

## AGENDA

### INVESTMENT COMMITTEE MEETING OF THE EL CAMINO HOSPITAL BOARD

**Monday, August 12, 2019 – 6:00pm**

El Camino Hospital | Conference Room A (ground floor)  
2500 Grant Road, Mountain View, CA 94040

**PURPOSE:** To develop and recommend to the El Camino Hospital Board of Directors the organization's investment policies, maintain current knowledge of the management and investment of the invested funds of the hospital and its pension plan(s), provide guidance to management in its investment management role, and provide oversight of the allocation of the investment assets.

AGENDA ITEM	PRESENTED BY		ESTIMATED TIMES
<b>1. CALL TO ORDER / ROLL CALL</b>	Gary Kalbach, Chair		<b>6:00 – 6:02 pm</b>
<b>2. POTENTIAL CONFLICT OF INTEREST DISCLOSURES</b>	Gary Kalbach, Chair		<b>6:02 – 6:03</b>
<b>3. PUBLIC COMMUNICATION</b> a. Oral Comments <i>This opportunity is provided for persons in the audience to make a brief statement, not to exceed 3 minutes on issues or concerns not covered by the agenda.</i> b. Written Correspondence	Gary Kalbach, Chair	<i>public comment</i>	<b>information 6:03 – 6:06</b>
<b>4. CONSENT CALENDAR</b> <i>Any Committee Member or member of the public may remove an item for discussion before a motion is made.</i> <b>Approval</b> a. <a href="#">Minutes of the Open Session of the Investment Committee Meeting – May 13, 2019</a> <b>Information</b> b. <a href="#">FY20 Pacing Plan</a> c. <a href="#">Progress Against FY19 Investment Committee Goals</a> d. <a href="#">CFO Report Out - Open Session Finance Committee Materials</a> e. <a href="#">Article of Interest</a>	Gary Kalbach, Chair	<i>public comment</i>	<b>motion required 6:06 – 6:09</b>
<b>5. REPORT ON BOARD ACTIONS</b> <a href="#">ATTACHMENT 5</a>	Gary Kalbach, Chair		<b>information 6:09 – 6:14</b>
<b>6. APPOINTMENT OF VICE CHAIR</b>	Gary Kalbach, Chair		<b>information 6:14 – 6:16</b>
<b>7. ALTERNATIVE INVESTMENT ITEM</b>	Gary Kalbach, Chair		<b>discussion 6:16 – 6:26</b>
<b>8. INVESTMENT REVIEW ITEMS</b> a. Capital Markets Review & Portfolio Performance b. Tactical Asset Allocation Positioning and Market Outlook <a href="#">ATTACHMENT 8</a>	Antonio DiCosola and Chris Kuhlman, Pavilion, a Mercer Practice		<b>information 6:26 – 7:11</b>
<b>9. ENVIRONMENTAL, SOCIAL &amp; CORPORATE GOVERNANCE (ESG) INVESTING</b> <a href="#">ATTACHMENT 9</a>	Antonio DiCosola and Chris Kuhlman, Pavilion, a Mercer Practice		<b>information 7:11 – 7:36</b>

A copy of the agenda for the Regular Meeting will be posted and distributed at least seventy-two (72) hours prior to the meeting. In observance of the Americans with Disabilities Act, please notify us at (650) 988-7504 prior to the meeting so that we may provide the agenda in alternative formats or make disability-related modifications and accommodations.

AGENDA ITEM	PRESENTED BY		ESTIMATED TIMES
<b>10. ADJOURN TO CLOSED SESSION</b>	Gary Kalbach, Chair		<b>motion required 7:36 – 7:37</b>
<b>11. POTENTIAL CONFLICT OF INTEREST DISCLOSURES</b>	Gary Kalbach, Chair		<b>7:37 – 7:38</b>
<b>12. CONSENT CALENDAR</b> <i>Any Committee Member may remove an item for discussion before a motion is made.</i> <b>Approval</b> <i>Gov't Code Section 54957.2.</i> a. Minutes of the Closed Session of the Investment Committee Meeting (5/13/2019)	Gary Kalbach, Chair		<b>motion required 7:38 – 7:41</b>
<b>13. ADJOURN TO OPEN SESSION</b>	Gary Kalbach, Chair		<b>motion required 7:41 -7:42</b>
<b>14. RECONVENE OPEN SESSION / REPORT OUT</b>	Gary Kalbach, Chair		<b>7:42 – 7:43</b>
To report any required disclosures regarding permissible actions taken during Closed Session.			
<b>15. INVESTMENT ADVISOR REVIEW</b> <a href="#">ATTACHMENT 15</a>	Gary Kalbach, Chair	<i>public comment</i>	<b>possible motion 7:43 – 7:58</b>
<b>16. ADJOURNMENT</b>	Gary Kalbach, Chair	<i>public comment</i>	<b>motion required 7:58 – 7:59</b>

**Upcoming Meetings:**

Regular Meetings: November 11, 2019, January 27, 2020\*, February 10, 2020, May 11, 2020

Education Sessions: October 23, 2019; April 22, 2020

\*Joint with Finance Committee

**Minutes of the Open Session of the  
Investment Committee of the Board of Directors  
Monday, May 13, 2019  
El Camino Hospital, 2500 Grant Road, Mountain View, California  
Conference Room A**

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**Members Present**

Nicola Boone  
John Conover  
Jeffrey Davis, Chair  
Gary Kalbach

**Members Absent**

George Ting, MD  
Brooks Nelson

**Members Excused**

A quorum was present at the El Camino Hospital Investment Committee on Monday, May 13, 2019 meeting.

<b>Agenda Item</b>	<b>Comments/Discussion</b>	<b>Approvals/Action</b>
<b>1. CALL TO ORDER/ ROLL CALL</b>	The open session meeting of the Investment Committee of El Camino Hospital (the “Committee”) was called to order at 5:30pm by Committee Member Gary Kalbach at the request of Chair Davis. Committee Chair Jeffrey Davis, MD and Committee Members Brooks Nelson and George Ting, MD were absent. All other Committee members were present.	<i>None</i>
<b>2. POTENTIAL CONFLICT OF INTEREST DISCLOSURES</b>	Mr. Kalbach asked if any Committee member or anyone in the audience believes that a Committee member may have a conflict of interest on any of the items on the agenda. No conflict of interest was reported.	<i>None</i>
<b>3. PUBLIC COMMUNICATION</b>	Mr. Kalbach asked if there was any public communication to present. None were noted.	<i>None</i>
<b>4. CONSENT CALENDAR ITEMS</b>	This item was deferred until the end of the meeting due to lack of a quorum.	<i>Deferred to 2<sup>nd</sup> Open Session</i>
<b>5. REPORT ON BOARD ACTIONS</b>	At Mr. Kalbach’s request, Cindy Murphy, Director of Governance Services, briefly reviewed the Report on Board Actions as further detailed in the packet.	<i>Information</i>
<b>6. 403(b) INVESTMENT PERFORMANCE</b>	Brian Montanez of the Multnomah Group, summarized the Hospital’s 403(b) Plan Performance. Mr. Montanez reviewed the Fund Actions, including (1) the New York Life Guaranteed Interest Account moving to a lower share class, increasing the yield by 25 basis points; (2) the final Principal Fixed Account transfer payment was made for the 403(b) Plan; (3) American Beacon Stephens Small Cap Growth was replaced with Conestoga Small cap due to continued under performance; and (4) Fidelity Government Money Market was replaced with Vanguard Federal Money Market for expense reasons. Mr. Montanez explained that T. Rowe Price Equity Income is the only investment in the menu that scores in the bottom half of Multnomah’s Group Qualitative Scoring peer group but performance has picked up under the new manager’s tenure and Multnomah believes it is a solid option. He also reported that the fixed dollar fee arrangement was reduced from \$91 to \$81 per	

