud and special hazard losses that are not covered by standard hazard insurance

Restrictions on redemption and transferability of shares or units; illiquidity. Real estate is an illiquid investment and the account may not be able to generate sufficient cash to meet withdrawal requests from investors.

Reliance on controlling persons and third parties. The exercise of control over an entity can impose additional risks and the fund can experience a significant loss. The risk of third parties includes a conflict between their objectives and those of the account or fund.

Use of leverage. Leverage will increase the exposure of the real estate assets to adverse economic factors, such as rising interest rates, economic downturns, or deteriorations in the condition of the properties or their respective markets and changes in interest rates

Legal & Taxation. Investors should consult their own legal and tax advisers for potential US and/or local country legal or tax implications on any investment

Currency risk. The funds and accounts managed by UBS Realty Investors LLC are denominated in US Dollars. There is a potential for loss due to currency fluctuations for non-US investors.

Lack of diversification. Individually managed accounts and funds in their initial investment periods may have investments that are relatively large compared to the account's or fund's anticipated total value. Any limit to diversification increases risk because the unfavorable performance of even a single investment might have an adverse effect on the aggregate return.

Unspecified investments. There can be no assurance that the advisor will be able to continually locate and acquire assets meeting the fund or account's objective. Competition for assets may generally reduce the number of suitable prospective assets available.

In considering an investment in a commingled real estate fund, prospective investors must rely on their own examination of the partnership agreement, private placement memorandum, and all terms of the offering, including merits and details of these and other risks involved. If there are any discrepancies in fund terms between this presentation and the private placement (offering) memorandum, the memorandum shall prevail.

This is not a recommendation to invest in any product or services. Investors must have the sophistication to independently evaluate investment risks and to exercise independent judgment in deciding whether or not to invest in real estate and real estate funds.

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Any forecasts or projections contained in the presentation are opinions only and are based on available information at the time of writing. Accordingly, such statements are inherently speculative as they can be affected by incorrect assumptions or by known or unknown risks and uncertainties. The outcomes ultimately achieved may differ substantially from the forecasts or projections. Past performance is not an indication of future performance. The opinions expressed are a reflection of UBS Asset Management's best judgment at the time this material was compiled, and any obligation to update or alter forward-looking statements as a result of new information, future events, or otherwise is disclaimed.

Ownership interests in the Fund are not endorsed or guaranteed by UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC, any of their affiliates or any other banking entity, and are not insured by the federal deposit insurance corporation or any other governmental agency. Any losses in the Fund will be borne solely by investors in the Fund and not by UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC or any of their affiliates. Therefore, losses of UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC or any of its affiliates' in the Fund will be limited to losses attributable to the ownership interests in the covered Fund held by UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC or any of its affiliates in their capacity as investors in the Fund. Investors should always read the Fund offering documents prior to investing in the Fund which includes a description of the roles of UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC and its affiliates in greater detail.

The Fund discussed involves risks of a high degree and investors are advised to read and consider carefully the information contained in the offering documents including the detailed risk factors. There is no public market for the fund interests and no such market is expected to develop in the future. Risks include restrictions on the transferability and resale of shares, risk of investing in real estate and in developing markets, and the possibility of loss of investment does exist.

In the US, the Global Real Estate commingled funds are distributed by UBS Fund Services (USA) LLC, member FINRA and other UBS Asset Management broker-dealer affiliates. UBS Fund Services (USA) LLC main office is located at 10 State House Square, Hartford, CT 06103. UBS Realty Investors LLC, UBS Fund Services (USA) LLC is a member of the UBS Asset Management business division and subsidiaries of UBS AG.

Section 3

Biography

Julie Pierro

Portfolio & Client Services Officer Executive Director



Years of investment
industry experience: 20

Education: Central
Connecticut State University
(BA); National University
(MBA)

Julie Pierro is a member of the Portfolio and Client Services Unit for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management. She is responsible for developing and maintaining investment relationships with clients and consultants both in the US and around the globe.

Julie's additional responsibilities include client servicing and marketing Global Real Estate investment products and capabilities to pension funds, defined contribution plans, consultants and endowments/foundations.

Julie has extensive experience in a variety of client relationship management roles, in both investor relations as well as within Human Resources management. Prior to joining UBS Julie held a senior management role with The Hartford's, Retirement Plans Group.

Julie is a member of the Pension Real Estate Association (PREA) and FINRA Series 7, 26 & 66 Registered.

Note: As at March 2018

Contact information

UBS Fund Services (USA) LLC, member FINRA, and its affiliates act as the non-exclusive distributor of commingled fund securities.



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Together, UBS Realty Investors LLC, UBS Farmland Investors LLC, and UBS Fund Services (USA) LLC, subsidiaries of UBS AG, comprise Real Estate US. Securities offered through UBS Fund Services (USA) LLC, member FINRA. Julie Pierro, registered representative.



City Of Burlington Employees Retirement Plan

Performance Review
June 2018

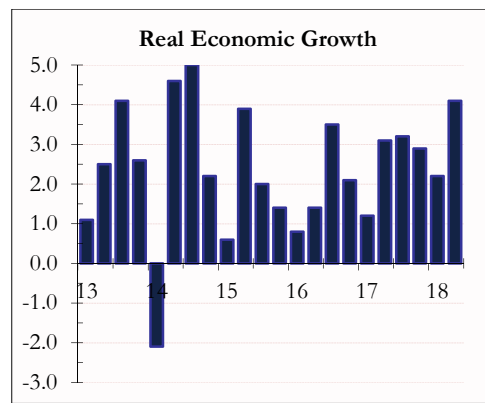


DAHAB ASSOCIATES
New York Massachusetts Pennsylvania Florida

ECONOMIC ENVIRONMENT

Healthy Despite Tariff Dispute

Global expansion slowed in Europe and Asia during the second quarter, while the US economy remained strong. Second quarter



GDP, according to the BEA's advance estimate met expectations, expanding at a rate of 4.1%. First quarter GDP was also revised upward to 2.2%. Job growth surprised to the upside, with 213,000 hires in June and 2.4 million for the latest 12-months and unemployment inched up

from 3.8% to 4.0%. Home sales remained brisk, while home prices rose 7.1%, year-over-year (through May). Interestingly, sales of lower-priced homes have been driving the market lately.

Corporate manufacturing and services supported the economy, as virtually all the component industries continued to grow. The one concern is that businesses are wary of the new tariffs' potential to impact them negatively in the near term. The same applies to consumer sentiment – very high regarding current conditions, but wary about the future. The Federal Reserve Board voted unanimously to raise the Fed funds rate again to 1.75-2.0%, in a nod to economic momentum, robust job growth and core inflation attaining the desired 2% level. The expectation is for two more rate increases this year.

Commodity prices were mixed for the quarter. Energy products were up nicely while many other commodities, especially grains, were down. More telling was the quarter's stock market volatility,

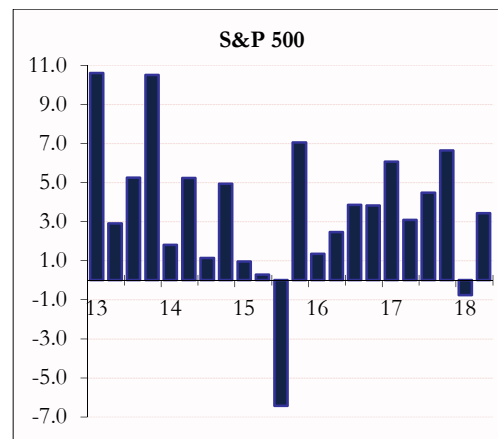
due largely to the newly implemented tariffs applicable to Canadian, Mexican, European, Japanese and Chinese imports sold in the US. The real question is whether the long-held US policy of relatively modest tariffs will now give way to a more damaging trade war.

DOMESTIC EQUITIES

Tariff Uncertainty Stirred Markets

Good news arrived on several fronts: high corporate earnings, lower taxes, sustained job growth, and short-term consumer optimism. Yet the stock market wavered during the quarter. Markets were weak in April, stronger in May and weak again in June, due to uncertainty regarding the new tariffs. Still, all major market indices ended the quarter in positive territory.

The industrial-heavy DJIA gained 1.3%, while the broader S&P 500 added 3.4%. The winner among the major indices was the tech-heavy NASDAQ, which



climbed 6.6%. Again in Q2, large-cap growth stocks, particularly tech names, bested the more traditional value sectors; the Russell 1000 Growth Index gained 5.8% vs. only 1.2% for large-cap value. Small-cap beat large-cap, as the Russell 2000 Growth Index gained 7.2% and its value counterpart climbed 8.3%. The smaller stocks' outperformance reflected the expected shielding of smaller businesses from tariff impacts.

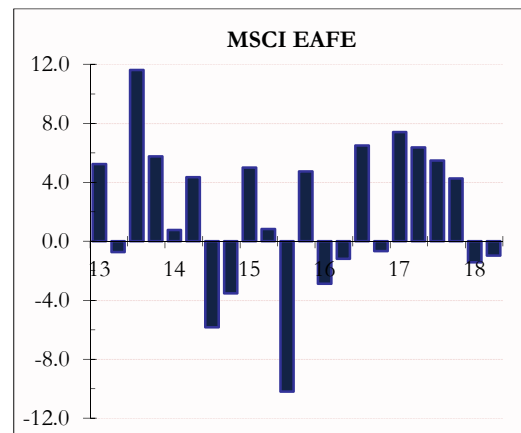
The energy sector surged 14.3%, as OPEC withheld some production in the face of greater US demand. Consumer Service stocks (+10.3%) and ubiquitous technology names (+8.1%) also performed well. On the downside, the financial sector return was nominal, as a relatively flat yield curve stymied bank profits, and basic industries lost ground (-1.1%), as tariff concerns dampened investor enthusiasm.

INTERNATIONAL EQUITIES

Trade Issues Tanked

The economies of Europe, Canada, Mexico, Japan and China were already losing steam during the quarter; but the bigger blow was the uncertainty regarding the outcome of trade negotiations. The US took an aggressive negotiating stance and the countries on the receiving end retaliated.

The MSCI EAFE Index fell 1% for the quarter. The UK market was up 3%, helped by surging employment and higher consumer confidence – despite fractious Brexit negotiations. The EU market



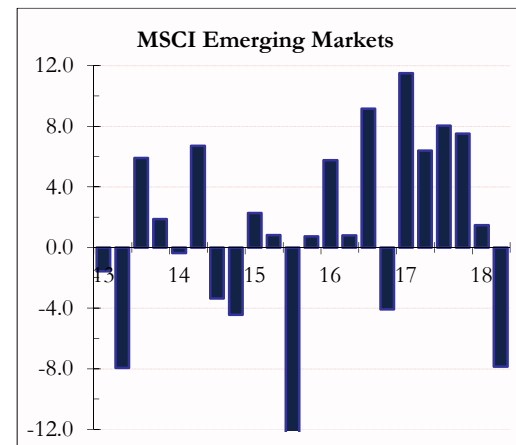
banking sector. While Spain's economy was strong, its market fell

was down 0.9%. In Germany (-3.4%), Chancellor Merkel saw her hold on the coalition government weakened. Concern over tariffs on German auto exports to the US was another issue. Italy fell 6.8%, due to its weak, populist government and continued troubles in its

4.1%, driven by both a decline in tourism and the presumed ineffectiveness of the country's new PM.

Australia (+5.3%) shined due to rebounding commodity exports and an increased minimum wage. Japan was down 2.8% due to its heavy exposure to tariffs on steel, aluminum and auto exports. Hong Kong (-1.2%) had record low unemployment and expanding government spending. Israel (+11%) was the most positive developed market, by far, driven by robust personal consumption and energy-related exports. Canada (+4.9%), separate from the EAFE Index, benefited directly from higher energy prices and business investment; however, NAFTA negotiations still threaten its economy.

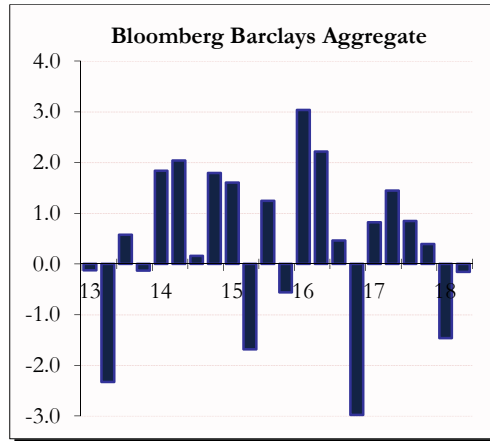
So far this year, emerging market (EM) returns have been negative. The strengthening US dollar, trade tensions, and Latin American



elections were all key factors. The second quarter EM Index return dipped 7.9%. Brazil (-26.4%) was the big loser among the four BRIC countries. Upcoming elections in October, a nationwide trucking strike in May, rampant inflation, and relatively weak export

growth all worked against the largest Latin American country. Russia was down (-5.8%) and India was slightly negative (-0.6%). In China (-3.4%), investors worried about a trade war escalation with the US. Korea, Malaysia, Singapore and the Philippines all enjoyed healthy economies, but were dragged down by global trading uncertainties.

Mexico (-3.5%) experienced the same NAFTA trade worries as Canada, although its oil exports quickly ramped up and other aspects of its economy were positive. Turkey (-25.7%) gave pause



to investors, as President Erdogan gained sweeping powers on his re-election, while hurt by soaring imports and stagnant exports.

Greece (-2.0%) has negotiated an encouraging June agreement with the EU, thereby steadying its economy. By contrast,

shares in Argentina, a member of the Frontier market, plunged almost 42%! Its rampant inflation and near bankrupt Treasury are repeats of past decades.

BOND MARKET

Short-term Rates Rose While the Yield Curve Flattened

In June, the Federal Reserve Board raised the Fed funds rates to a range of 1.75%–2.0% and the front end of the yield curve rose in sync with the Fed move. Rates in the 5-10 year maturity range rose marginally, but long rates were steady. As a result, the yield curve has flattened further, but is not inverted. An inverted yield curve will likely herald a recession.

The Barclays Aggregate Index was essentially flat for the quarter, down 0.2%. Treasuries, constituting 38% of the Index, were up a nominal 0.1%. Long-maturity Treasuries and mortgage-backed issues each gained ¼%. However, corporate issues lost 1%, partly

related to the tariff unease. High-yield issues gained 1%, helped by economic growth, low supply and less sensitivity to higher interest rates.

The G-6 Index (sovereign bonds among key developed economies x-US) lost a significant 4.8%, largely due to currency depreciation vs. the US dollar. Emerging market sovereign debt tumbled 3.6%. Almost all EM debt returns were in the red for the quarter.

CASH EQUIVALENTS

Fed Funds Rate Hike Spurs Tempting Savings Account Rates

The 3-month T-bill return rose along with the June hike in the Fed funds rate. The bellwether 90-day Treasury issue gained almost 0.5% vs. 0.3% in the first quarter. The year-over-year return rose to 1.4%. Around the country, bank teaser rates appear daily, guaranteeing 2% or higher on day-to-day savings accounts. As a result, conservative investors can now obtain a return that is more in line with inflation.

Economic Statistics

	Current Quarter	Previous Quarter
GDP	4.1	2.2
Unemployment	4.0	4.1
CPI All Items Year/Year	2.9	2.4
Fed Funds Rate	2.0	1.75
Industrial Capacity	78.0	77.5
US Dollars per Euro	1.17	1.23

Major Index Returns

Index	Quarter	12 Months
Russell 3000	3.9	14.8
S&P 500	3.4	14.4
Russell Midcap	2.8	12.3
Russell 2000	7.8	17.6
MSCI EAFE	-1.0	7.4
MSCI Emg Markets	-7.9	8.6
NCREIF ODCE	2.0	8.4
U.S. Aggregate	-0.2	-0.4
90 Day T-bills	0.5	1.5

Domestic Equity Return Distributions

	Quarter				Trailing Year		
	VAL	COR	GRO		VAL	COR	GRO
LC	1.2	3.6	5.8	LC	6.8	14.5	22.5
MC	2.4	2.8	3.2	MC	7.6	12.3	18.5
SC	8.3	7.8	7.2	SC	13.1	17.6	21.8

Market Summary

- The BEA Advance estimate pegs 2nd quarter GDP at 4.1%.
- Unemployment rate was 4.0% in June.
- Year over year CPI for all items expanded 2.9%.
- The dollar was stronger against the euro than in the previous quarter.
- Growth continued to beat value, except among small cap names, where value fared better. Across styles, smaller companies bested larger ones.

INVESTMENT RETURN

On June 30th, 2018, the City of Burlington Employees Retirement System's portfolio was valued at \$191,480,598, representing an increase of \$1,372,672 from the March quarter's ending value of \$190,107,926. Last quarter, the Fund posted withdrawals totaling \$1,209,164, which offset the portfolio's net investment return of \$2,581,836. Income receipts totaling \$128,121 plus net realized and unrealized capital gains of \$2,453,715 combined to produce the portfolio's net investment return.

RELATIVE PERFORMANCE

Total Fund

For the second quarter, the portfolio returned 1.4%, which was equal to the Burlington Policy Index's return of 1.4% and ranked in the 42nd percentile of the Public Fund universe. Over the trailing year, the portfolio returned 9.8%, which was equal to the benchmark's 9.8% return, ranking in the 19th percentile. Since December 2001, the portfolio returned 5.8% annualized.

Equity

The equity portion of the portfolio returned 1.7% last quarter; that return was 1.0% greater than the MSCI All Country World index's return of 0.7% and ranked in the 39th percentile of the Global Equity universe. Over the trailing twelve-month period, this component returned 12.9%, 1.6% above the benchmark's 11.3% performance, ranking in the 35th percentile.

Real Assets

In the second quarter, the real assets segment returned 1.5%, which was 0.5% greater than the Real Assets Blended Index's return of 1.0%. Over the trailing twelve-month period, this component returned 6.1%, which was 0.4% less than the benchmark's 6.5% performance.

Fixed Income

For the second quarter, the fixed income component returned 0.0%, which was equal to the Intermediate Gov/Credit Index's return of 0.0% and ranked in the 67th percentile of the Broad Market Fixed Income universe. Over the trailing year, this segment returned -0.6%, which was equal to the benchmark's -0.6% performance, and ranked in the 92nd percentile.

ASSET ALLOCATION

At the end of the second quarter, equities comprised 68.9% of the total portfolio (\$131.9 million), while real assets totaled 10.1% (\$19.4 million). The account's fixed income component comprised 19.3% (\$37.0 million), while the remaining 1.6% was comprised of cash & equivalents (\$3.2 million).

The Retirement System also had a positive cash balance in the Pooled Account (not included in the valuations in this report) of \$585,467.75.

EXECUTIVE SUMMARY

PERFORMANCE SUMMARY

	Quarter	FYTD / 1Y	3 Year	5 Year	10 Year	Since 12/01
Total Portfolio - Gross	1.4	9.8	7.5	7.3	6.1	5.8
<i>PUBLIC FUND RANK</i>	(42)	(19)	(27)	(80)	(84)	----
Total Portfolio - Net	1.3	9.6	7.3	6.9	5.7	----
Policy Index	1.4	9.8	8.0	7.6	5.9	----
Equity - Gross	1.7	12.9	----	----	----	----
<i>GLOBAL EQUITY RANK</i>	(39)	(35)	----	----	----	----
MSCI AC World	0.7	11.3	8.8	10.0	6.4	7.3
ACWI Ex US	-2.4	7.8	5.6	6.5	3.0	7.1
MSCI EAFE	-1.0	7.4	5.4	6.9	3.3	6.5
MSCI EM Net	-8.0	8.2	5.6	5.0	2.3	10.2
Russell 3000	3.9	14.8	11.6	13.3	10.2	7.9
S&P Completion	5.9	16.7	10.2	12.5	10.7	----
Real Assets - Gross	1.5	6.1	----	----	----	----
Real Assets Idx	1.0	6.5	2.8	3.5	0.4	5.9
NCREIF ODCE	2.0	8.4	9.4	11.0	5.3	8.1
NCREIF Timber	0.5	3.6	3.4	6.0	4.0	7.0
BLP Commodity	0.4	7.3	-4.5	-6.4	-9.0	1.2
Fixed Income - Gross	0.0	-0.6	----	----	----	----
<i>BROAD MARKET FIXED RANK</i>	(67)	(92)	----	----	----	----
Int Gov/Credit	0.0	-0.6	1.2	1.6	3.1	3.8
Global Aggregate	-2.8	1.4	2.6	1.5	2.6	4.7
Global Agg Ex US	-4.8	2.8	3.2	0.9	1.8	5.1
Aggregate Index	-0.2	-0.4	1.7	2.3	3.7	4.3

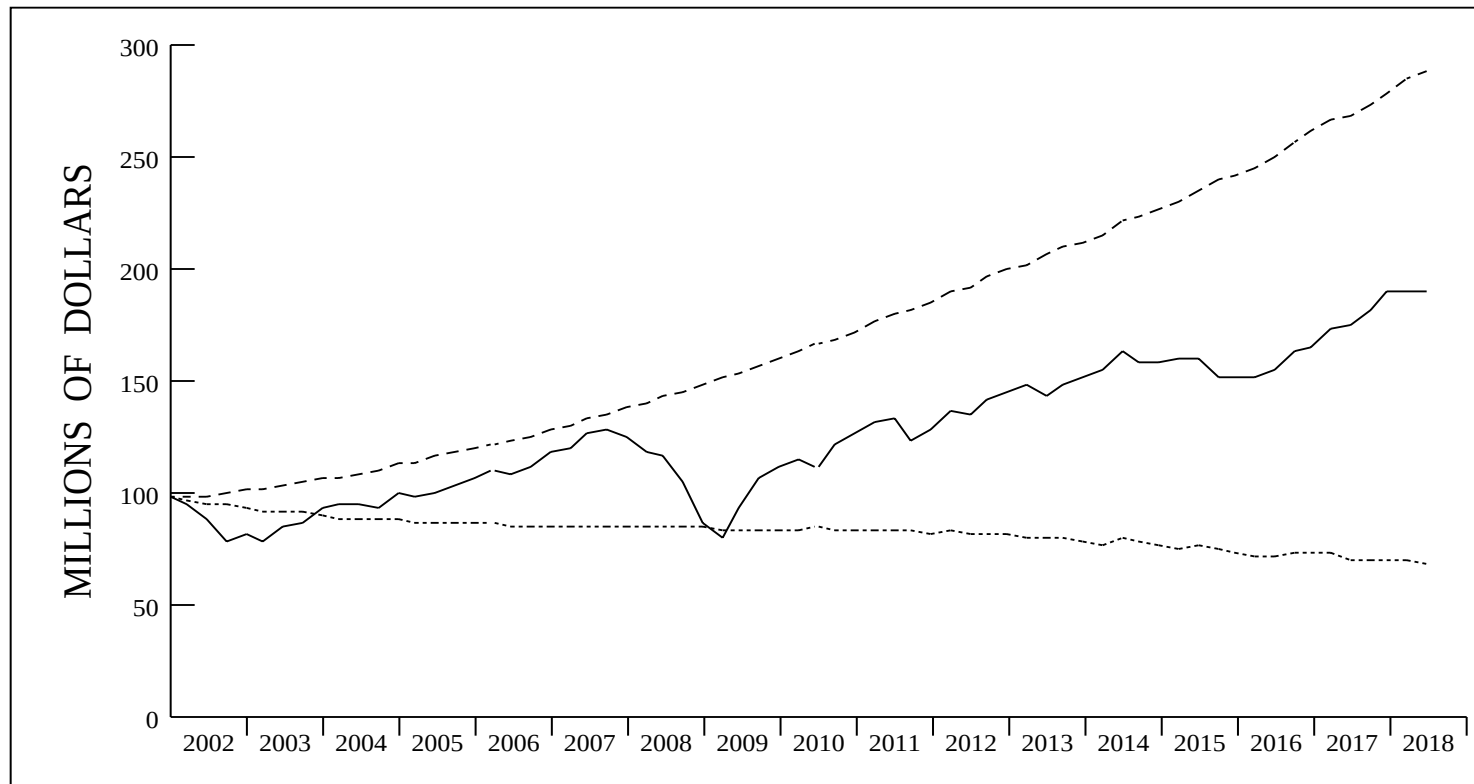
ASSET ALLOCATION

Equity	68.9%	\$ 131,874,317
Real Assets	10.1%	19,424,941
Fixed Income	19.3%	37,029,372
Cash	1.6%	3,151,968
Total Portfolio	100.0%	\$ 191,480,598

INVESTMENT RETURN

Market Value 3/2018	\$ 190,107,926
Contribs / Withdrawals	- 1,209,164
Income	128,121
Capital Gains / Losses	2,453,715
Market Value 6/2018	\$ 191,480,598

INVESTMENT GROWTH

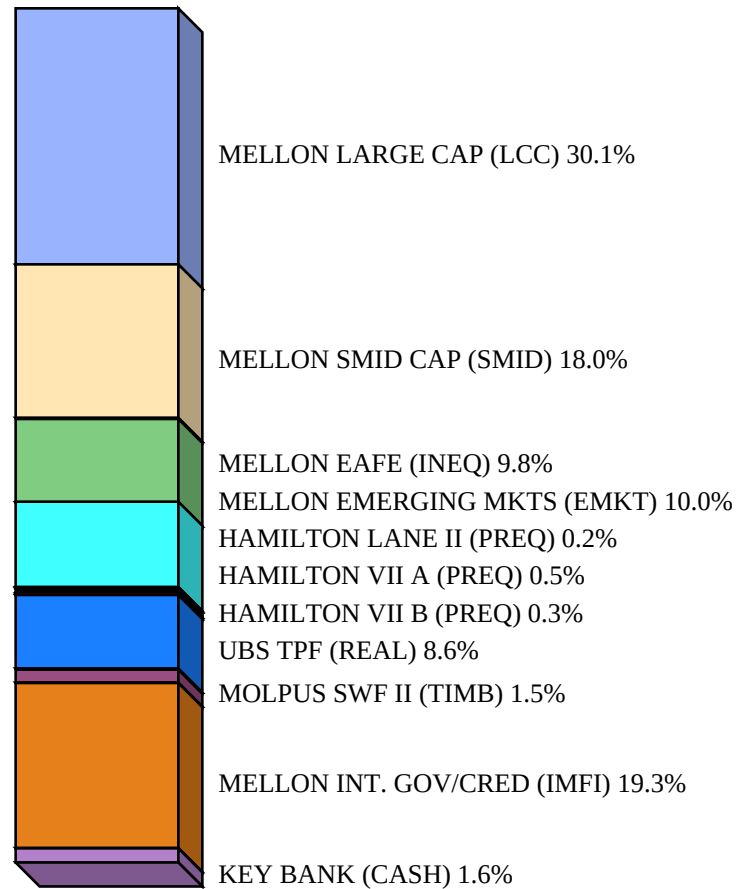


— ACTUAL RETURN
 - - - 8.0%
 . . . 0.0%

VALUE ASSUMING
 8.0% RETURN \$ 289,569,492

	LAST QUARTER	PERIOD 12/01 - 6/18
BEGINNING VALUE	\$ 190,107,926	\$ 98,885,312
NET CONTRIBUTIONS	- 1,209,164	- 29,066,942
INVESTMENT RETURN	2,581,836	121,662,228
ENDING VALUE	\$ 191,480,598	\$ 191,480,598
INCOME	128,121	15,338,381
CAPITAL GAINS (LOSSES)	2,453,715	106,323,847
INVESTMENT RETURN	2,581,836	121,662,228

MANAGER ALLOCATION AND TARGET SUMMARY



Name	Market Value	Percent	Target
Mellon Large Cap (LCC)	\$57,584,619	30.1	30.0
Mellon Smid Cap (SMID)	\$34,463,430	18.0	18.0
Mellon EAFE (INEQ)	\$18,744,672	9.8	10.0
Mellon Emerging Mkts (EMKT)	\$19,235,488	10.0	10.0
Hamilton Lane II (PREQ)	\$335,744	0.2	0.5
Hamilton VII A (PREQ)	\$877,012	0.5	0.9
Hamilton VII B (PREQ)	\$633,352	0.3	0.6
UBS TPF (REAL)	\$16,511,002	8.6	8.0
Molpus SWF II (TIMB)	\$2,913,939	1.5	2.0
Mellon Int. Gov/Cred (IMFI)	\$37,029,372	19.3	20.0
Key Bank (CASH)	\$3,151,968	1.6	0.0
Total Portfolio	\$191,480,598	100.0	100.0

INVESTMENT RETURN SUMMARY - ONE QUARTER

Name	Quarter Total Return	Market Value March 31st, 2018	Net Cashflow	Net Investment Return	Market Value June 30th, 2018
Mellon Large Cap (LCC)	3.5	59,456,454	-3,900,000	2,028,165	57,584,619
Mellon Smid Cap (SMID)	5.7	35,082,458	-2,600,000	1,980,972	34,463,430
Mellon EAFE (INEQ)	-0.8	20,962,409	-2,100,000	-117,737	18,744,672
Mellon Emerging Mkts (EMKT)	-7.8	21,889,517	-1,000,000	-1,654,029	19,235,488
Hamilton Lane II (PREQ)	-2.0	344,457	-1,759	-6,954	335,744
Hamilton VII A (PREQ)	0.3	916,855	-43,002	3,159	877,012
Hamilton VII B (PREQ)	1.0	640,520	-13,486	6,318	633,352
UBS TPF (REAL)	1.8	16,262,893	-39,560	287,669	16,511,002
Molpus SWF II (TIMB)	0.2	2,915,778	0	-1,839	2,913,939
Mellon Int. Gov/Cred (IMFI)	0.0	30,473,260	6,500,000	56,112	37,029,372
Key Bank (CASH)	---	1,163,325	1,988,643	0	3,151,968
Total Portfolio	1.4	190,107,926	-1,209,164	2,581,836	191,480,598

MANAGER PERFORMANCE SUMMARY - GROSS OF FEES

Portfolio	(Universe)	Quarter	FYTD	1 Year	3 Years	5 Years	Since Inception	
Total Portfolio	(Public Fund)	1.4 (42)	9.8 (19)	9.8 (19)	7.5 (27)	7.3 (80)	5.8 ----	12/01
<i>Policy Index</i>		<i>1.4 ---</i>	<i>9.8 ---</i>	<i>9.8 ---</i>	<i>8.0 ---</i>	<i>7.6 ---</i>	<i>---- ---</i>	<i>12/01</i>
Mellon Large Cap	(LC Core)	3.5 (30)	14.5 (47)	14.5 (47)	---- ----	---- ----	15.5 (45)	03/16
<i>S&P 500</i>		<i>3.4 ---</i>	<i>14.4 ---</i>	<i>14.4 ---</i>	<i>11.9 ---</i>	<i>13.4 ---</i>	<i>15.4 ---</i>	<i>03/16</i>
Mellon Smid Cap	(Smid Cap)	5.7 (26)	16.4 (39)	16.4 (39)	---- ----	---- ----	17.8 (39)	03/16
<i>Russell 2500</i>		<i>5.7 ---</i>	<i>16.2 ---</i>	<i>16.2 ---</i>	<i>10.3 ---</i>	<i>12.3 ---</i>	<i>17.7 ---</i>	<i>03/16</i>
Mellon EAFE	(Intl Eq)	-0.8 (25)	7.5 (57)	7.5 (57)	---- ----	---- ----	11.6 (67)	03/16
<i>MSCI EAFE</i>		<i>-1.0 ---</i>	<i>7.4 ---</i>	<i>7.4 ---</i>	<i>5.4 ---</i>	<i>6.9 ---</i>	<i>11.7 ---</i>	<i>03/16</i>
Mellon Emerging Mkts	(Emerging Mkt)	-7.8 (43)	8.1 (42)	8.1 (42)	---- ----	---- ----	14.1 (54)	03/16
<i>MSCI EM Net</i>		<i>-8.0 ---</i>	<i>8.2 ---</i>	<i>8.2 ---</i>	<i>5.6 ---</i>	<i>5.0 ---</i>	<i>14.2 ---</i>	<i>03/16</i>
Hamilton Lane II		-2.0 ----	6.3 ----	6.3 ----	-2.8 ----	2.8 ----	10.8 ----	03/09
<i>S&P Completion</i>		<i>5.9 ---</i>	<i>16.7 ---</i>	<i>16.7 ---</i>	<i>10.2 ---</i>	<i>12.5 ---</i>	<i>18.1 ---</i>	<i>03/09</i>
Hamilton VII A		0.3 ----	9.4 ----	9.4 ----	9.5 ----	13.3 ----	12.8 ----	09/11
<i>S&P Completion</i>		<i>5.9 ---</i>	<i>16.7 ---</i>	<i>16.7 ---</i>	<i>10.2 ---</i>	<i>12.5 ---</i>	<i>16.5 ---</i>	<i>09/11</i>
Hamilton VII B		1.0 ----	10.8 ----	10.8 ----	8.5 ----	8.3 ----	8.2 ----	09/11
<i>S&P Completion</i>		<i>5.9 ---</i>	<i>16.7 ---</i>	<i>16.7 ---</i>	<i>10.2 ---</i>	<i>12.5 ---</i>	<i>16.5 ---</i>	<i>09/11</i>
UBS TPF		1.8 ----	7.7 ----	7.7 ----	---- ----	---- ----	6.6 ----	09/16
<i>NCREIF ODCE</i>		<i>2.0 ---</i>	<i>8.4 ---</i>	<i>8.4 ---</i>	<i>9.4 ---</i>	<i>11.0 ---</i>	<i>8.1 ---</i>	<i>09/16</i>
Molpus SWF II		0.2 ----	-1.9 ----	-1.9 ----	2.4 ----	4.1 ----	3.3 ----	03/09
<i>NCREIF Timber</i>		<i>0.5 ---</i>	<i>3.6 ---</i>	<i>3.6 ---</i>	<i>3.4 ---</i>	<i>6.0 ---</i>	<i>3.8 ---</i>	<i>03/09</i>
Mellon Int. Gov/Cred	(Int Fixed)	0.0 (85)	-0.6 (97)	-0.6 (97)	---- ----	---- ----	0.3 (93)	03/16
<i>Int Gov/Credit</i>		<i>0.0 ---</i>	<i>-0.6 ---</i>	<i>-0.6 ---</i>	<i>1.2 ---</i>	<i>1.6 ---</i>	<i>0.3 ---</i>	<i>03/16</i>