Agenda Item	Comments/Discussion	Approvals/Action
	<p>participant which is well within the range of similarly sized plans with similar services.</p> <p>Mr. Montanez reviewed the Fund Scorecard with the Committee and asked if any of the Committee members had any concerns about any of the plans investments. No concerns were raised.</p>	
<p><b>7. HEDGE FUND RESEARCH AND DUE DILIGENCE</b></p>	<p>Alex Da Costa of Pavilion described Pavilion/Mercer's dedicated hedge fund research team as one of the largest teams doing this type of work. He explained what hedge funds are, and how using them can improve the risk/reward proposition through the flexibility inherent in hedge funds. He also explained that hedge funds can play a role in portfolios as they can provide attractive risk adjusted returns relative to traditional stock and bond portfolios and provide diversified exposures to traditional stock and bond portfolios.</p> <p>Chair Davis arrived at 6:03 pm.</p> <p>Mr. Da Costa reported that Mercer's hedge fund philosophy is to diversify the return drivers in the growth portfolio and generate attractive risk-adjusted returns relative to equities over a market cycle. In evaluating hedge funds, Mercer's operational due diligence team does a deep dive into the quality of service, the fund auditor, the fund administrator, the valuation policy, and brokerage firms utilized. He also explained that four main areas (factors) are looked at when assessing a hedge fund strategy: Idea Generation, Portfolio Construction, Implementation and Business Management, and described Mercer's process including research, reporting, legal assessment and due diligence.</p> <p>Antonio DiCosola of Pavilion clarified that in cases where ECH must redeem from a hedge fund in a timely manner, Iftikhar Hussain, CFO, makes that decision on Pavilion's recommendation and that is subsequently reported to the Committee, but going into a new fund is brought to the Committee for discussion.</p>	
<p><b>8. AGENDA ITEM 9 - ASSEST ALLOCATION REVIEW AND ERM FRAMEWORK</b></p>	<p>This item was taken out of order.</p> <p>Antonio DiCosola and Chris Kuhlman of Pavilion presented a Healthcare Enterprise Risk Modeling analysis. Using ECH's Long Range Financial Plan from January 2019, the analysis incorporates the overall risks and financial situation of the organization into a review of the Surplus Cash Portfolio asset allocation. They reported that there is no need for ECH to reduce risk in its portfolio at this time due to strong financial position and strong operations. They also reported that ECH can maintain a long term investment horizon and weather bouts of volatility. If the Committee desires, ECH has the ability to increase its risk and return profile or allocate a higher percentage to illiquid strategies. They explained this is based on the following:</p>	



Agenda Item	Comments/Discussion	Approvals/Action
	<ul style="list-style-type: none"> <li>• ECH is above its peers across all financial metrics;</li> <li>• ECH's 603 Days Cash on Hand ("DCOH") at the end of FY18 is significantly higher than Moody's peer median (252.4) and is projected to stay significantly higher through 2028;</li> <li>• Cash Balance is abnormally high, but being drawn down to cover major capital projects;</li> <li>• Cash to debt is projected to stay above 200% and eventually rise above 400% in 2028 after completion of spending reserved for major projects; and</li> <li>• Negative cash flow will slow down after planned major capital project spending is complete in 2026.</li> </ul> <p>Mr. DiCosola and Mr. Kuhlman reviewed ECH's current asset allocation, a comparison to healthcare peers and possible asset allocation scenarios that would either reduce or increase risk. They reviewed the variability of expected return over 1 year and 5 years of each scenario, the historical scenario analysis, a downside stress test and liquidity comparison. Mr. DiCosola commented that the purpose of this exercise is to think about long term needs and strategic allocations.</p> <p>Mr. Kalbach commented that perhaps ECH should consider more investment in its own business, Dan Woods, CEO, and Iftikhar Hussain, CFO, commented that there is no need to reduce risk right now and Mr. Kalbach noted that there is no urgency to make any significant change right now.</p>	
<b>9. AGENDA ITEM 8 - EL CAMINO HOSPITAL QUARTERLY PE-EXECUTIVE SUMMARY 1Q19</b>	<p>Mr. DiCosola reviewed the Investment Committee Scorecard noting that performance is in line with or better than benchmark and that the Cash Balance Plan has more equity exposure and has had stronger performance as a result given the recent market environment. The Surplus Cash portfolio was up 6.7% in the first quarter, in line with its benchmark, and is 20 basis points ahead since inception. The Cash Balance Plan was up 8.3% in the first quarter, performing better than its benchmark, and is 70 basis points ahead since inception. He reviewed the Market Value Reconciliation noting that the Surplus Cash has gone from \$677 million in 2015 to almost \$1 billion, and the Cash Balance Plan has gone from \$216.8 million to \$270.7 million in the same time period. He reported that the managers have added value and that Wellington and Conestoga lagged in Q1, but results are still strong over the longer time periods. He also reported that international managers with growth orientation performed very well.</p>	

Agenda Item	Comments/Discussion	Approvals/Action
<b>10. HEDGE FUND CHANGE</b>	Mr. Da Costa gave a report on 1 <sup>st</sup> Quarter Investment Activity reporting that ECH has submitted a redemption request for the Chatham Asset Management High Yield Offshore Fund effective June 30, 2019 and explained the reasons for doing so including observations of increasing illiquidity in the portfolio and negative press allegations of market manipulation. Though Pavilion’s research showed no evidence of manipulation, they thought it prudent to step back from the investment.	
<b>11. ADJOURN TO CLOSED SESSION</b>	<p><b><u>Motion:</u></b> To adjourn to closed session at 7:30pm.</p> <p><b><u>Movant:</u></b> Kalbach  <b><u>Second:</u></b> Boone  <b><u>Ayes:</u></b>, Boone, Conover, Davis, Kalbach  <b><u>Abstentions:</u></b> None  <b><u>Absent:</u></b> Ting, Nelson  <b><u>Excused:</u></b> None  <b><u>Recused:</u></b> None</p>	<i>A motion to adjourn to the Closed Session at 7:30 pm was approved.</i>
<b>12. AGENDA ITEM 15 RECONVENE OPEN SESSION</b>	Agenda Items 12 -14 were conducted in closed session. The Closed Session Minutes of the February 25, 2019 meeting were approved by a unanimous vote of all members present (Boone, Conover, Davis, Kalbach).	
<b>13. AGENDA ITEM 4 – CONSENT CALENDAR</b>	<p>Chair Davis asked if any Committee member wished to remove any items from the consent calendar for discussion. Cindy Murphy, Director of Governance Services, suggested that the Committee could select an Educational Item for Goal #2 of the Committee’s Proposed FY20 Committee Goals. Mr. Hussain suggested several topics and the Committee requested that an educational presentation on Environmental, Social, and Governance (“ESG”) investing be added to Goal #2.</p> <p><b><u>Motion:</u></b> To approve the consent calendar: Open Minutes of the February 25, 2019 Investment Committee Meeting, Proposed FY20 Committee Goals (as amended) and Proposed FY20 Pacing Plan; and for information: CFO Report Out on Open Session Finance Committee Materials, Progress against FY19 Investment Committee Goals and Article of Interest.</p> <p><b><u>Movant:</u></b> Kalbach  <b><u>Second:</u></b> Boone  <b><u>Ayes:</u></b>, Boone, Conover, Davis, Kalbach  <b><u>Abstentions:</u></b> None  <b><u>Absent:</u></b> Nelson, Ting  <b><u>Excused:</u></b> None  <b><u>Recused:</u></b> None</p>	<i>The Open Session Minutes of the February 25, 2019 Investment Committee Meeting, the FY20 Pacing Plan and the Proposed FY 20 Committee Goals (as amended) were approved.</i>