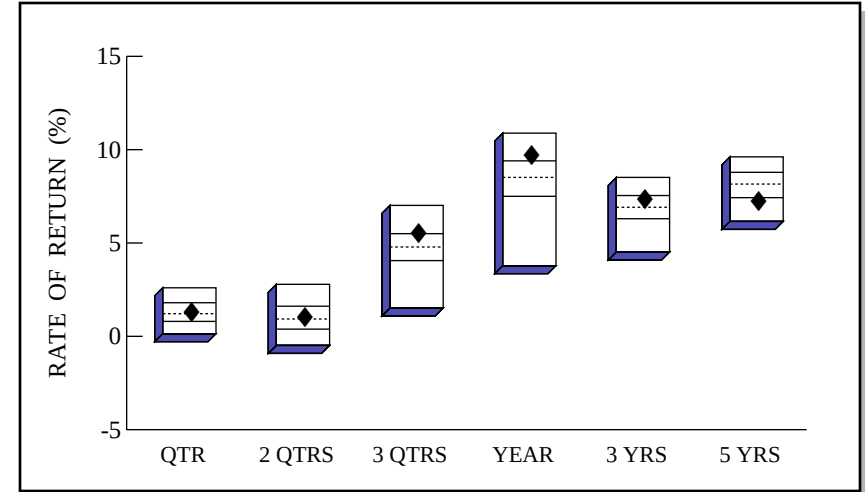
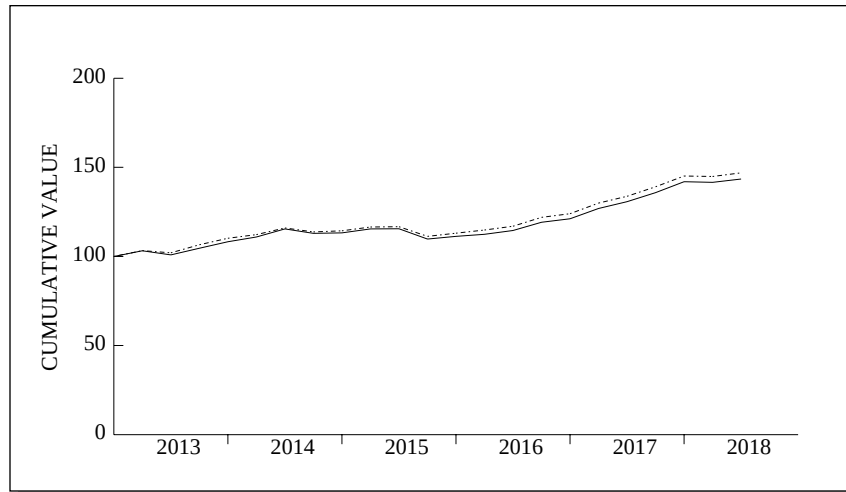
MANAGER PERFORMANCE SUMMARY - NET OF FEES

Name	Quarter	FYTD	1 Year	3 Years	5 Years	Since Inception	
Total Portfolio	1.3	9.6	9.6	7.3	6.9	----	12/01
<i>Policy Index</i>	<i>1.4</i>	<i>9.8</i>	<i>9.8</i>	<i>8.0</i>	<i>7.6</i>	----	<i>12/01</i>
Mellon Large Cap	3.5	14.4	14.4	----	----	15.4	03/16
<i>S&P 500</i>	<i>3.4</i>	<i>14.4</i>	<i>14.4</i>	<i>11.9</i>	<i>13.4</i>	<i>15.4</i>	<i>03/16</i>
Mellon Smid Cap	5.7	16.3	16.3	----	----	17.8	03/16
<i>Russell 2500</i>	<i>5.7</i>	<i>16.2</i>	<i>16.2</i>	<i>10.3</i>	<i>12.3</i>	<i>17.7</i>	<i>03/16</i>
Mellon EAFE	-0.8	7.4	7.4	----	----	11.5	03/16
<i>MSCI EAFE</i>	<i>-1.0</i>	<i>7.4</i>	<i>7.4</i>	<i>5.4</i>	<i>6.9</i>	<i>11.7</i>	<i>03/16</i>
Mellon Emerging Mkts	-7.9	8.1	8.1	----	----	14.0	03/16
<i>MSCI EM Net</i>	<i>-8.0</i>	<i>8.2</i>	<i>8.2</i>	<i>5.6</i>	<i>5.0</i>	<i>14.2</i>	<i>03/16</i>
Hamilton Lane II	-2.5	1.9	1.9	-6.2	0.1	8.7	03/09
<i>S&P Completion</i>	<i>5.9</i>	<i>16.7</i>	<i>16.7</i>	<i>10.2</i>	<i>12.5</i>	<i>18.1</i>	<i>03/09</i>
Hamilton VII A	0.0	8.0	8.0	8.3	11.8	10.8	09/11
<i>S&P Completion</i>	<i>5.9</i>	<i>16.7</i>	<i>16.7</i>	<i>10.2</i>	<i>12.5</i>	<i>16.5</i>	<i>09/11</i>
Hamilton VII B	0.8	9.5	9.5	7.2	6.9	6.3	09/11
<i>S&P Completion</i>	<i>5.9</i>	<i>16.7</i>	<i>16.7</i>	<i>10.2</i>	<i>12.5</i>	<i>16.5</i>	<i>09/11</i>
UBS TPF	1.5	6.7	6.7	----	----	5.5	09/16
<i>NCREIF ODCE</i>	<i>2.0</i>	<i>8.4</i>	<i>8.4</i>	<i>9.4</i>	<i>11.0</i>	<i>8.1</i>	<i>09/16</i>
Molpus SWF II	-0.1	-2.9	-2.9	1.4	3.1	2.5	03/09
<i>NCREIF Timber</i>	<i>0.5</i>	<i>3.6</i>	<i>3.6</i>	<i>3.4</i>	<i>6.0</i>	<i>3.8</i>	<i>03/09</i>
Mellon Int. Gov/Cred	0.0	-0.6	-0.6	----	----	0.3	03/16
<i>Int Gov/Credit</i>	<i>0.0</i>	<i>-0.6</i>	<i>-0.6</i>	<i>1.2</i>	<i>1.6</i>	<i>0.3</i>	<i>03/16</i>

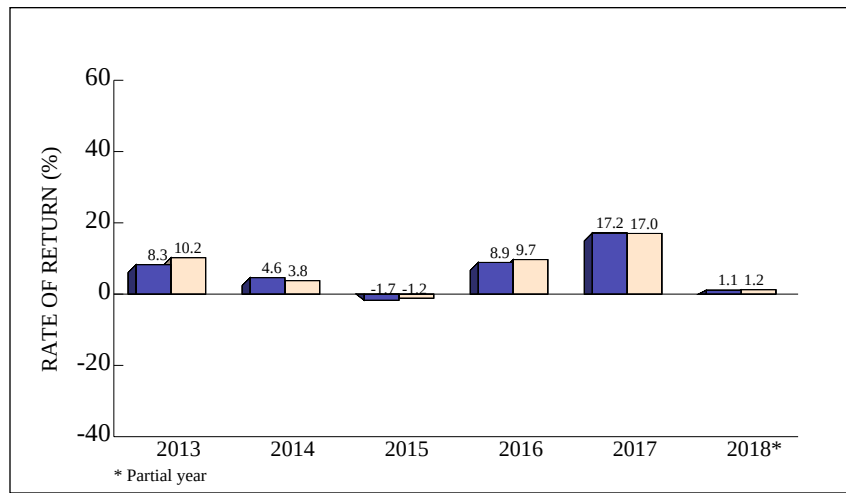
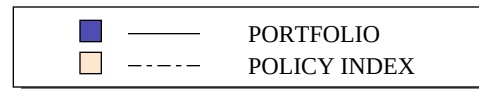
MANAGER VALUE ADDED

1 Quarter	Portfolio	Benchmark	1 Year
0.1	Mellon Large Cap	S&P 500	0.1
0.0	Mellon Smid Cap	Russell 2500	0.2
0.2	Mellon EAFE	MSCI EAFE	0.1
0.2	Mellon Emerging Mkts	MSCI EM Net	-0.1
 -7.9	Hamilton Lane II	S&P Completion	 -10.4
 -5.6	Hamilton VII A	S&P Completion	 -7.3
 -4.9	Hamilton VII B	S&P Completion	 -5.9
-0.2	UBS TPF	NCREIF ODCE	-0.7
-0.3	Molpus SWF II	NCREIF Timber	 -5.5
0.0	Mellon Int. Gov/Cred	Int Gov/Credit	0.0
0.0 	Total Portfolio	Policy Index	0.0

TOTAL RETURN COMPARISONS

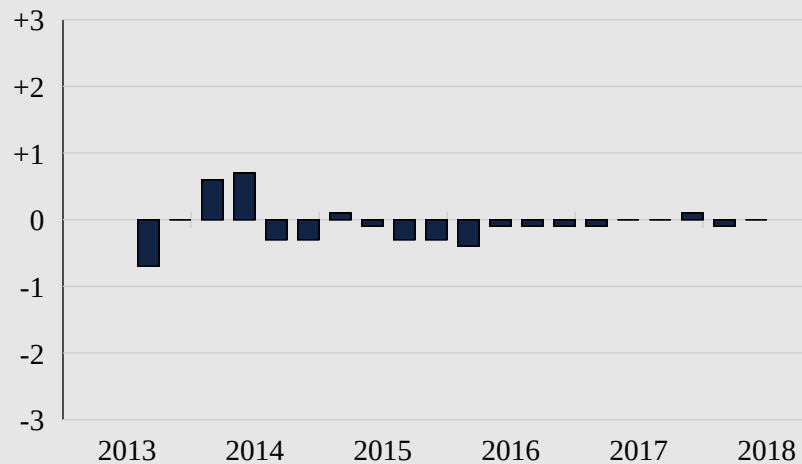


Public Fund Universe



	QTR	2 QTRS	3 QTRS	YEAR	-----ANNUALIZED----- 3 YRS	5 YRS
RETURN	1.4	1.1	5.6	9.8	7.5	7.3
(RANK)	(42)	(42)	(21)	(19)	(27)	(80)
5TH %ILE	2.6	2.8	7.0	10.9	8.5	9.6
25TH %ILE	1.8	1.6	5.5	9.4	7.5	8.8
MEDIAN	1.2	0.9	4.8	8.5	6.9	8.2
75TH %ILE	0.8	0.4	4.1	7.5	6.3	7.4
95TH %ILE	0.1	-0.5	1.5	3.8	4.5	6.2
Policy	1.4	1.2	5.6	9.8	8.0	7.6

Public Fund Universe

TOTAL PORTFOLIO QUARTERLY PERFORMANCE SUMMARY - 5 YEARS**COMPARATIVE BENCHMARK: BURLINGTON POLICY INDEX****VARIATION FROM BENCHMARK**

Total Quarters Observed	20
Quarters At or Above the Benchmark	8
Quarters Below the Benchmark	12
Batting Average	.400

RATES OF RETURN

Date	Portfolio	Bench	Diff	-----Cumulative-----		
				Portfolio	Bench	Diff
9/13	3.7	4.4	-0.7	3.7	4.4	-0.7
12/13	3.5	3.5	0.0	7.3	8.0	-0.7
3/14	2.5	1.9	0.6	10.0	10.0	0.0
6/14	4.0	3.3	0.7	14.4	13.7	0.7
9/14	-2.2	-1.9	-0.3	12.0	11.5	0.5
12/14	0.3	0.6	-0.3	12.3	12.1	0.2
3/15	1.9	1.8	0.1	14.5	14.2	0.3
6/15	0.1	0.2	-0.1	14.6	14.4	0.2
9/15	-5.0	-4.7	-0.3	8.9	9.1	-0.2
12/15	1.3	1.6	-0.3	10.3	10.8	-0.5
3/16	1.1	1.5	-0.4	11.5	12.5	-1.0
6/16	1.8	1.9	-0.1	13.6	14.6	-1.0
9/16	4.1	4.2	-0.1	18.2	19.5	-1.3
12/16	1.6	1.7	-0.1	20.1	21.5	-1.4
3/17	4.7	4.8	-0.1	25.8	27.3	-1.5
6/17	3.0	3.0	0.0	29.6	31.1	-1.5
9/17	3.9	3.9	0.0	34.7	36.3	-1.6
12/17	4.5	4.4	0.1	40.7	42.2	-1.5
3/18	-0.3	-0.2	-0.1	40.4	41.9	-1.5
6/18	1.4	1.4	0.0	42.3	44.0	-1.7

Private Equity Investor Report
Hamilton Lane Secondary Fund II LP

IRR Since Inception	14.35%	Annualized, Net of Fees	
Market Value	\$ 335,744	Last Statement Date:	6/30/2018
Capital Commitment	\$ 3,400,000	100.00%	
Paid In Capital	\$ 2,982,695	87.73%	
Remaining Commitment	\$ 417,305	12.27%	

Date	Contributions	% of Commitment	Recallable Distributions	% of Commitment	Distributions
Year 2009	\$ 518,361	15.25%	\$ (151,904)	-4.47%	\$ -
Year 2010	\$ 1,109,828	32.64%	\$ -	-	\$ (87,992)
Year 2011	\$ 607,254	17.86%	\$ (115,109)	-3.39%	\$ (361,234)
Year 2012	\$ 934,221	27.48%	\$ -	-	\$ (836,516)
Year 2013	\$ 97,310	2.86%	\$ (17,266)	-0.51%	\$ (731,867)
Year 2014	\$ -	-	\$ -	-	\$ (1,140,848)
Year 2015	\$ -	-	\$ -	-	\$ (533,140)
1/28/2016	\$ -	-	\$ -	-	\$ (38,549)
5/20/2016	\$ -	-	\$ -	-	\$ (81,887)
8/19/2016	\$ -	-	\$ -	-	\$ (46,080)
12/28/2016	\$ -	-	\$ -	-	\$ (31,257)
6/1/2017	\$ -	-	\$ -	-	\$ (44,158)
11/20/2017	\$ -	-	\$ -	-	\$ (45,061)
1/29/2018	\$ -	-	\$ -	-	\$ (38,733)
Total	\$ 3,266,974	96.09%	\$ (284,279)	-8.36%	\$ (4,017,322)