Agenda Item	Comments/Discussion	Approvals/Action
<b>14. AGENDA ITEM 16 ADJOURNMENT</b>	<p><b><u>Motion:</u></b> To adjourn the Investment Committee meeting at 7:40 pm.</p> <p><b><u>Movant:</u></b> Kalbach <b><u>Second:</u></b> Conover <b><u>Ayes:</u></b>, Boone, Conover, Davis, Kalbach <b><u>Abstentions:</u></b> None <b><u>Absent:</u></b> Ting, Nelson <b><u>Excused:</u></b> None <b><u>Recused:</u></b> None</p>	<p><i>A motion to adjourn to the Investment Committee meeting at 7:40 pm was approved.</i></p>

**Attest as to the approval of the Foregoing minutes by the Investment Committee of El Camino Hospital:**

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Gary Kalbach,  
Chair, Investment Committee

## INVESTMENT COMMITTEE PACING PLAN

Revised 05/13/2019

FY 2020: Q1		
JULY – NO MEETING	AUGUST 12, 2019 Meeting	SEPTEMBER – NO MEETING
N/A	<ul style="list-style-type: none"> <li>Capital Markets Review and Portfolio Performance</li> <li>Tactical Asset Allocation Positioning and Market Outlook</li> <li>Education Topic: Env./Social Governance</li> <li>CFO Report Out – Open Session Finance Committee Materials</li> </ul>	N/A
FY 2020: Q2		
OCTOBER – NO MEETING	NOVEMBER 11, 2019 Meeting	DECEMBER – NO MEETING
<i>October 23, 2019 – Board and Committee Educational Session</i>	<ul style="list-style-type: none"> <li>Capital Markets Review and Portfolio Performance</li> <li>Tactical Asset Allocation Positioning and Market Outlook</li> <li>Investment Policy Review</li> <li>CFO Report Out – Open Session Finance Committee Materials</li> </ul>	N/A
FY 2020: Q3		
JANUARY 27, 2020	FEBRUARY – 10, 2020 Meeting	MARCH – NO MEETING
<i>Joint Finance Committee and Investment Committee meeting.</i>	<ul style="list-style-type: none"> <li>Capital Markets Review and Portfolio Performance</li> <li>Tactical Asset Allocation Positioning and Market Outlook</li> <li>CFO Report Out – Open Session Finance Committee Materials</li> <li>Proposed FY 2021 Goals/Pacing Plan/Meeting Dates</li> </ul>	N/A
FY 2020: Q4		
APRIL – NO MEETING	MAY 11, 2020 Meeting	JUNE – NO MEETING
<i>April 22, 2020 – Board and Committee Educational Session</i>	<ul style="list-style-type: none"> <li>Capital Markets Review and Portfolio Performance</li> <li>Tactical Asset Allocation Positioning and Market Outlook</li> <li>Asset Allocation Review and ERM Framework</li> <li>CFO Report Out – Open Session Finance Committee Materials</li> <li>403(b) Investment Performance</li> <li>Approve FY 21 Committee Goal</li> <li>Review status of FY20 Goals</li> </ul>	N/A

## FY20 COMMITTEE GOALS

### Investment Committee

#### PURPOSE

The purpose of the Investment Committee is to develop and recommend to the El Camino Hospital (ECH) Board of Directors ("Board") the investment policies governing the Hospital's assets, maintain current knowledge of the management and investment funds of the Hospital, and provide oversight of the allocation of the investment assets.

**STAFF:** **Iftikhar Hussain**, Chief Financial Officer (Executive Sponsor)

The CFO shall serve as the primary staff to support the Committee and is responsible for drafting the Committee meeting agenda for the Committee Chair's consideration. Additional members of the Executive Team or hospital staff may participate in the meetings upon the recommendation of the CFO and at the discretion of the Committee Chair. The CEO is an ex-officio member of this Committee.

GOALS	TIMELINE	METRICS
1. Review performance of consultant recommendations of managers and asset allocations	Each quarter - ongoing	Committee to review selection of money managers and make recommendations to the CFO
2. Education Topic: Environmental and Social Governance	FY20 Q1	Completed by August 2020
3. Asset Allocation, Investment Policy Review and ERM framework including Efficient Frontier	Q4	Completed by May 2020

#### SUBMITTED BY:

**Chair:** Jeffrey Davis, MD

**Executive Sponsor:** Iftikhar Hussain

Approved by the ECH Board of Directors 6/12/2019

<b>Item:</b>	Finance Committee Report El Camino Hospital Investment Committee (IC) August 12, 2019
<b>Responsible party:</b>	Iftikhar Hussain, CFO
<b>Action requested:</b>	For Information
<b>Background:</b> The Finance Committee meets 7 times per year. The Committee last met on July 29, 2019 and meets next on September 23, 2019	
<b>Summary and session objectives:</b> To update the Investment Committee on the work of the Finance Committee. <ul style="list-style-type: none"> <li>a. Reviewed FY 19 fiscal year end financial report. Consolidated operating margin was 24.6 million ahead of budget mainly due to higher revenues including \$23 million in non-recurring items. Revenue cycle operations continue outstanding performance with cash collection and days in AR ahead of target. Commercial payer mix was unfavorable which is concerning since this is the only payer group where the revenue covers the expenses.</li> </ul>	
<b>Proposed Board motion, if any:</b> <ul style="list-style-type: none"> <li>a. Approval of capital funding for ED remodel and radiation oncology equipment.</li> <li>b. Reviewed updated Long Term forecast</li> <li>c. Approval of heart failure medical director, cardiothoracic surgery call panel, and colon-rectal physician income guarantee contracts.</li> </ul>	
<b>LIST OF ATTACHMENTS:</b> The Finance Committee Open Session Materials may be accessed by clicking <a href="#">here</a> .	

# How 11 health systems are spending millions in innovation dollars for new initiatives in 2019

## Becker's Hospital Review

Laura Dyrda | Thursday, July 11th, 2019

Hospitals and health systems are investing in innovation centers, artificial intelligence, technology startups, telemedicine and hospitals of the future.

Here are 11 hospitals, health systems and healthcare providers that are spending on new companies, initiatives and institutes focused on technology and healthcare innovation over the past six months.

NewYork-Presbyterian in New York City launched the Hauser Institute for Health Innovation after receiving more than \$50 million since 2011 from philanthropists Rita Hauser and Gustave Hauser to improve the health system's telemedicine programs.

Cedars-Sinai Medical Center in Los Angeles has become a founding sponsor of Bioscience Los Angeles County, a nonprofit organization supporting life sciences innovation among research hospitals, academic institutions and public institutions.

Charlotte, N.C.-based Atrium Health, Cleveland Clinic and the Long Beach, Calif.-based MemorialCare Fund invested \$3 million in Xealth, Seattle-based digital health startup, to help the company close a \$14 million Series A financing round. UPMC, Froedtert and the Medical College of Wisconsin are also investors in the company.

Hartford (Conn.) HealthCare has promised a \$500,000 investment in a health technology accelerator that aims to bring new medtech startups to the city.

The University of Arkansas for Medical Sciences in Little Rock established the Institute for Digital Health and Innovation to enhance telemedicine and digital health services. The institute will initially focus on increasing access to technology for video consultations and seek partnerships with other health systems to broaden the specialties it offers patients.

Providence St. Joseph Health partnered with Microsoft to build a new high-tech hospital that will improve the health system's EMR in addition to evolving the hospital model. Providence St. Joseph

Health in Renton, Wash., acquired a Seattle-based healthcare technology company Lumedic, which uses blockchain technology to improve revenue cycle management. The health system also acquired Epic Consulting firm Bluetree as part of its strategy to diversify its revenue and support patient care.

So far in 2019, New York City-based Mount Sinai Health System has launched several innovation institutes and initiatives. It partnered with LabCorp to establish the Digital and Artificial Intelligence-Enabled Pathology Center of Excellence within its department of pathology, molecular and cell-based medicine. The health system also partnered with Hasso Plattner Institute in Potsdam, Germany, to establish a digital health institute. Finally, the health system opened the Center for Computational Immunology at its Icahn School of Medicine, which will allow researchers to use genomics, machine learning and immunology to develop precision treatments.

Winston-Salem, N.C.-based Novant Health launched the Institute of Innovation & Artificial Intelligence, which aims to use advanced technology to personalize patient care. It will also partner with technology companies and research organizations to reach its goals.

Cleveland Clinic formed the Center for Clinical Artificial Intelligence to further the use of technology in diagnostics, disease prediction and treatment plans. The Cleveland Clinic Enterprise Analytics launched the center, which has already begun building machine learning models to identify patients at high risk of death during admission and several projects focused on personalized cancer care.

Emory University in Atlanta is planning a \$1 billion "health innovation district" in Brookhaven, Ga. It filed an application with the city in May and would expect the development, which would include a hospital and hotel as well as commercial space, to take 15 years to complete.



**EL CAMINO HOSPITAL  
COMMITTEE MEETING COVER MEMO**

**To:** Investment Committee  
**From:** Cindy Murphy, Director of Governance Services  
**Date:** August 12, 2019  
**Subject:** Report on Board Actions

**Purpose:**

To keep the Committee informed with regards to actions taken by the El Camino Hospital and El Camino Healthcare District Boards.

**Summary:**

1. Situation: It is important to keep the Committees informed about Board activity to provide context for Committee work. The list below is not meant to be exhaustive, but includes agenda items the Board voted on that are most likely to be of interest to or pertinent to the work of El Camino Hospital's Board Advisory Committees.
2. Authority: This is being brought to the Committees at the request of the Board and the Committees.
3. Background: Since the last Investment Committee Meeting the Hospital Board has met once and the District Board has met once. In addition, since the Board has delegated certain authority to the Compliance and Audit Committee, the Finance Committee and the Executive Compensation Committee those approvals are also noted in this report.

**A. ECH Board Actions**

**June 12, 2019**

- Approved FY19 Period 10 Financials
- Approved FY20 Organizational Goals
- Approved FY20 El Camino Hospital Capital and Operating Budget
- Approved FY20 Community Benefit Plan
- Approved FY20 CEO Salary Range
- Approved FY20 Master Calendar, Committee Appointments and Committee Goals
- Approved Infection Control Medical Director Agreement

**B. ECHD Board Actions**

**June 18, 2019**

- Approved Resolution 2019-05 Recognizing ECH Community Benefit Grantee Cristo Rey San Jose Jesuit High School
- Approved Resolution 2019-06 Establishing Tax Appropriation Limit
- Approved FY20 Community Benefit Plan

Report on Board Actions  
August 12, 2019

- Approved FY20 ECH Capital and Operating Budget, FY20 ECHD Consolidated and Stand-Alone Budget and FY19 Period 10 Financials
- Allocated \$6,958,521 of tax revenues to the Mountain View Campus Women's Hospital Expansion/Renovation/Reconstruction Project
- Appointed Director Julia Miller as the District's Liaison to the Community Benefit Advisory Council
- Elected New Board Officers
  - Gary Kalbach, Chair
  - George O. Ting, MD, Vice Chair
  - Julia Miller, Secretary/Treasurer
- Appointed Julia Miller as Chair of the ECH Board Member Election and Re-Election Ad Hoc Committee, George O. Ting, MD as a member of the Committee and Lanhee Chen and Christina Lai as advisors.

**C. Finance Committee Actions**

- Approved Lithotripsy Professional Services Agreement and Behavioral Health Unit On-Call Panel Agreements
- Approved Funding for MV Campus Signage not to exceed \$2.5 million

**D. Compliance and Audit Committee: None since last report.**

**E. Executive Compensation Committee Actions**

- Approved FY20 Executive Bases Salary Ranges and Base Salaries
- Approved FY20 Individual Executive Goals

4. Assessment: N/A

5. Other Reviews: N/A

6. Outcomes: N/A

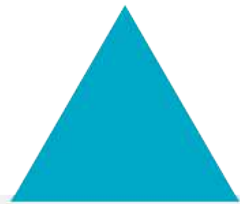
**List of Attachments:** None.