Private Equity Investor Report
Hamilton Lane Private Equity Fund VII LP Series A Offshore

IRR Since Inception	10.45%	Annualized, Net of Fees	
Market Value	\$ 877,012	Last Statement Date:	6/30/2018
Capital Commitment	\$ 1,500,000	100.00%	
Paid In Capital	\$ 1,304,825	86.99%	
Remaining Commitment	\$ 195,175	13.01%	

Date	Contributions	% of Commitment	Recallable Distributions	% of Commitment	Distributions
7/27/2011	\$ 172,500	11.50%	\$ -	-	\$ -
9/27/2011	\$ 52,500	3.50%	\$ -	-	\$ -
11/15/2011	\$ 52,500	3.50%	\$ -	-	\$ -
12/30/2011	\$ 67,947	4.53%	\$ -	-	\$ -
4/24/2012	\$ 83,394	5.56%	\$ -	-	\$ (32,311)
6/24/2012	\$ 52,500	3.50%	\$ -	-	\$ -
8/23/2012	\$ 45,000	3.00%	\$ -	-	\$ (3,692)
10/15/2012	\$ 67,500	4.50%	\$ -	-	\$ (23,932)
11/21/2012	\$ 80,250	5.35%	\$ -	-	\$ -
3/12/2013	\$ 48,750	3.25%	\$ -	-	\$ (27,930)
2/14/2014	\$ 61,500	4.10%	\$ -	-	\$ -
5/20/2014	\$ 187,500	12.50%	\$ -	-	\$ (151,650)
7/14/2014	\$ 50,522	3.37%	\$ -	-	\$ (19,283)
1/6/2015	\$ 145,117	9.67%	\$ -	-	\$ (88,738)
12/8/2015	\$ 28,179	1.88%	\$ -	-	\$ (51,519)
7/22/2016	\$ 75,000	5.00%	\$ -	-	\$ (53,805)
1/25/2017	\$ 34,166	2.28%	\$ -	-	\$ (216,102)
6/22/2017	\$ -	-	\$ -	-	\$ (96,706)
8/16/2017	\$ -	-	\$ -	-	\$ (31,846)
9/28/2017	\$ -	-	\$ -	-	\$ (6,487)
11/15/2017	\$ -	-	\$ -	-	\$ (80,964)
3/29/2018	\$ -	-	\$ -	-	\$ (138,746)
6/15/2018	\$ -	-	\$ -	-	\$ (39,985)
Total	\$ 1,304,825	86.99%	\$ -	0.00%	\$ (1,063,696)

Valuations of non-public securities are provided by Hamilton Lane, based on current market and company conditions.

Private Equity Investor Report
Hamilton Lane Private Equity Fund VII LP Series B Offshore

IRR Since Inception	6.35%	Annualized, Net of Fees	
Market Value	\$ 633,352	Last Statement Date:	6/30/2018
Capital Commitment	\$ 1,000,000	100.00%	
Paid In Capital	\$ 825,225	82.52%	
Remaining Commitment	\$ 174,775	17.48%	

Date	Contributions	% of Commitment	Recallable Distributions	% of Commitment	Distributions
7/27/2011	\$ 160,000	16.00%	\$ -	-	\$ -
9/27/2011	\$ 35,000	3.50%	\$ -	-	\$ -
12/28/2011	\$ 50,723	5.07%	\$ -	-	\$ -
4/24/2012	\$ 56,445	5.64%	\$ -	-	\$ (22,962)
6/24/2012	\$ 50,000	5.00%	\$ -	-	\$ -
8/23/2012	\$ 50,000	5.00%	\$ -	-	\$ (2,909)
11/21/2012	\$ 30,000	3.00%	\$ -	-	\$ (16,671)
1/3/2013	\$ 40,000	4.00%	\$ -	-	\$ -
8/12/2013	\$ 100,000	10.00%	\$ -	-	\$ (35,860)
2/14/2014	\$ 44,000	4.40%	\$ -	-	\$ -
5/20/2014	\$ 80,000	8.00%	\$ -	-	\$ (49,323)
7/14/2014	\$ 45,512	4.55%	\$ -	-	\$ (3,495)
12/8/2014	\$ 16,254	1.63%	\$ -	-	\$ (29,570)
1/20/2015	\$ 65,791	6.58%	\$ -	-	\$ (11,610)
8/3/2015	\$ -	-	\$ -	-	\$ (9,735)
3/23/2016	\$ -	-	\$ -	-	\$ (67,664)
7/18/2016	\$ -	-	\$ -	-	\$ (10,836)
1/27/2017	\$ 1,500	0.15%	\$ -	-	\$ (64,973)
6/23/2017	\$ -	-	\$ -	-	\$ (43,902)
8/17/2017	\$ -	-	\$ -	-	\$ (15,753)
9/27/2017	\$ -	-	\$ -	-	\$ (5,960)
12/8/2017	\$ -	-	\$ -	-	\$ (20,240)
3/30/2018	\$ -	-	\$ -	-	\$ (18,393)
6/15/2018	\$ 1	-	\$ -	-	\$ (11,983)
Total	\$ 825,225	82.52%	\$ -	0.00%	\$ (441,839)

Valuations of non-public securities are provided by Hamilton Lane, based on current market and company conditions.

Timber Investor Report

Molpus Sustainable Woodlands Fund II, LP

IRR Since Inception	1.82%	Annualized, Net of Fees	
Market Value	\$ 2,913,939	Last Statement Date:	6/30/2018
Capital Commitment	\$ 3,400,000	100.00%	
Paid In Capital	\$ 3,400,000	100.00%	
Remaining Commitment	\$ -	0.00%	

Date	Contributions	% of Commitment	Recallable Distributions	% of Commitment	Distributions
2/28/2009	\$ 510,000	15.00%	\$ -	-	\$ -
9/30/2009	\$ 2,890,000	85.00%	\$ -	-	\$ -
4/30/2010	\$ -	-	\$ -	-	\$ (19,365)
6/30/2010	\$ -	-	\$ -	-	\$ (67,116)
12/31/2010	\$ -	-	\$ -	-	\$ (28,663)
6/30/2011	\$ -	-	\$ -	-	\$ (19,109)
12/31/2011	\$ -	-	\$ -	-	\$ (38,218)
12/31/2012	\$ -	-	\$ -	-	\$ (47,772)
6/25/2013	\$ -	-	\$ -	-	\$ (76,435)
12/31/2013	\$ -	-	\$ -	-	\$ (114,653)
3/31/2014	\$ -	-	\$ -	-	\$ (47,772)
9/30/2014	\$ -	-	\$ -	-	\$ (47,772)
12/31/2014	\$ -	-	\$ -	-	\$ (28,663)
3/31/2015	\$ -	-	\$ -	-	\$ (38,218)
9/30/2015	\$ -	-	\$ -	-	\$ (47,772)
12/31/2015	\$ -	-	\$ -	-	\$ (47,772)
6/30/2016	\$ -	-	\$ -	-	\$ (28,663)
9/30/2016	\$ -	-	\$ -	-	\$ (76,435)
12/31/2016	\$ -	-	\$ -	-	\$ (95,544)
6/30/2017	\$ -	-	\$ -	-	\$ (38,218)
9/29/2017	\$ -	-	\$ -	-	\$ (38,218)
12/29/2017	\$ -	-	\$ -	-	\$ (57,327)
Total	\$ 3,400,000	100.00%	\$ -	0.00%	\$ (1,003,705)

APPENDIX - MAJOR MARKET INDEX RETURNS

Equity	Style	QTR	FYTD	1 Year	3 years	5 Years
Russell 3000	Broad Equity	3.9	14.8	14.8	11.6	13.3
S&P 500	Large Cap Core	3.4	14.4	14.4	11.9	13.4
Russell 1000	Large Cap Core	3.6	14.5	14.5	11.6	13.4
Russell 1000 Growth	Large Cap Growth	5.8	22.5	22.5	15.0	16.4
Russell 1000 Value	Large Cap Value	1.2	6.8	6.8	8.2	10.3
Russell 2000	Small Cap	7.8	17.6	17.6	11.0	12.5
Russell 2000 Growth	Small Cap Growth	7.2	21.8	21.8	10.6	13.6
Russell 2000 Value	Small Cap Value	8.3	13.1	13.1	11.2	11.2
MSCI EAFE	Developed Markets	-1.0	7.4	7.4	5.4	6.9
MSCI EAFE Growth	Developed Markets Growth	0.3	9.8	9.8	6.8	7.8
MSCI EAFE Value	Developed Markets Value	-2.3	4.9	4.9	3.9	6.0
MSCI Emerging Markets	Emerging Markets	-7.9	8.6	8.6	6.0	5.4
MSCI All Country World	Global Equity	0.7	11.3	11.3	8.8	10.0
MSCI All Country World Ex US	Global Equity (ex. US)	-2.4	7.8	7.8	5.6	6.5
Fixed Income	Style	QTR	FYTD	1 Year	3 years	5 Years
Bloomberg Barclays Aggregate Index	Core Fixed Income	-0.2	-0.4	-0.4	1.7	2.3
Bloomberg Barclays Gov/Credit	Gov/Credit	-0.3	-0.6	-0.6	1.8	2.3
Bloomberg Barclays Capital Gov't Bond	Treasuries	0.1	-0.6	-0.6	1.0	1.5
Bloomberg Barclays Capital Credit Bond	Corporate Bonds	-0.9	-0.6	-0.6	2.9	3.4
Intermediate Aggregate	Core Intermediate	0.1	-0.3	-0.3	1.3	1.8
Intermediate Gov/Credit	Gov / Credit Intermediate	0.0	-0.6	-0.6	1.2	1.6
ML/BoA 1-3 Year Treasury	Short Term Treasuries	0.2	0.1	0.1	0.4	0.6
Bloomberg Barclays Capital High Yield	High Yield Bonds	1.0	2.6	2.6	5.5	5.5
Bloomberg Barclays Global Treasury Ex US	International Treasuries	-4.9	2.9	2.9	3.5	1.0
Bloomberg Barclays Global Government Bond	International Fixed Income	-3.5	1.9	1.9	2.8	1.0
Bloomberg Barclays Global Aggregate	International Fixed Income	-2.8	1.4	1.4	2.6	1.5
Bloomberg Barclays Global Aggregate Ex US	International Fixed Income	-4.8	2.8	2.8	3.2	0.9
Alternative Assets	Style	QTR	FYTD	1 Year	3 years	5 Years
MSCI US REIT Index	REITs	10.1	3.6	3.6	8.1	8.3
NCREIF NFI-ODCE Index	Real Estate	2.0	8.4	8.4	9.4	11.0
NCREIF Timber Index	Timber	0.5	3.6	3.6	3.4	6.0
Bloomberg Commodity Index	Commodities	0.4	7.3	7.3	-4.5	-6.4
HFRI FOF Composite	Hedge Funds	0.8	5.5	5.5	2.0	3.5

APPENDIX - DISCLOSURES

- * The Burlington Policy Index was constructed as follows:

For periods since June 30, 2016:

30% S&P 500	18% Russell 2500	10% MSCI EAFE
10% MSCI EM	20% BC Intermediate Gov/Cred	
2% S&P Completion Index	2% NCREIF Timberland	8% NCREIF ODCE

For periods from December 31, 2015 through June 30, 2016:

30% S&P 500	18% Russell 2500	10% MSCI EAFE
10% MSCI EM	28% BC Intermediate Gov/Cred	
2% S&P Completion Index	2% NCREIF Timberland	

For periods through December 31, 2015, this index uses the returns of the Manager Shadow Index.

- * The Burlington Manager Shadow index is the weighted average of each manager portfolio's beginning value multiplied by its current quarter benchmark return.
- * The Real Assets Blended Index is comprised of equal parts:

NCREIF ODCE	NCREIF Timber	Bloomberg Commodities (Formerly known as Dow Jones UBS Commodities)
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- * All values for the Pooled Cash account since June 2012 are subject to change. Audited statements are not provided for this account.
- * Dahab Associates utilizes data provided by a custodian and other vendors it believes are reliable. However, it cannot assume responsibility for errors and omissions therefrom.
- * All returns were calculated on a time-weighted basis, and are gross of fees unless otherwise noted.
- * All returns for periods greater than one year are annualized.
- * Dahab Associates uses the modified duration measure to present average duration.
- * All values are in US dollars.



BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

James T. Strouse
Chairman of the Board
Robert Hooper
Vice-Chairman

****SPECIAL****

Retirement Board Meeting Agenda
City Hall Conference Room 12
Thursday August 23, 2018 9:30am

Stephanie Hanker
Retirement Administrator
802-865-7097
VT Relay – dial 711

1. Agenda
2. Public Forum
3. Elect Chair, Vice-Chair and Secretary of the Board
4. Approve Minutes of July 25, 2018
5. Approve Retirement Applications
6. Ratify Refund and Rollovers
7. Performance Presentation - UBS
8. Performance Presentation – Dahab Associates
9. Discussion of Rate of Return
10. Possible Executive Session
11. Adjourn

Non-Discrimination

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at 865-7145.

Draft
July 25, 2018
Burlington Employees' Retirement Board
Special Meeting
Burlington Electric

Board Members Present:

- Ben O'Brien Via Phone
- Beth Anderson
- Robert Hooper
- Matt Dow (Via Phone) + Person 3:25pm
- Pat Robins
- David Mount 3:09pm

Others Present:

- Stephanie Hanker
- Lisa Roach
- Kim Sturtevant Via Phone
- Richard Goodwin
- Jim Strouse
- Steven Lemanski H&H

Called to order at 3:05pm

1. **Agenda:**

Request to table board elections for chair, vice chair and secretary to next meeting.

2. **Public Forum:**

No Public Present

3. **Elect Chair, Vice Chair and Secretary of the Board:**

Tabled to August

4. **Approval Minutes of 06/21/2018:**

Benjamin O'Brien moved to approve the minutes as presented. Beth Anderson 2nd. Motion carries 5:0

5. **Approval of Bills:**

Benjamin O'Brien moved to approve the presented bills. Matt Dow 2nd. Motion carries 5:0

6. Approval of Retirement Application

Beth Anderson moved to approve the applications presented. Ben O'Brien 2nd. Motion carries 5:0

7. Ratify Refund and Rollovers:

Beth Anderson moved to approve. Matt Dow 2nd. Motion carries 5:0

8. Discussion Regarding Actuarial Methods:

Steve Lemanski suggested to the Board the current use of the Open Group Method should be reconsidered to develop the annual funding policy contributions. Steve Lemanski stated the Board should consider moving to the Direct Rate Smoothing method, which employs a modified open group approach. Steve Lemanski stated the benefits of moving to the new method would capture now some of the saving the system will see as staff retire that are covered under more expensive benefit and capture new members that are hired with lesser benefits. Steve Lemanski stated the new method allows for more flexibility with assumptions and allow for updating every five years, as each experience study is completed. Steve Lemanski stated that with the proposed step down, the \$300K collar, ten year smoothing and other changes currently within and proposed for methods and assumptions, that would create a reasonably conservation and more stable method to the system over the next several years and should see growth in the funding level.

Steve Lemanski will prepare different scenarios concerning rate of return for the Board, 7 ¾ % and 7 ½% when current valuation is completed.

9. Adjourn:

Pat Robbins moved to adjourn. Matt Dow 2nd. Motion carries 6:0 Meeting adjourned 4:00pm.



BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

James T. Strouse
Chairman of the Board
Robert Hooper
Vice-Chairman

Stephanie Hanker
Retirement Administrator
802-865-7097
Dial 7-1-1 (TTY)

August 2018 Retiree Approval List

Name	Class	Type	Monthly Amount	Effective Date
Jeffrey Beerworth	A	Disability Retirement	\$3,992.65	06/26/2018
Brian Wilkinson	A	Disability Retirement	\$3,818.22	07/31/2018
Randall Bergeron	B	Service Retirement	\$1,171.92	07/11/2018
Scott Crady	A	Early Retirement	\$4,147.04	07/20/2018
Ann Bombard	B	Late Retirement	\$2,309.28	07/01/2018
Karen Downey	B	Late Retirement	\$2,949.57	06/16/2018
Douglas Murray	B	Early Retirement	\$1,079.64	08/01/2018
James Lauzon	B	Service Retirement	\$453.50	09/01/2018



BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

James T. Strouse
Chairman of the Board
Robert Hooper
Vice-Chairman

Stephanie Hanker
Retirement Administrator
802-865-7097
TTY Dial 7-1-1

TO: Retirement Board Members

FROM: Stephanie Hanker

DATE: August 23, 2018

SUBJECT: Class "A and B" Refund's

Following our usual procedure, this is to notify you that I will be ordering checks for Class "A" or Class "B" employees who have requested a refund/rollover.

Dairo Cutura a former Class B employee, took a refund of their retirement contributions in the gross amount of \$4,984.65.

Nicole Rainville a former Class B employee, took a refund of their retirement contributions in the gross amount of \$1,687.06.

John Hayes, a former Class B employee, took a refund of their retirement contributions in the gross amount of \$3,155.40.

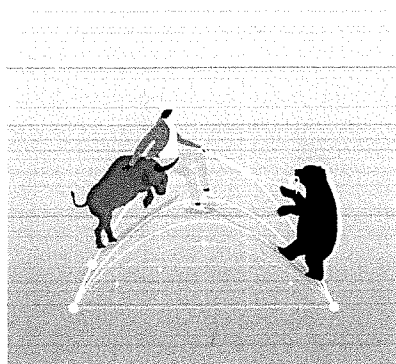
Thomas Morrell a former Class A employee, took a rollover of their retirement contributions in the gross amount of \$15,216.80.

Aster Turnbull, a former Class B employee, took a rollover of their retirement contributions in the gross amount of \$10,138.59.

Michelle Keller, a former Class B employee, took a rollover of their retirement contributions in the gross amount of \$9,308.12.

Ellen Gawarkiewicz, a former Class B employee, took a rollover of their retirement contributions in the gross amount of \$1,043.50.

Davis McCarthy, a former Class B employee, took a refund of their retirement contributions in the gross amount of \$2,636.67.



July 2018

FURTHER READING

June 2018

**Pundits Predicting Panic
in Emerging Markets**

Chris Brightman, CFA, Michele
Mazzoleni, PhD, and Jonathan
Treussard, PhD

April 2018

Yes. It's a Bubble. So What?

Rob Arnott, Bradford Cornell, PhD,
and Shane Shepherd, PhD

March 2018

When Value Goes Global

Brandon Kunz and Michele
Mazzoleni, PhD

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Where Is the Global Economy Going?

By Vitali Kalesnik, PhD, Jim Masturzo, CFA, and Michele Mazzoleni, PhD

*The three most common expressions in aviation are: Why is it doing that?
Where are we? and Oh crap! – Anonymous*

As in aviation, the questions “Why is it doing that?” and “Where are we?” also happen to be very commonly posed by economists and market watchers. For the most part, we never truly know where we are in an economic cycle until after the fact. By that time, if anything meaningful has changed, it’s usually an “Oh crap” moment for investors. Due to the delayed nature of many economic indicators, over the last few years nowcasting has become part of the investment lexicon, especially for market participants looking to get a leg up on the competition and in their own portfolios.

Key Points

1. Investors are wise to look at more granular classifications of the business cycle and not just relatively infrequent NBER recessions.
2. Yield-curve slopes and equity market returns can be used as nowcasting signals to identify turning points of the business cycle.
3. Market signals are implying a number of developed markets—notably, Japan, the United States, and Germany—are now entering the correction phase of the business cycle. Trade wars, Brexit, debt issues in Italy and Spain, and political problems in Germany and Italy can make the road ahead a lot bumpier than the road we have grown accustomed to.

In this article, we show how simple and easy-to-access market fundamentals can be used in real time to identify multiple stages in the business cycles of developed economies, going beyond the usual narrow characterization of recessions. Indeed, for the purpose of investing, we must look at all business-cycle states, not just those identified by the National Bureau of Economic Research (NBER), the entity responsible for dating US recessions, whose motivations may not align with the needs of investors. Hence, we review evidence from bond and equity markets as useful descriptors across *all* major business-cycle stages. Furthermore, we take a global perspective by applying our findings across 14 major developed markets.

Our evidence shows that bond yields and equity returns can provide clarity as to the current phase of the business cycle, especially during transient states when economies tend to turn the corner on the next phase. Specifically, the slope of the yield curve tends to peak when an economy is rebounding after a recession, and it flattens or inverts when economic growth loses momentum. We also find

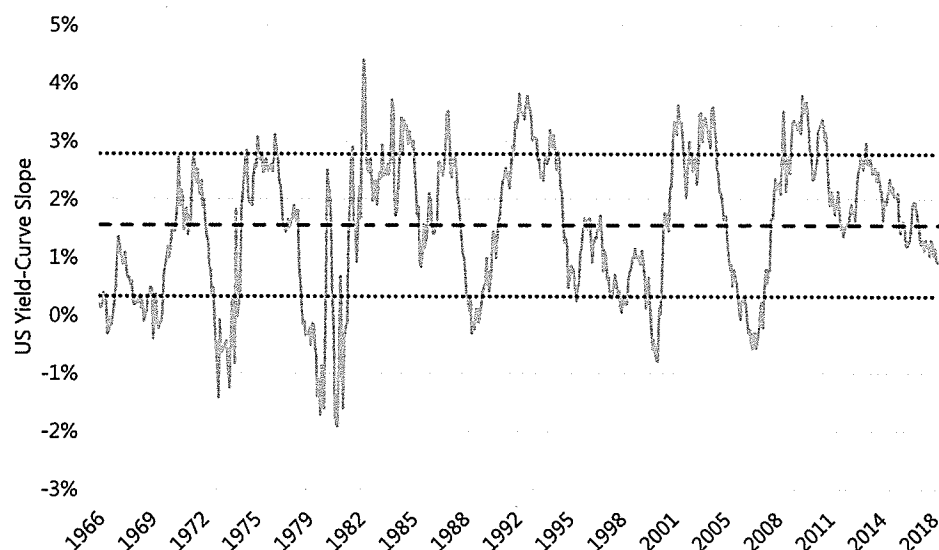
that equity returns can be used as a second predictor to further refine the identification of the business-cycle stage. These results paired with the most recent market trends imply that a number of major developed markets may be currently entering the correction phase of the business cycle, producing above-potential output, but in the midst of a slowing economy. The good news is that not all corrections turn into fully fledged recessions; the bad news is that the road ahead may be bumpier than what we have grown accustomed to over the last few years.

Throwing Our Hat in the Ring

By discussing market variables and the economy, we join a crowded field. For example, with the recent flattening of the US yield curve, the slope is back in the news, as any search of *Google Trends* will attest. As a widely accepted predictor of economic recessions, the slope is generally defined as the spread between the yields of the 10-year government benchmark and a shorter-term government benchmark, often the three-month maturity. Historically,

The US yield-curve slope is now below its long-term average, an indication that a recession may be on the way.

Slope of the US Treasury Curve, Dec 1966–Jun 2018



Source: Research Affiliates, LLC, using data from the US Department of the Treasury and Bloomberg. The blue line is the yield-curve slope (10-year yield – 3-month yield), the black dashed line is the average slope, and red dotted lines are $\pm$ one standard deviation from the average slope.

“The global economy may now be shifting from a bull economy to a correction phase.”

a downward-sloping yield curve foretold of higher unemployment, slower real GDP growth, and falling wages and industrial production, and was viewed as a signal for investors to move toward a risk-off portfolio position.

In the United States, the yield curve has been flattening for the better part of the last decade, albeit from a level of significant steepness following the global financial crisis. The most recent march downward started in early 2017 and has taken the yield-curve slope to a point below its long-term average to a level not seen in a flattening cycle since early 2005.

Moreover, the slope is not the only market-based indicator that has been raising concerns. Indeed, the recent jitters across international equity markets have heightened investors’ fears that bad economic times might be just around the corner.

Decoding the Business Cycle

In order to understand where we are in the economic cycle, we suggest a simple framework for classifying the various states of the economy over a full business cycle.

In the United States, an NBER-classified recession is a relatively narrow set of events in which a contraction is observed across a wide array of indicators. Since 1953, according to the NBER, the United States has been in recession only 14% of the time; since 1990, this has fallen to 10%. Arguably, a more granular framework than a binary “in” or “out of” recession could be a more valuable tool for investors.

In order to define a set of business-cycle states, we intersect two output-based metrics. The first metric is the well-

known output gap, which measures whether the level of production is above or below its estimated potential level, based on data from the OECD (Organisation for Economic Co-operation and Development). We then combine this output-gap data with country-specific slowdowns and expansionary phases as measured by the Federal Reserve Bank of St. Louis (available in the FRED database). These phases indicate the momentum, or speed, at which the economy is running. The intersection of these two measures allows us to classify four stages of the business cycle.

Four Business-Cycle States

We name these four interaction states as follows: bull economy, correction, bear economy, and rebound. In a bear economy, for instance, the output level is below its potential and its growth rate is decelerating, which produces a double whammy! Arguably, the global economy may now be shifting from a bull economy to a correction phase, as suggested by current volatile market conditions.

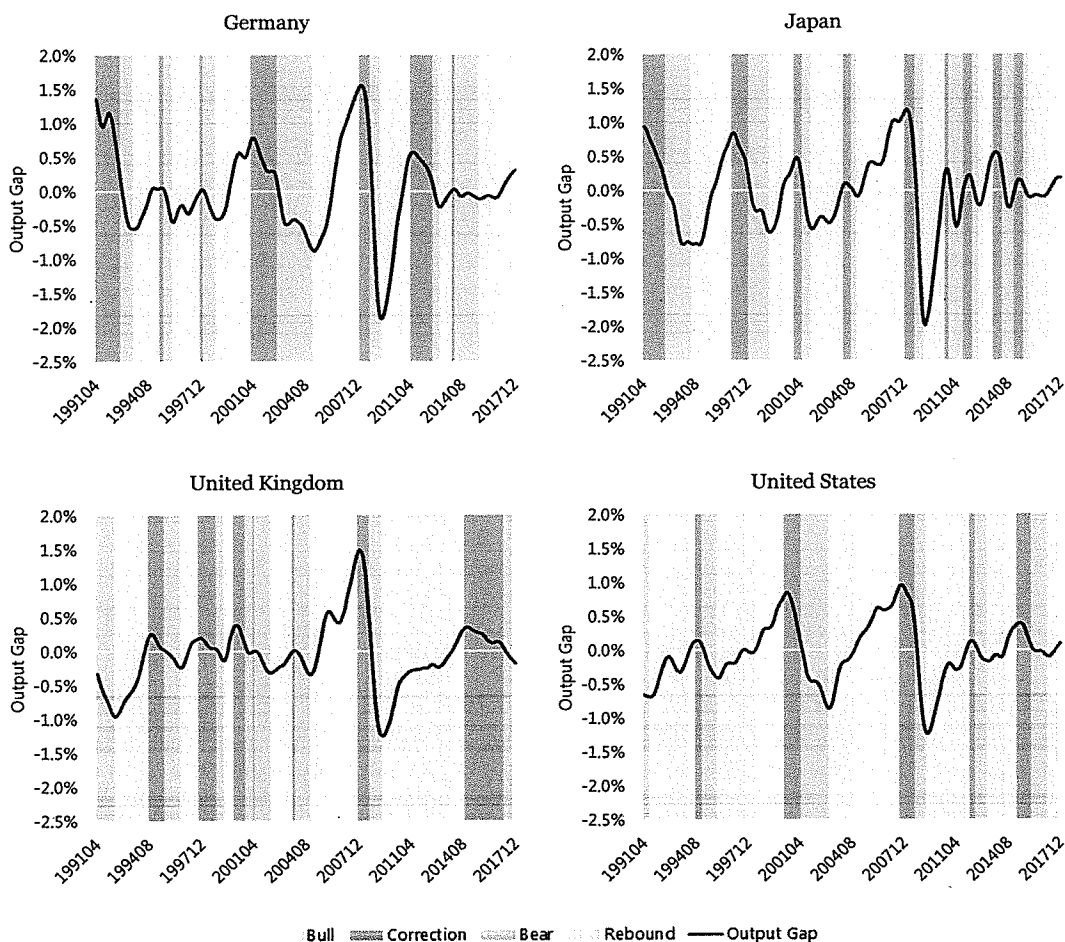
Interaction (Business-Cycle) State	Economic Potential (Output Gap)	Economic Momentum (Expansion/Slowdown)
Bull Economy	Above	Accelerating
Correction	Above	Slowing
Bear Economy	Below	Slowing
Rebound	Below	Accelerating

In the United States, since 1966 each of these economic states has lasted an average of about 12 months, with recoveries lasting slightly longer at 15 months. Said another way, on average, a full business cycle lasts between four and five years. Looking at the other major developed markets of Germany, Japan, and the United Kingdom, we see the same picture, although data availability means our look-back period is more limited.

Using these economic variables as the basis of a business-cycle framework results in business-cycle states that are easily identifiable and reproduceable, not to mention familiar to most investors; however, we note a few catches. Both the output gap and the expansion/slowdown measure are not known in real time. Additionally, the four economic stages are the byproduct of a statistical filter, which uses

All four business-cycle states, not just those defined by the NBER, are helpful guides for investors as they navigate the markets.

Business-Cycle States: Germany, Japan, United Kingdom, and United States, Apr 1991–Dec 2017



Source: Research Affiliates, LLC, using data from the Federal Reserve Bank of St. Louis (FRED).

forward-looking information to determine historic peaks and troughs in the economy. Therefore, we need a different go-forward mechanism to identify the present economic state.

Nowcasting with the Yield-Curve Slope

As we have already noted, the slope of the yield curve has long been used as a predictor of recessions.¹ In particular, the slope of the yield curve usually becomes flat or inverted ahead of an economic recession. Possible reasons for this

include 1) monetary tightening by central banks that may precede a slowdown in economic activity, and 2) a change in investors' long-term interest rate expectations and/or required compensation for holding duration risk.

Turning to our four-state framework, we can see that the slope—computed as the spread between the 10-year and three-month government benchmark yields—shows a consistent pattern across a set of 14 developed markets over the period April 1991 through December 2017. First, we calculate the slope at the end of each month for each country and remove the country average from each obser-

vation; in this way, we are able to isolate deviations from the norm at the country level. We then categorize each month into one of the four business-cycle states of bull economy, correction, bear economy, and rebound.

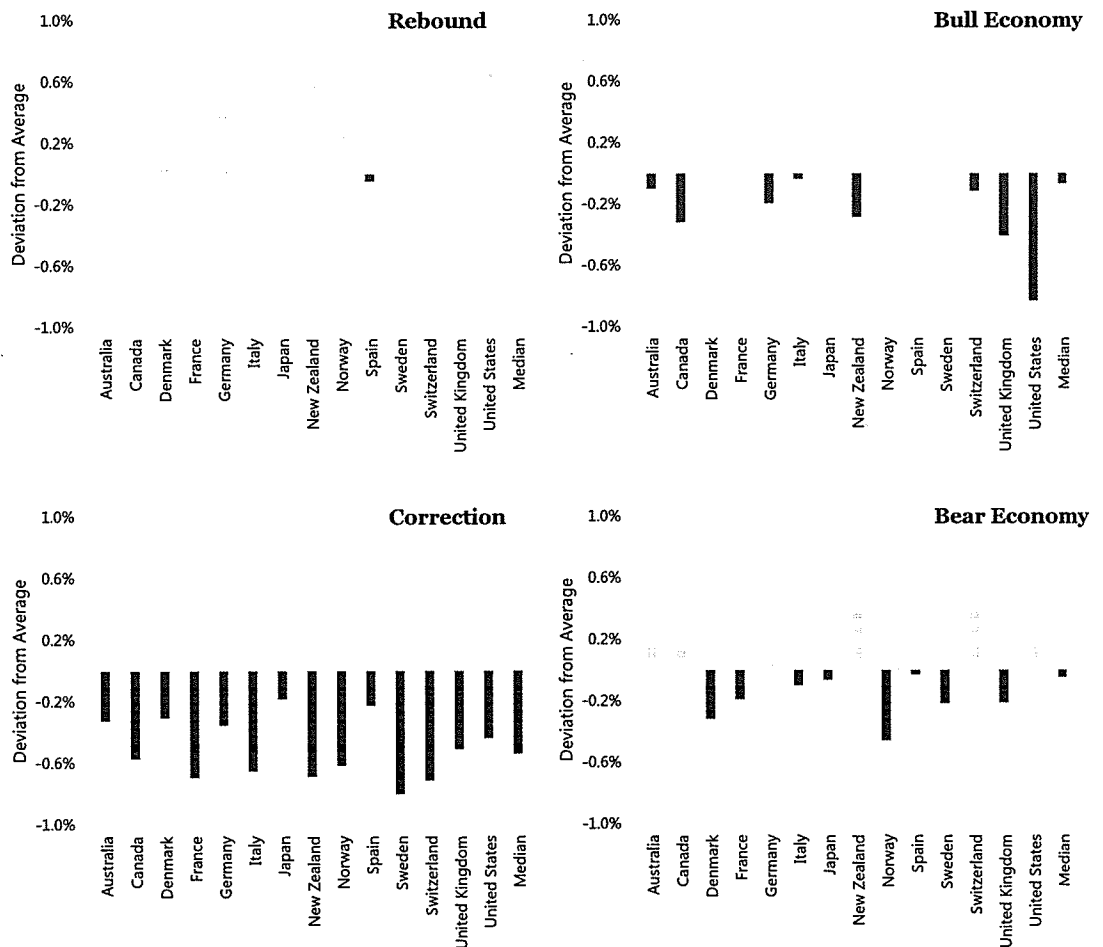
The evidence shows a consistent association between the slope and two of the business-cycle stages—correction and rebound—across our full set of 14 developed economies. In contrast, the evidence is mixed and inconsistent across countries for the bull and bear economic states. Addition-

ally, the magnitude of the deviation in the yield-curve slope from the average over the sample period is larger in both the correction and rebound states.