**Suggested Committee Discussion Questions:** None

# El Camino Hospital

## Executive Summary

Second Quarter 2019

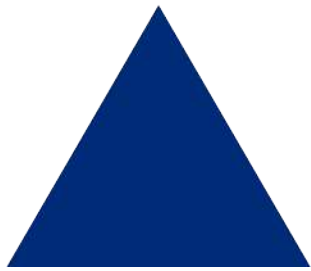


**PAVILION**  
a Mercer Practice

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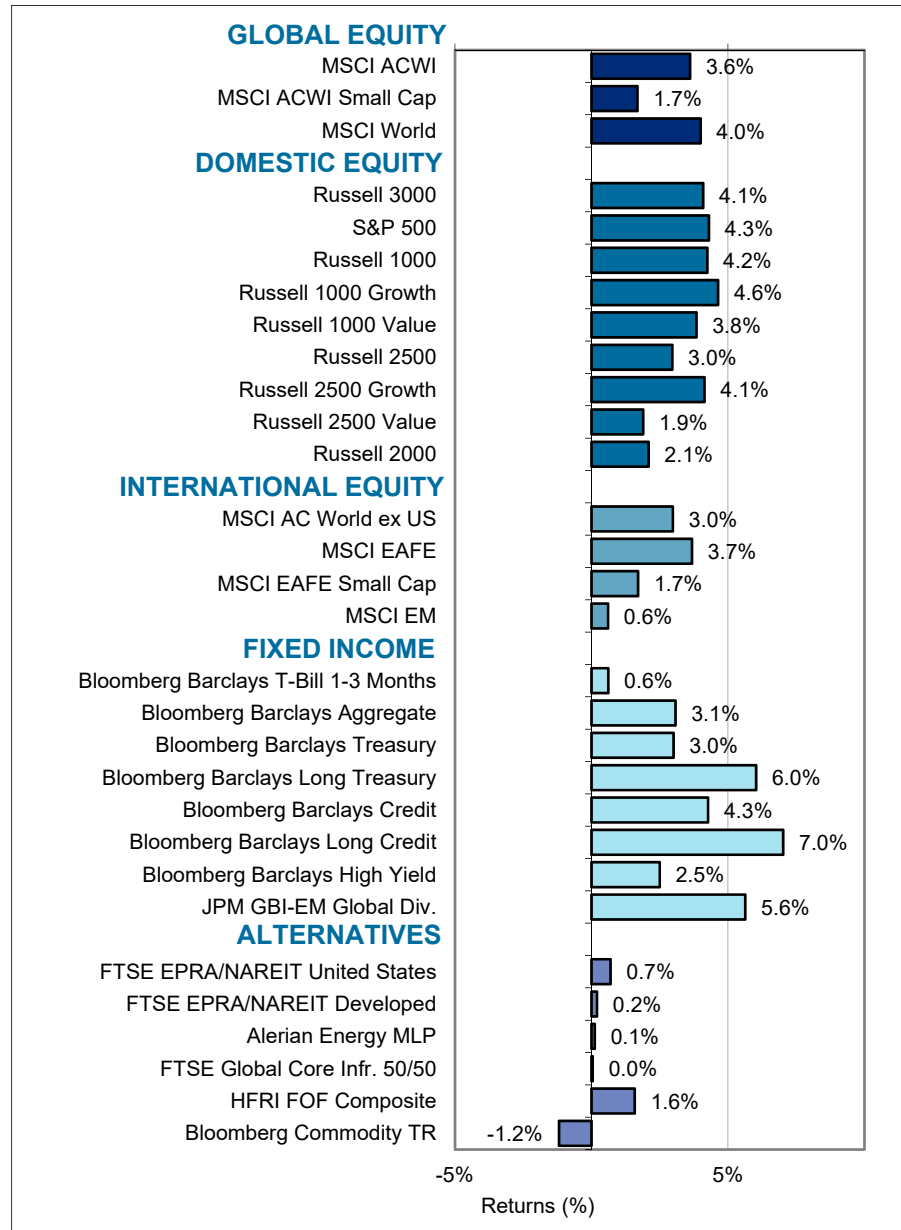
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# Capital Markets Review



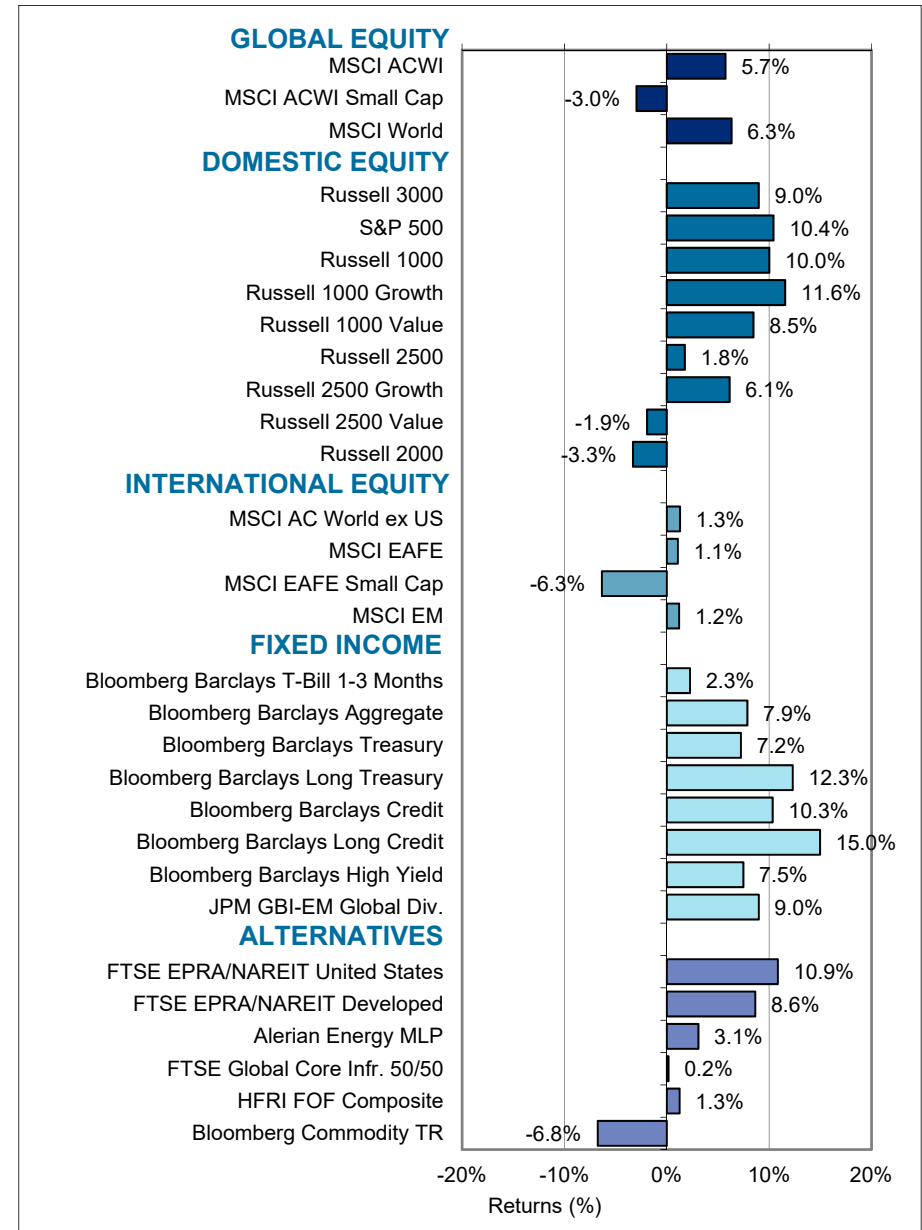
# Performance Summary

## Market Performance Second Quarter 2019



Source: Standard & Poor's, Russell, MSCI Barra, NAREIT, Bloomberg

## Market Performance 1-Year



Source: Standard & Poor's, Russell, MSCI Barra, NAREIT, Bloomberg

# Performance Drivers

## 1. The Fed signaled rate cuts

- The Fed left rates unchanged in Q2, but signaled that the next move likely will be lower. While the median of the “dot-plot” suggests no rate cuts in 2019, eight of the seventeen responses projected at least one cut.
- The bond market suggests a rate cut is highly likely at the July meeting and that the Fed will cut rates four times by the end of 2020.
- The Fed’s estimate of the long-term (neutral) Fed Funds rate declined from 2.75% to 2.5%.
- **Mercer View:** The Fed has shifted to a more dovish stance over the past few quarters as it seeks to increase inflation expectations and provide “insurance” against an economic slowdown. Interest rate cuts in the second half of 2019 are likely. This should ease financial conditions and may extend the economic cycle. Nevertheless, economic conditions do not seem to support the degree of rate cuts priced by the bond market.