In simple terms, our international evidence suggests that the slope of the yield curve is the steepest when the economy is rebounding after tough times, and is close to flat or even inverted when the economy is entering a period of subdued growth following exuberant times. The key insight is that the yield curve is a richer predictor of more than

Across these 14 developed economies, we find a consistent association between the yield-curve slope and the business-cycle stages of correction and rebound.

Yield-Curve Slope Categorized by Business-Cycle State, Apr 1991–Dec 2017



Source: Research Affiliates, LLC, based on data from Bloomberg.

“The yield curve is a richer predictor of more than just recessions.”

just recessions. First, not all correction phases eventually result in a recession, yet a flattening of the curve should indicate, at a minimum, a loss of economic momentum. Second, macro rebounds can be detected by above-average slope levels.

Diving a bit deeper, the United States offers a longer data sample to further validate the intuition gained from the international evidence. From 1966, the average slope of the US yield curve has been about 1.5%. In the bull and bear economic states, the slope tends to be similar to the average at 1.4% and 1.7%, respectively. In the correction and rebound phases, however, we see noteworthy deviations from the average with slopes of 0.6% and 2.2%, respectively.

To further drive home this point, we turn to a visual chart of the yield-curve slope, overlaying our correction and rebound phases on the time series over the period April 1953 to December 2017. Although not perfect in all periods, we can see that, historically, rebounds have often coincided with a steep yield curve, while corrections have corresponded to a flat or inverted yield curve. All considered, the evidence suggests that the slope is a very useful indicator of the turning points in the business cycle.

Nowcasting with Stock Market Returns

To validate and extend our analysis, we now turn our attention to equity market returns. Indeed, changes in equity prices are useful real-time indicators because they reflect changes in investors' expectations about future cash flows as well as their appetite for holding equity risk (itself a function of duration and credit risks).

Unlike the slope of the yield curve, which is an observable yield spread in a single period, we must choose a horizon in order to measure return. Because the average length of each business-cycle stage is about 12 months, it makes sense to choose a shorter period than 12 months to decipher cycle turning points. The more granular the period, however, the more noise is introduced into the process. As a happy medium, we use a six-month return.

Following a similar process as before, we measure the difference between each nation's six-month trailing return and the full-sample average of contemporaneous equity market returns over the period April 1991 through December 2017. The results differ slightly from the slope analysis. Here we see that equity returns associate with a binary breakdown of the economy: up during rebound and bull states, and down during correction and bear states (although the magnitudes are larger for rebounds and corrections). This is consistent with the evidence that equity returns are good identifiers of expansions and slowdowns in the growth rate of the economy. More generally, this evidence confirms that the level of the slope and of equity returns appear to signal a similar direction for the economy.

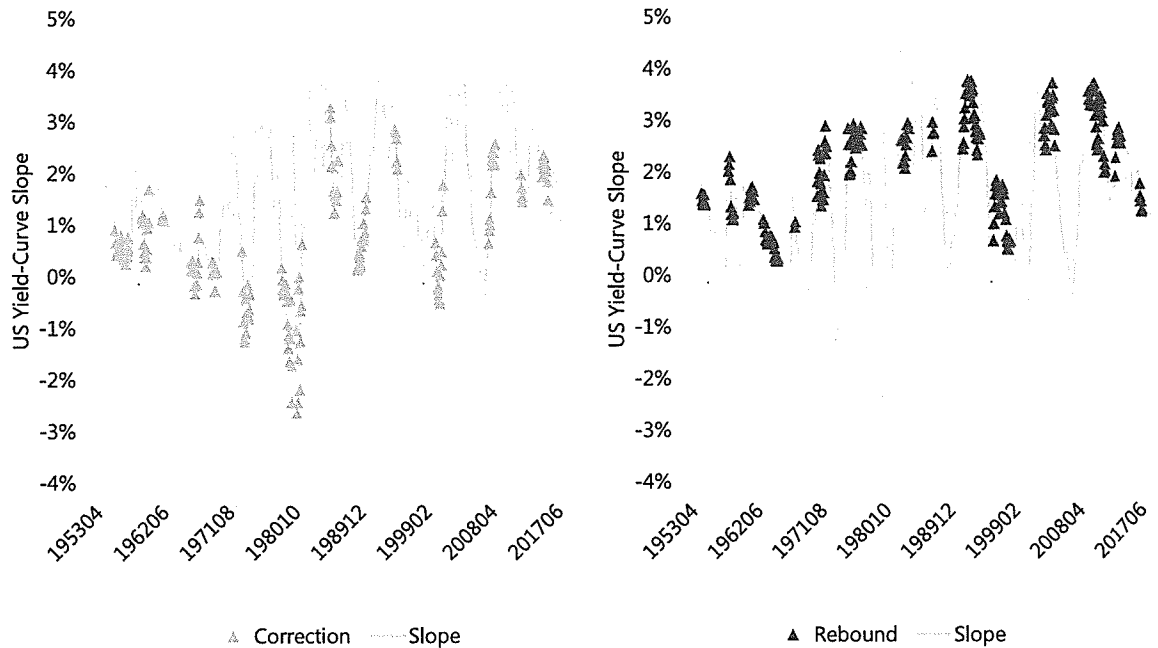
Average US Yield-Curve Slope in Each Business-Cycle State, Jan 1966–Dec 2017

Bull	Correction
1.4%	0.6%
Bear	Rebound
1.7%	2.2%

Source: Research Affiliates, LLC, using data from the US Department of the Treasury and Bloomberg. The entire sample average is 1.49%.

Historically, the yield-curve slope has been a very useful indicator of turning points in the business cycle.

US Yield-Curve Slope and Correction/Rebound States, Apr 1953–Dec 2017



Source: Research Affiliates, LLC, using data from the US Treasury and Bloomberg. The blue line in each graph represents the yield-curve slope.

The union of the slope of the yield curve and equity returns constitutes a happy marriage. By using these two indicators, we may be better able to filter false positives that could occur if we were to use only the slope. On the one hand, a below-average slope matched with negative equity returns is suggestive of a correction phase. On the other hand, an above-average slope matched with positive equity returns is a signal of entering rebound territory.

“The slope and equity returns appear to signal a similar direction for the economy.”

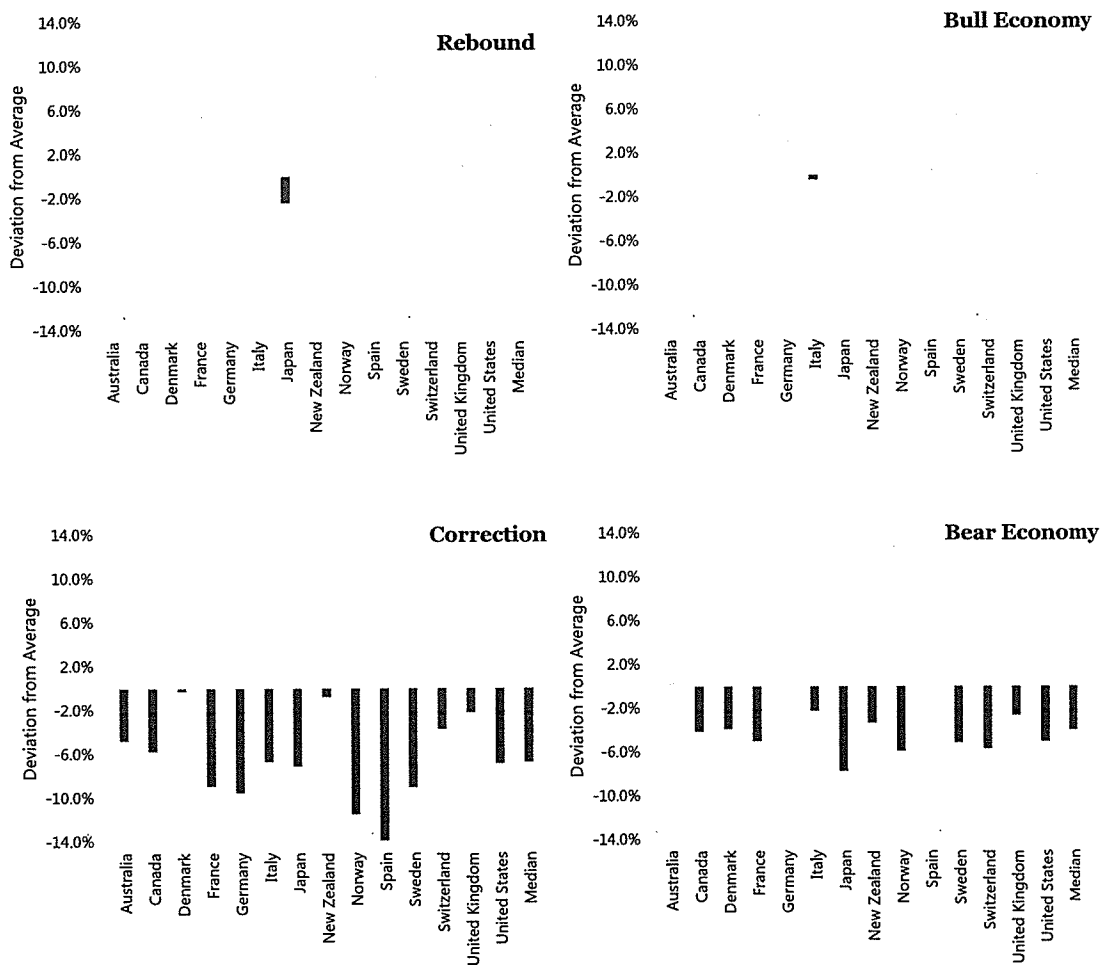
The keen observer will have noticed a bit of an inconsistency in our two market metrics. For bonds, we use a forward-looking, income-based, metric, whereas for equities we use a historical, return-based metric. This inconsistency is intentional, and we believe is a benefit of our approach because it incorporates two diverse perspectives as opposed to simply using two yield metrics or two return metrics.

What Does This Tell Us About Today?

Our findings paired with the most recent quarter-end market data imply that a number of major developed markets are currently entering correction territory. We create a scatterplot of the slope (x-axis) and the equity return (y-axis) for each of the developed markets in our

Equity returns can identify expansions and slowdowns in the economy.

Equity Market Six-Month Trailing Returns, Apr 1991–Dec 2017



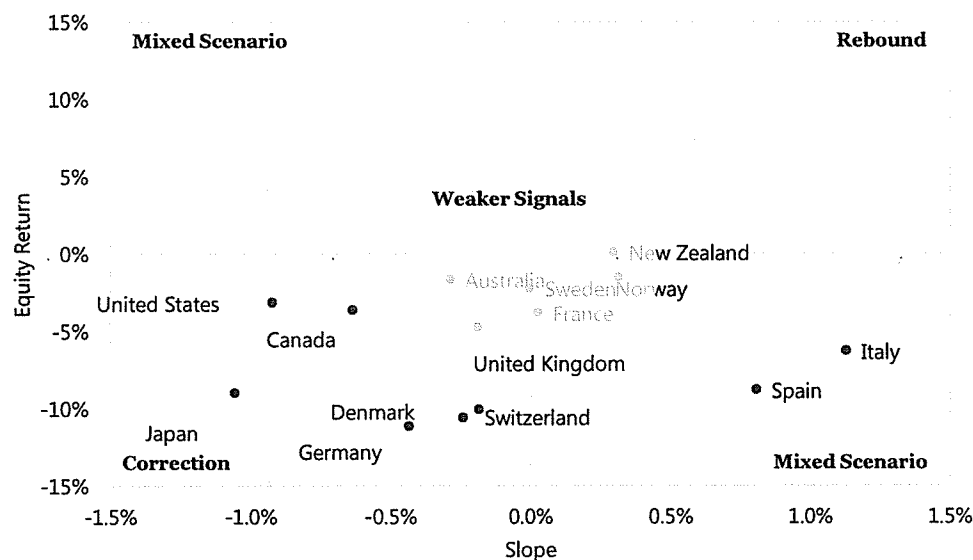
Source: Research Affiliates, LLC, using data from MSCI and Bloomberg.

sample set as of June 30, 2018. We divide the scatterplot into four quadrants consistent with the four business-cycle stages. The lower-left and upper-right quadrants, where the slope and return agree, are the correction and rebound states, respectively. In the other two quadrants, the signals are mixed and we cannot make a prediction. Countries near the origin have weak signals and few conclusions should be drawn about impending changes in their business cycles.

As we have shown throughout this article, these signals work well across developed countries and are useful in categorizing similarities in the business-cycle stage of groups of countries. Currently, a number of countries have very weak signals, but a few cluster in correction territory.² In particular, for Japan, the United States, Canada, and Germany, the situation is starting to look ominous. We will be watching closely to see if these trends continue.³

The combined signals of slope and equity returns suggest the United States, Canada, Japan, and Germany are very close to economic corrections.

Slope and Equity Return Deviations from Averages, as of June 30, 2018



Source: Research Affiliates, LLC.

Of course, investors should continue to monitor events beyond those that can easily be extrapolated from asset returns. The particular factors to be mindful of, those which can push an economy from a simple correct to a recession, include:

- **Trade wars** have the biggest potential to hurt global GDP. Global growth over recent decades has been fueled by international trade. Tariffs and barriers will not just put a stop to growth, but are also likely to reduce global GDP.
- **Brexit** in the United Kingdom has the potential to disrupt the international flows of capital and trade, at least in Europe.
- **Italy's debt** situation has been met with a new coalition pushing for unorthodox policies, which may further strain the nation's financial situation. Financial and economic distress in an economy of Italy's size can easily translate into a systemic eurozone crisis.
- Growing **political disagreement** across the countries of Europe on a range of policy matters could be detrimental to the long-run prospects of these nations.

Endnotes

1. The yield curve, as one of the strongest forecasters of economic activity, has been documented and studied quite extensively by Kessel (1965), Harvey (1988), Harvey (1989), Estrella and Hardouvelis (1991), Chauvet and Potter (2005), and Rudebusch and Williams (2009).
2. Italy and Spain should be interpreted carefully, because their bond markets may reflect default risk as well.
3. We use these signals to identify the stage of the economic business cycle and not to forecast asset returns. The latter effort is the subject of many articles, both academic and practitioner, but is not our focus here.

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Estrella, Arturo, and Gikas A. Hardouvelis. 1991. "The Term Structure as a Predictor of Real Economic Activity." *Journal of Finance*, vol. 46, no. 2 (June): 555-576.