## 2. Global growth continues to slow from its above-trend pace

- The World Bank projects global growth to slow to 2.6% this year, down from 3.0% in 2018. The growth slowdown has been most pronounced in Europe. Global manufacturing activity has slowed sharply.
- Job and wage growth along with low debt service, particularly in the US, should support consumer spending.
- The key downside risks are rising trade tensions, uncertainty in the Eurozone and a further slowdown in China.
- **Mercer View:** While growth is slowing and many economies face late cycle dynamics, we expect the expansion to continue and believe a deep recession is unlikely over the next year. Low inflation enables central banks to ease policy, which should help extend the cycle. Uncertainty regarding tariffs and trade are likely to contribute to volatility in markets and may continue to weigh on business investment.

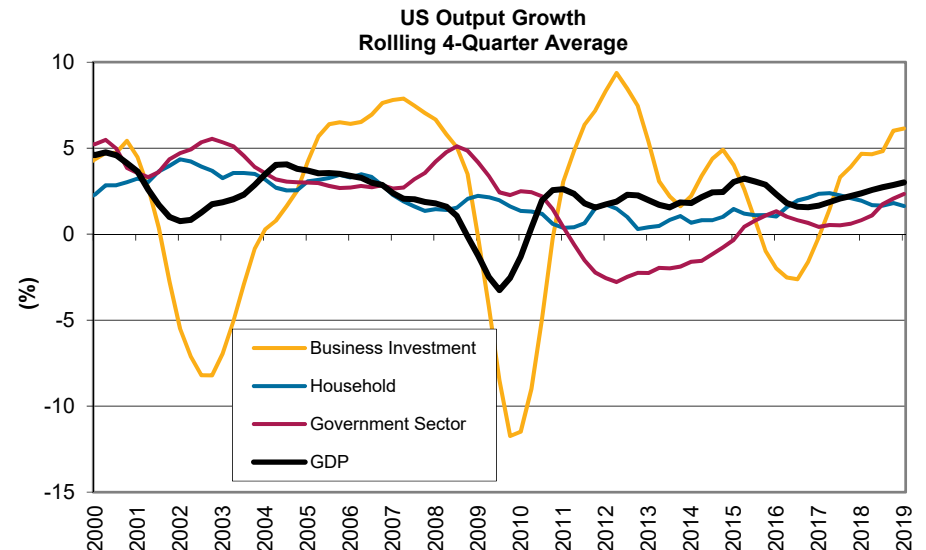
## 3. Trade tensions and geopolitical risks continue to cause uncertainty

- Trade risks remain at the forefront, as tensions escalated once again between the US and China. The US administration’s threat of tariffs on Mexico over immigration caught most by surprise and adds to the uncertainty for businesses looking to make long-term investments.
- The UK is nearing the selection of a replacement for Prime Minister May, and it is unclear how this might impact Brexit.
- Tensions between the US and Iran have escalated and present risks to global oil markets.
- **Mercer View:** Geopolitical risks remain elevated, and are likely to be a source of market volatility and downside risk.

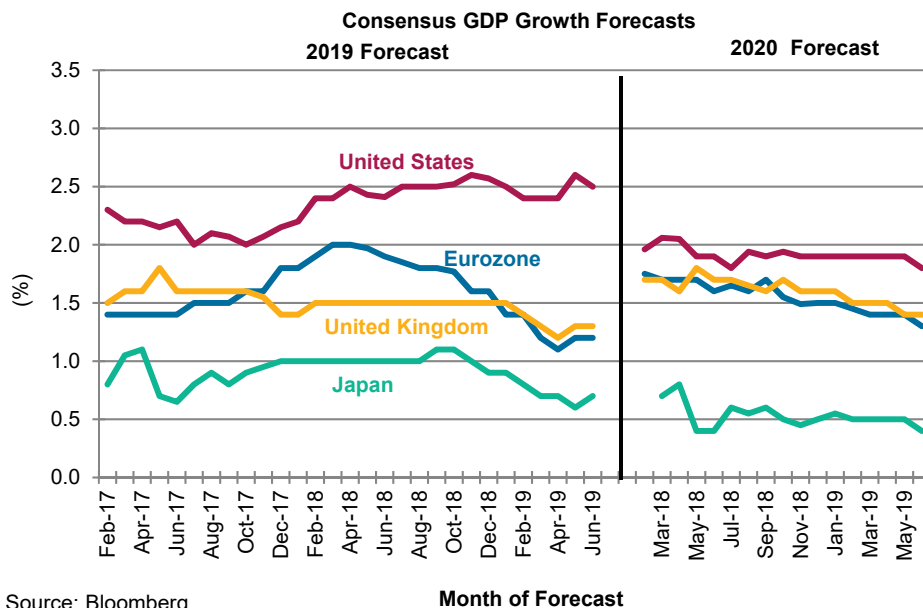
# Economic Fundamentals

## Growth Slowing, but Should Remain Positive in 2019

- US economic growth is expected to slow as the boost from tax cuts fades. US households remain in solid shape, but the slowdown in business investment in recent months is concerning.
- The slowdown has been most acute in the Eurozone, and consensus growth forecasts have been revised lower over the course of the year, but near trend.
- The growth outlook for emerging market economies will be influenced by trade. While China is expected to offset some of the drag from trade with looser monetary and fiscal policy, the outcome is difficult to predict.



Source: Bureau of Economic Analysis



Source: Bloomberg



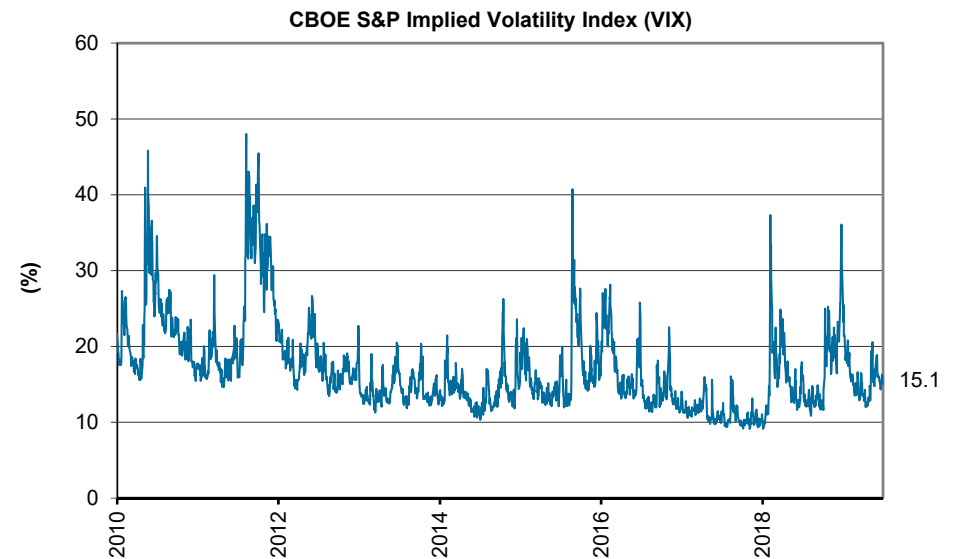
Source: Bloomberg



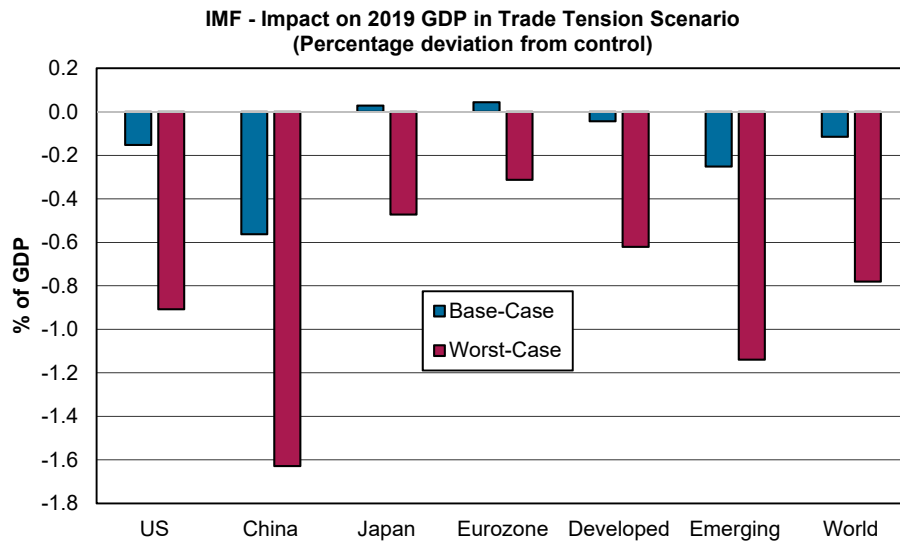
# Risk Factors

## Conditions Ease After FED and Trade Announcements

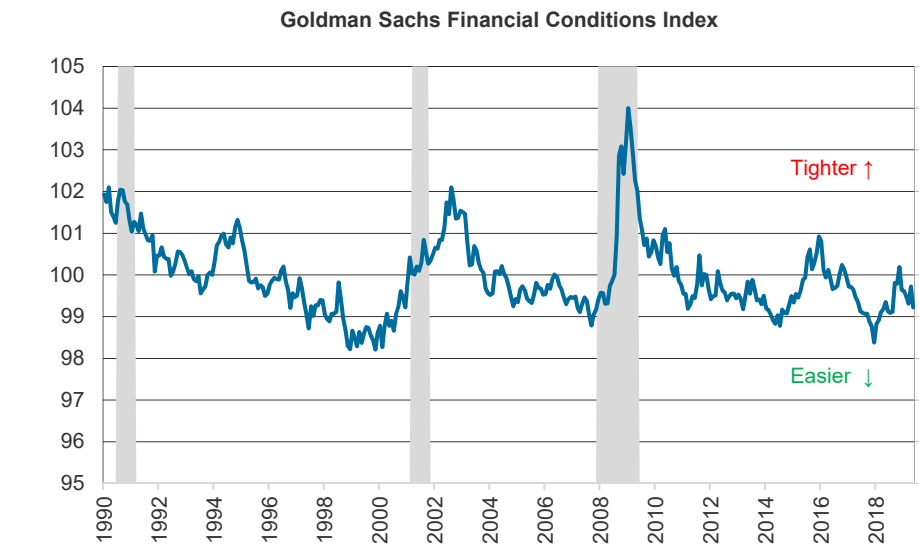
- Financial conditions eased somewhat relative to the end of Q1. After tightening in May as trade disputes intensified, conditions eased in June as the US and China agreed to re-open trade negotiations and the Fed suggested a more dovish policy.
- The VIX index also trended higher through April and May before reversing in June as concerns over trade and monetary policy abated.
- Uneven economic growth, Brexit, and populist movements raise risks across Europe.