Rudebusch, Glenn, and John Williams. 2009. "Forecasting Recessions: The Puzzle of the Enduring Power of the Yield Curve." *Journal of Business and Economic Statistics*, vol. 27, no. 4: 492-503.

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Vermont's ballooning pension debt threatens state's financial future

By **Elizabeth Hewitt**

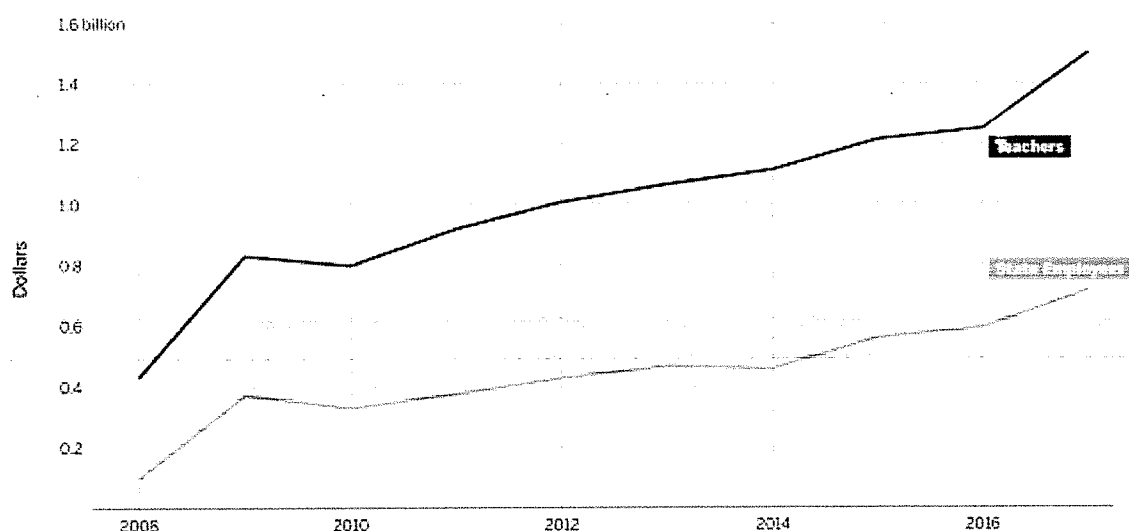
Aug 1 2018

The gap between what Vermont owes current and future retired state employees and teachers, and what assets it has to pay them, has ballooned in the last decade, threatening not only the future of the state's retirement plans, but also the state's credit rating and other markers of its financial standing. The dramatic increase in unfunded obligations in recent years is the upshot of flaws in the system that some say can be corrected only by making major changes in the state's retirement benefits plans.

But State Treasurer Beth Pearce says the state is in the process of taking corrective action, which will right the ship eventually — though she concedes it will take time.

The funding gap for state pension programs has multiplied for both teachers and state employees.

Vermont pensions unfunded liability



© 2018

SOURCE: Vermont State Treasurer's Office

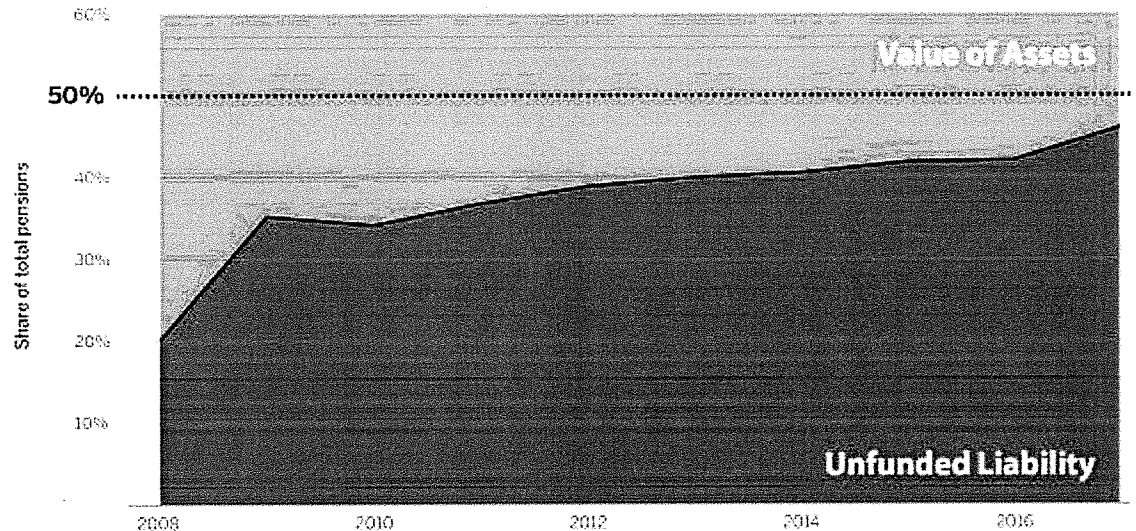
Unfunded obligations in the teachers' pension program, which was less than \$400 million in 2008, had grown to \$1.5 billion by 2017. For state employees, the unfunded portion of the pension program increased from \$87 million in 2008 to \$717 million in 2017.

Vermont is not the only state to see the assets of its public pension programs vastly outstripped by looming liabilities.

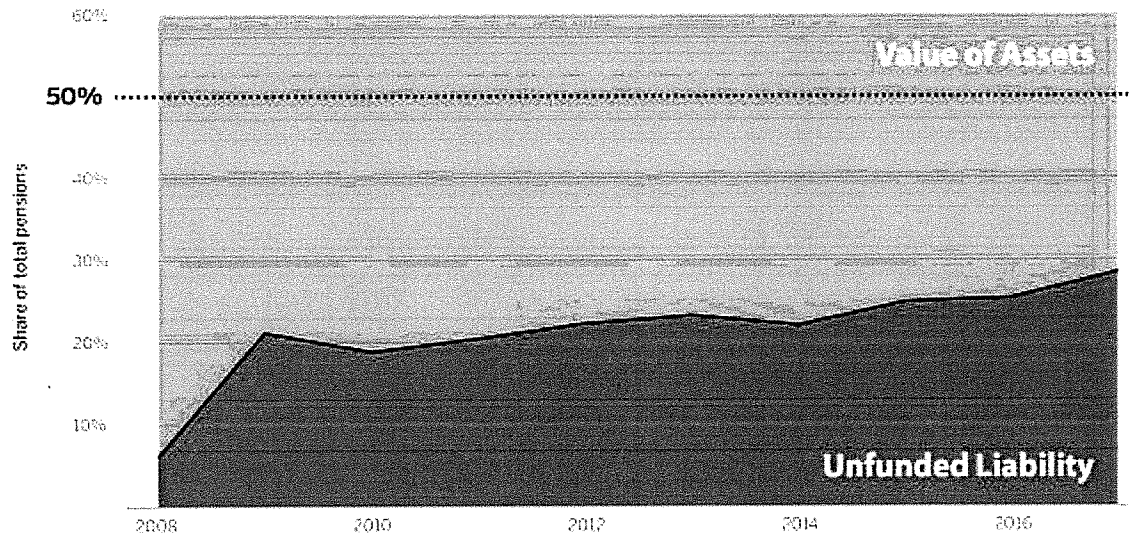
A report released in April by Pew Charitable Trusts found that state pension funds in the U.S. collectively have a \$1.4 trillion deficit.

The report, an examination of state pension funding in 2016, the most recent year for which data was available, says “Many state retirement systems are on an unsustainable course, coming up short on their investment targets and having failed to set aside enough money to fund the pension promises made to public employees.”

Teachers' pension funding



State employees' pension funding



(C) 2016

SOURCE: vermonttreasury.gov

Vermont's unfunded pension liability has not seen as dramatic an increase as many other states, but Joe Nation, a Stanford University professor who helped create the [Pension Tracker tool](#), characterized Vermont's statistics as "a little bit of good news."

"It's kind of like being on the Titanic and saying, but yeah, I have a first class ticket," he said.

Nation said part of the problem has been that the public pension system in the United States has tended to operate according to a different set of standards from other countries. Pension systems in the U.S., he said, assume a "very high rate" of return on investments, a uniquely American optimism that he said reminded him of a classic Clint Eastwood line: "You gotta ask yourself one question, do I feel lucky? Well do ya, punk?"

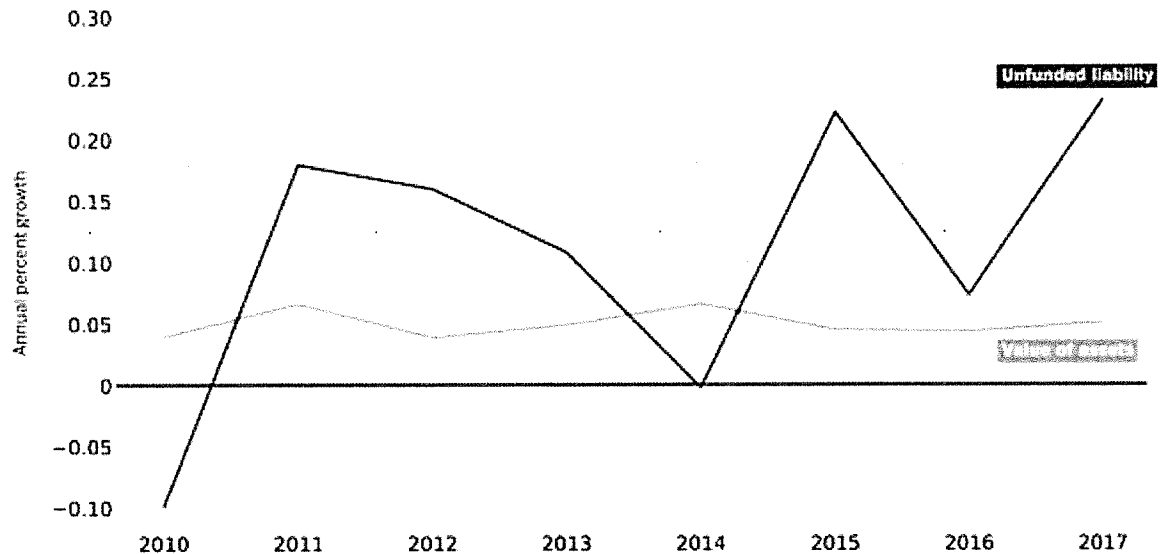
The real question, he says, is whether the projected rate of return is realistic. And if it isn't, "You can get into trouble very quickly," he said. "It doesn't take much time for a system to become terribly underfunded."

Many states, including Vermont, have tended to project rates of return for their pension systems at more than 7 percent, Nation said, while most financial experts would call closer to 6 percent more realistic.

David Coates, a retired managing partner at KPMG-Vermont and a member of the 2010 state commission tasked with tackling public retiree health benefit plans, says over-optimism in predicting rates of return is one factor in the current state of the state's pension funds.

In the event that investments fail to live up to expectations, it is the state's obligation to make up for the shortfall with higher annual contributions out of the general fund, Coates said. This can lead to squeezing out other items in the state's budget.

State employees' pension growing liability



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SOURCE: vermontcenterforpolicy.org

Teachers' pension growing liability



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SOURCE: vermontcenterforpolicy.org

Coates' conclusion has been that the state needs to overhaul its public retirement system, and if it doesn't, it risks damaging the state's bond rating and its fiscal health.

"We need to make changes to the system, period," Coates said.

Coates has suggested the state consider switching to a retirement system more in line with what is offered in the private sector — a defined contribution plan, like a 401(k).

He has advocated for keeping in place pension plans for employees currently in the system. However, new employees could be brought into a new defined contribution plan system, eventually phasing out the pension system.

Mark Crow, a director of the Vermont Business Roundtable, agreed with Coates that rosy growth projections for pension fund investments — projections that failed to materialize — has been a major factor in the dramatic increase in the amount the state has had to draw from the general fund to support its pension obligations.

Like Coates, Crow advocates following the private sector's approach to retirement; defined contribution plans, he said, would "stop the hemorrhaging."

The first challenge, Crow said, is to broaden awareness of the problems with the current system.

"At this point we're just trying to get people to listen and to understand what the issue is," Crow said.

State Treasurer Pearce said the present state of pension funding in Vermont is at least in part a result of chronic underfunding as far back as the 1990s.



State Treasurer Beth Pearce discusses the state's financial literacy working group at a press conference last year. Photo by Mike Dougherty/VTDigger

Since 2007, both the legislative and executive branches have been committed to fully funding the state's annual contribution to the pension funds, she said.

The state is making progress, she said, though she acknowledges there is a long way to go.

“You’re not going to turn these things around on a dime,” she said.

The state also reduced its projected rate of return on investments this year, from 7.95 percent to 7.5 percent.

Pearce said the state evaluates its portfolio of investments on a regular basis, and it always on the lookout for ways to secure better investment results.

Pearce said she has been looking into modifying employee retirement plans according to the private sector model, but a study conducted last year found that changing to a defined contribution plan likely would cost the state more, and would not address the unfunded liability issues.

“The bottom line for me is there are no quick fixes,” she said.

Meanwhile Coates said he is equally concerned about another state retirement obligation, which is retired teachers health care benefits.

Funding for health care for retired teachers was separated from the pension fund some years ago, Coates said, and he worries that account is even less well-funded than the other pension obligations.

Draft
August 23, 2018
Burlington Employees' Retirement Board
Special Meeting
City Hal, Conference Room 12

Board Members Present:

- Ben O'Brien Via Phone
- Beth Anderson
- Robert Hooper
- Matt Dow (Via Phone) Out 9:55am
- Pat Robins
- David Mount
- Munir Kasti

Others Present:

- Stephanie Harker
- Kim Sturtevant
- Barry Bryant – Dahab Associates
- Julie Pierro – UBS
- Jim Strouse

Called to order at 3:05pm

1. **Agenda:**

No changes to presented agenda

2. **Public Forum:**

No Public Present

3. **Elect Chair, Vice Chair and Secretary of the Board:**

Note Secretary to the board is appointed not elected.

Ben O'Brien moved to nominate Robert Hooper as Chair. Matt Dow 2nd the nomination. Nominations closed, vote of 6:0 in favor

Ben O'Brien moved to nominate Munir Kasti as Chair. Beth Anderson 2nd the nomination. Nominations closed, vote of 6:0 in favor

Beth Anderson stated the secretary should be appointment of the position of Retirement Administrator. Bob Hooper stated an appointment can happen as a new administrator is in the position. Bob Hooper stated the appointment of the Secretary will be deferred until a new Retirement Administrator is hired.

4. Approval Minutes of July 25, 2018:

David Mount moved to approve the minutes as presented. Patrick Robins 2nd. Motion carries 6:0

5. Approval of Retirement Application

Munir Kasti moved to approve the applications presented. Patrick Robins 2nd. Motion carries 6:0

6. Ratify Refund and Rollovers:

Beth Anderson moved to approve. Patrick Robins 2nd. Motion carries 6:0

7. Performance Presentation – Dahab Associates:

Barry Bryant presented performance of the fund as of June 30, 2018. Barry Bryant stated on June 30, 2018, the City of Burlington Employees Retirement System's portfolio was valued at \$191,480,598, representing an increase of \$1,372,672 from the March quarter's ending value of \$190,107,926. Barry Bryant stated last quarter the Fund posed withdrawals totaling \$1,209,164, which offset the portfolio's net investment return of \$2,581,836. Barry Bryant stated the second quarter the portfolio returned 1.4%, which was equal to the Burlington Policy Index's return of 1.4% and ranked in the 42nd percentile of the Public Fund universe. Barry Bryant stated over the trailing year the portfolio returned 9.8%, which was equal to the benchmark's 9.8% return, ranking in the 19th percentile. Barry Bryant stated since December 2001 the portfolio returned 5.8% annualized.

Barry Bryant stated he would like Julie Pierro present the UBS performance then return to him to speak about other investment information

8. Performance Presentation – UBS:

Julie Pierro presented to the Board an update on the Trumbull Fund

9. Discussion of Rate of Return:

Bob Hooper stated this agenda is tabled. Item to be on next meeting agenda

10. Possible Executive Session:

Beth Anderson requested to go into executive session to discuss potential litigation and attorney-client communication regarding a former employee's benefit calculation.

Beth Anderson moved to find that premature general public knowledge of a discussion of potential litigation and attorney client communications regarding a former employee's benefit calculation would clearly place the City at a substantial disadvantage because it risks disclosing its legal strategy if discussed in public. David Mount 2nd. Motion carries 5:0

Beth Anderson stated based upon finding of substantial disadvantage, I move that we enter into executive session to discuss the potential litigation and receive attorney-client communications regarding a form employee's benefit calculation under the provision of Title 1, Section 313(a)(1)(E) and (F). I request the presence of Assistant City Attorney Kim Sturtevant and Retirement Administrator Stephanie Hanker during the Executive session. Patrick Robins 2nd. Motion carries 5:0
Board enters executive session 10:15am.
Board exits executive session 10:26am.

11. Adjourn:

Barry Bryant stated he will return October 18, 2018
Munir Kasti moved to adjourn. David Mount 2nd. Motion carries 5:0
Meeting adjourned 11:05am

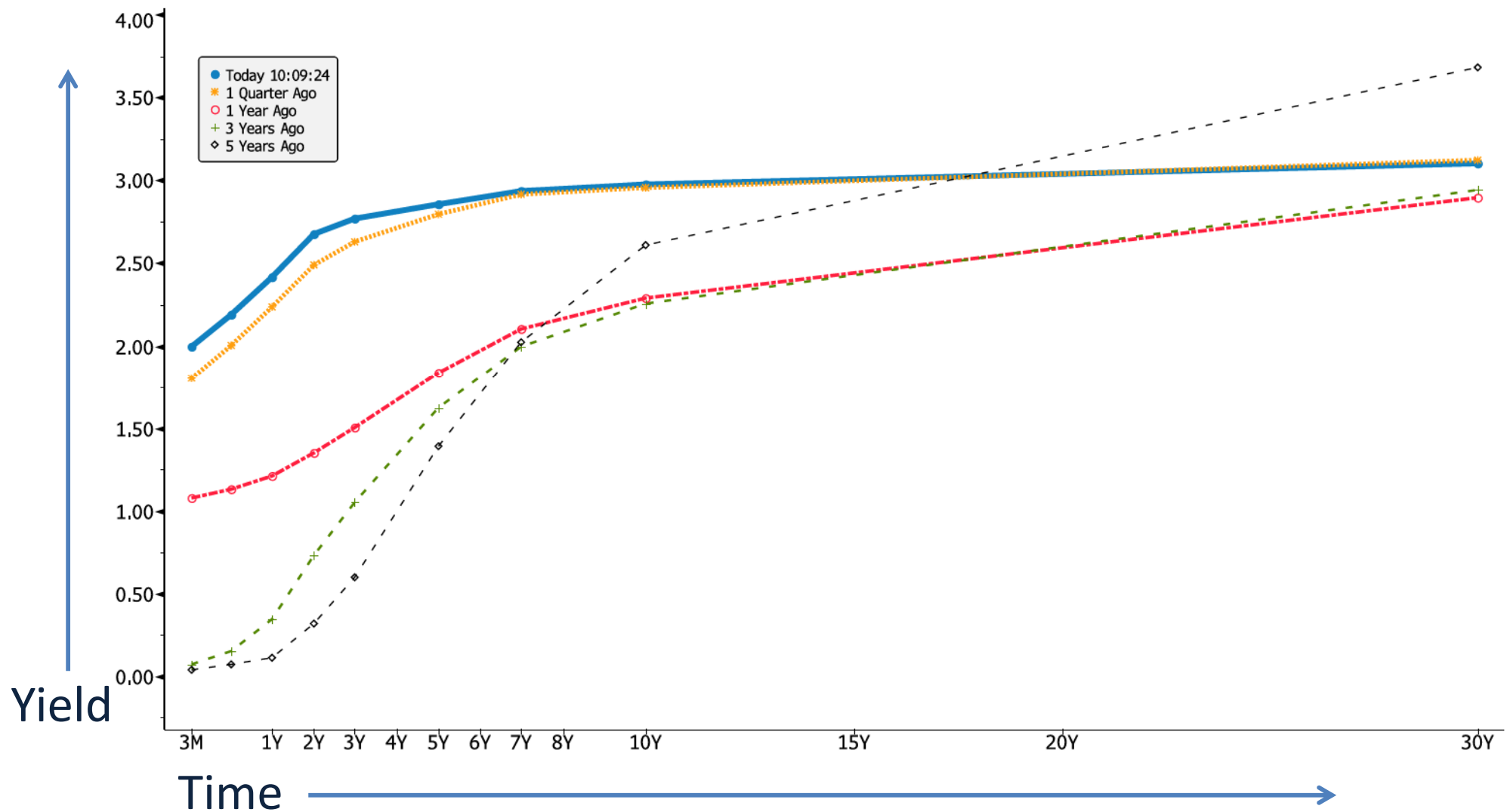
Yield Curve Inversion

Barry Bryant, CFA

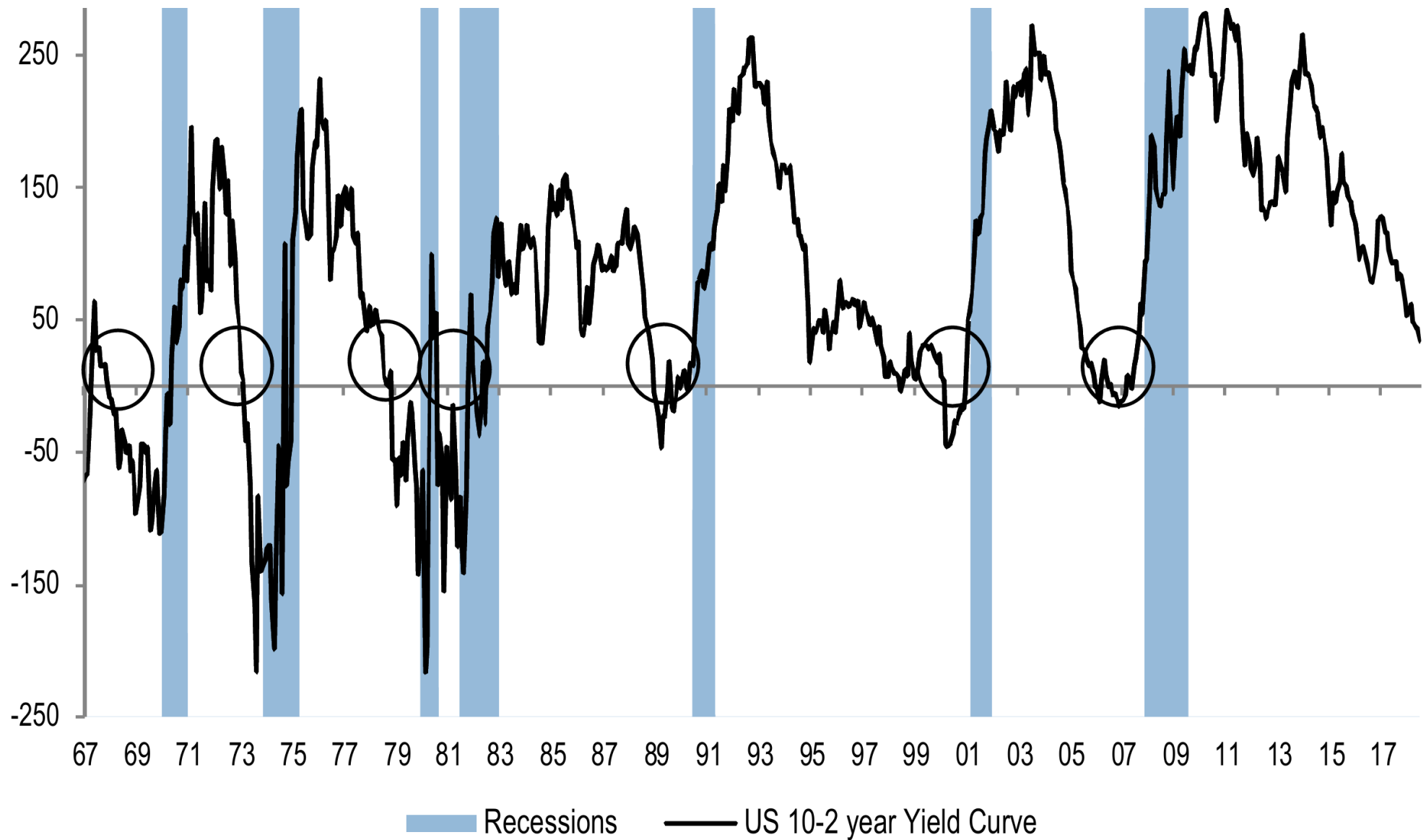
DAHAB ASSOCIATES
Florida Massachusetts New York Pennsylvania Texas



Yield Curve



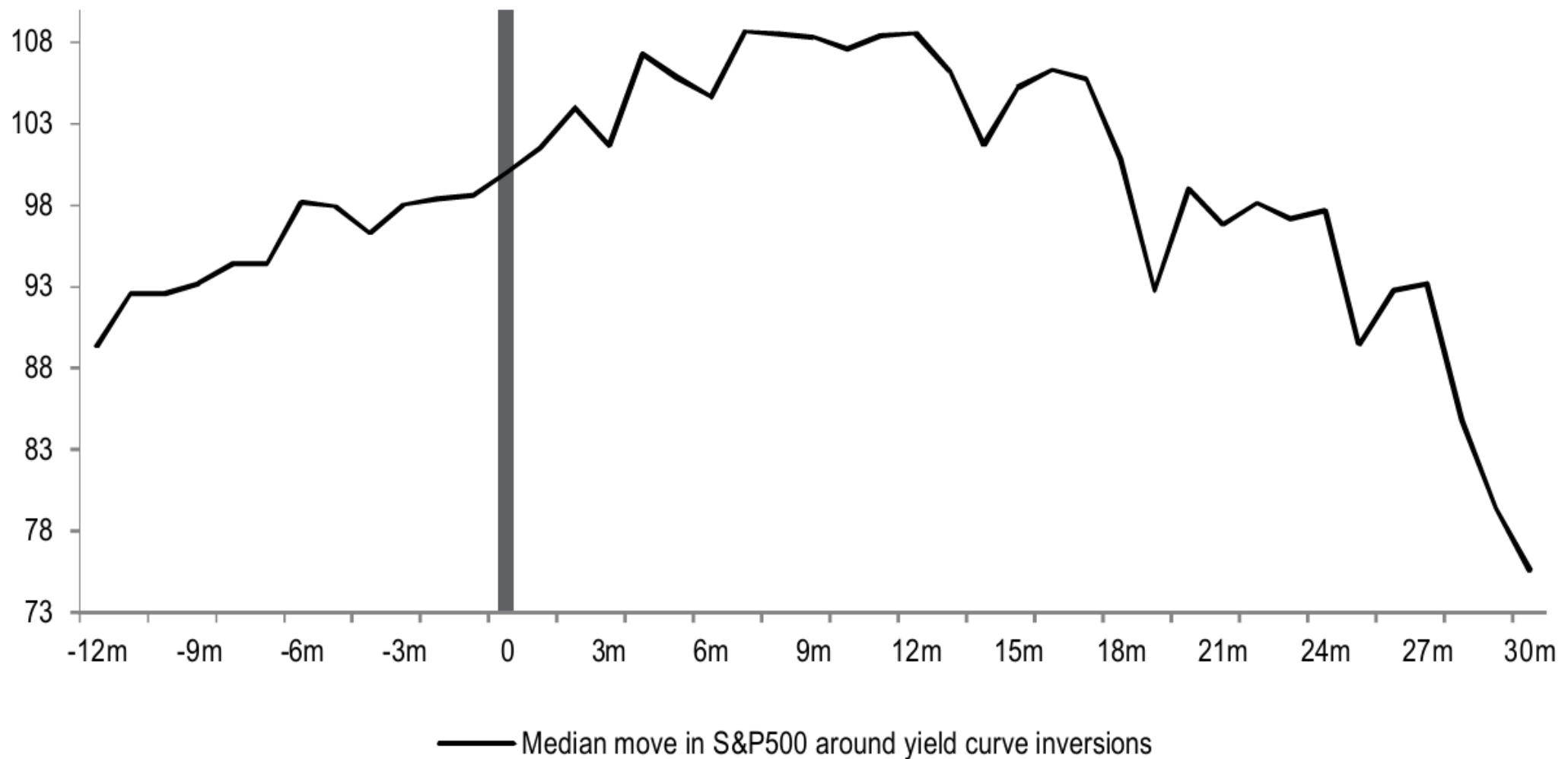
U.S. 10 Year – 2 Year Yield Curve



Yield Curve Inversion, S&P 500

Yield Curve inversion date	S&P500 peak date	Recession start date	# of months between yield curve inversion & SPX peak	# of months between SPX peak & recession	# of months between yield curve inversion & recession
Dec-67	Nov-68	Jan-70	11	14	25
Mar-73	Oct-73	Dec-73	7	2	9
Nov-78	Feb-80	Jan-80	15	0	14
Aug-80	Nov-80	Jul-81	3	8	11
Dec-88	Jul-90	Jul-90	19	1	19
Mar-00	Aug-00	Mar-01	5	7	12
Aug-06	Oct-07	Dec-07	13	3	16
Median			11	3	14
Average			10	5	15

S&P 500 Move Around Inversion



Ranks & Returns From Start of Recession

1 Year Forward

Asset Class	Index	1990-1991	2000-2001	2008-2009
Domestic Equity	S&P 500	12.76 (1)	-16.51 (7)	14.30 (3)
International Equity	MSCI ACWI ex. US	-6.97 (6)	-10.68 (6)	10.87 (4)
Real Estate	NCREIF ODCE	-2.81 (5)	3.89 (5)	-5.91 (7)
Gold	S&P GSCI Gold Index	-7.21 (7)	13.49 (1)	33.25 (1)
Long Term Fixed Income	Bloomberg Barclays Long Term Gov/Credit	9.56 (4)	12.65 (2)	16.49 (2)
Aggregate Fixed Income	Bloomberg Barclays US Capital Aggregate	10.70 (2)	7.34 (3)	9.50 (5)
Short Term Fixed Income	Bloomberg Barclays 1-3 Year Gov/Credit	9.92 (3)	5.19 (4)	3.77 (6)

Ranks & Returns From Start of Recession

3 Years Forward

Asset Class	Index	1990-1993	2000-2003	2008-2011
Domestic Equity	S&P 500	11.41 (3)	2.74 (7)	16.36 (2)
International Equity	MSCI ACWI ex. US	3.48 (5)	12.46 (2)	7.43 (5)
Real Estate	NCREIF ODCE	-4.53 (7)	8.10 (4)	8.40 (4)
Gold	S&P GSCI Gold Index	-1.06 (6)	16.12 (1)	19.09 (1)
Long Term Fixed Income	Bloomberg Barclays Long Term Gov/Credit	15.01 (1)	8.88 (3)	14.41 (3)
Aggregate Fixed Income	Bloomberg Barclays US Capital Aggregate	11.86 (2)	5.65 (5)	6.95 (6)
Short Term Fixed Income	Bloomberg Barclays 1-3 Year Gov/Credit	5.68 (4)	3.38 (6)	2.26 (7)

Ranks & Returns From Start of Recession

5 Years Forward

Asset Class	Index	1990-1995	2000-2005	2008-2013
Domestic Equity	S&P 500	12.90 (1)	6.08 (5)	18.81 (1)
International Equity	MSCI ACWI ex. US	6.36 (4)	16.46 (1)	11.59 (2)
Real Estate	NCREIF ODCE	-0.46 (5)	12.17 (3)	10.01 (3)
Gold	S&P GSCI Gold Index	-3.56 (6)	15.39 (2)	6.60 (5)
Long Term Fixed Income	Bloomberg Barclays Long Term Gov/Credit	11.66 (2)	7.15 (4)	9.60 (4)
Aggregate Fixed Income	Bloomberg Barclays US Capital Aggregate	9.06 (3)	5.05 (6)	4.87 (6)
Short Term Fixed Income	Bloomberg Barclays 1-3 Year Gov/Credit	7.13 (4)	3.27 (7)	1.73 (7)

Where Are We Today

USGG2YR Index (US Generic Govt 2 Year Yield)
USGG5YR Index (US Generic Govt 5 Year Yield)
USGG10YR Index (US Generic Govt 10 Year Yield)
USGG30YR Index (US Generic Govt 30 Year Yield)