Source: Bloomberg



Source: IMF



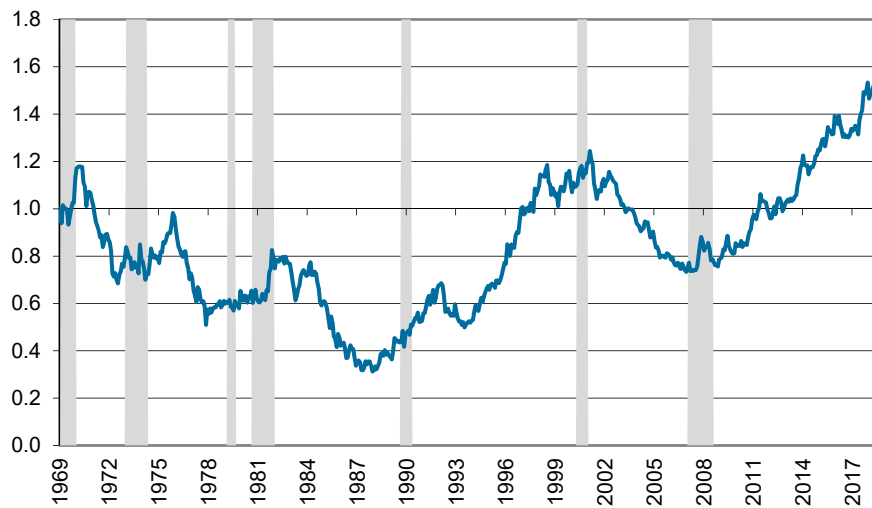
Source: Bloomberg

# Regional Equity Returns

## Developed Markets Outperformed in Q2

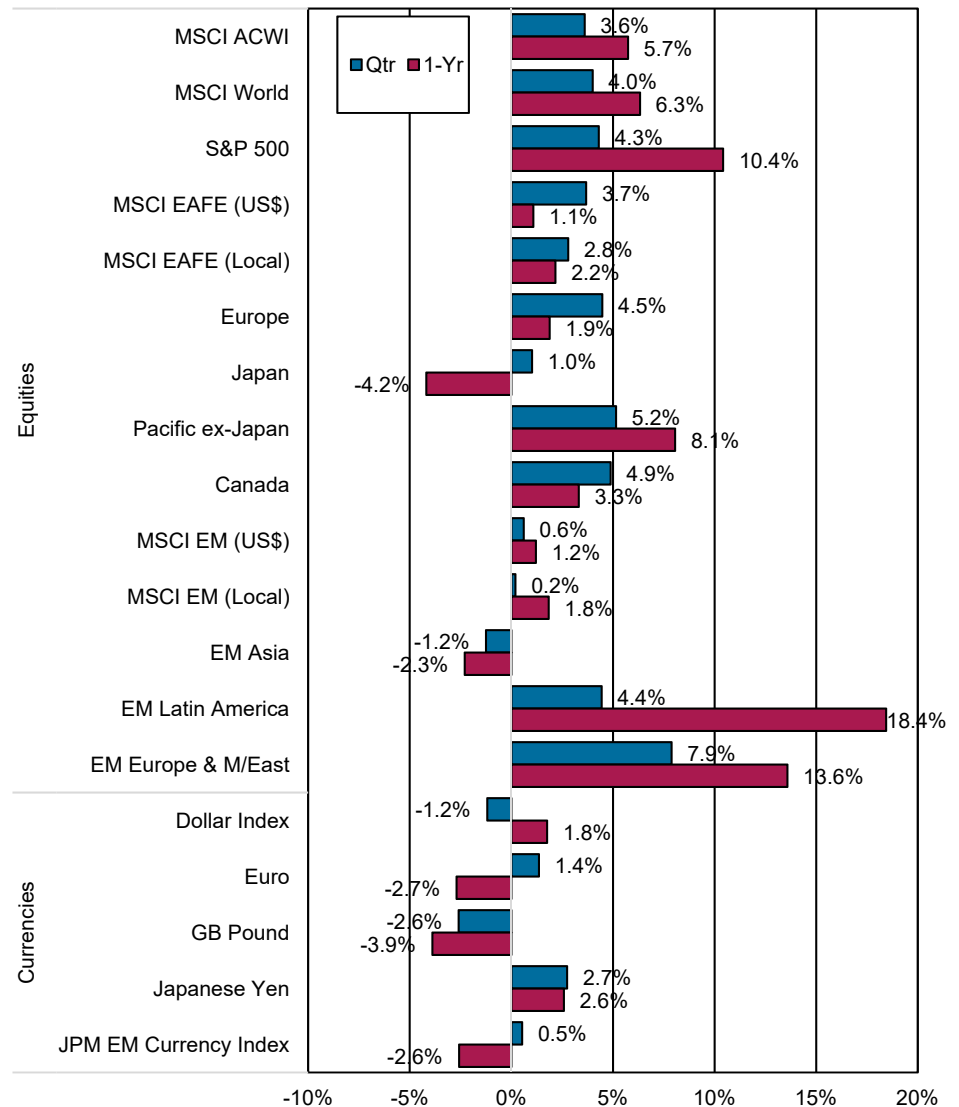
- Global equities gained 3.6% in Q2 as investors priced easier monetary policy.
- US markets continued to outperform with the S&P 500 returning 4.3% in Q2. US stocks gained more than 10% over the last year.
- International developed stocks returned 3.7% during Q2, helped by a modest decline in the dollar. The MSCI EAFE index gained 1.1% over the last year.
- Emerging market equities returned 0.6% in Q2, lagging developed markets by 340 bps as trade uncertainty persisted. Emerging market equities have gained 1.2% over the last year.

Ratio of MSCI US to MSCI EAFE



Source: Datastream

Global Performance



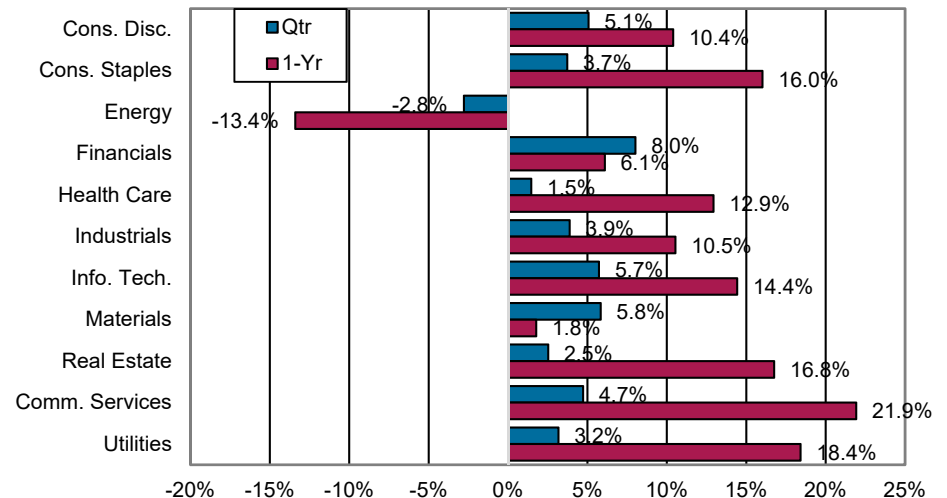
Source: Bloomberg, Datastream

# US Equity Factor and Sector Returns

## Small Caps Lagged, While Growth Modestly Outperformed

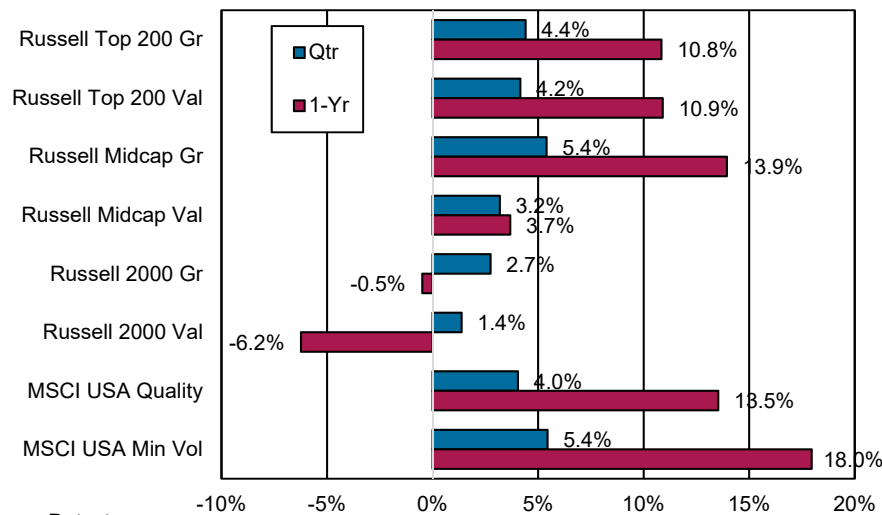
- Growth stocks generally displayed modest outperformance relative to value during Q2, with mid-cap growth producing the strongest results. Financials were the best performing sector, returning 7.3%.
- Large and mid-cap stocks outperformed small-cap stocks in Q2.
- Momentum and low volatility stocks outperformed the broad market during the quarter. Value stocks lagged the broader market, while quality stocks performed in line with the market.

MSCI USA Sector Returns



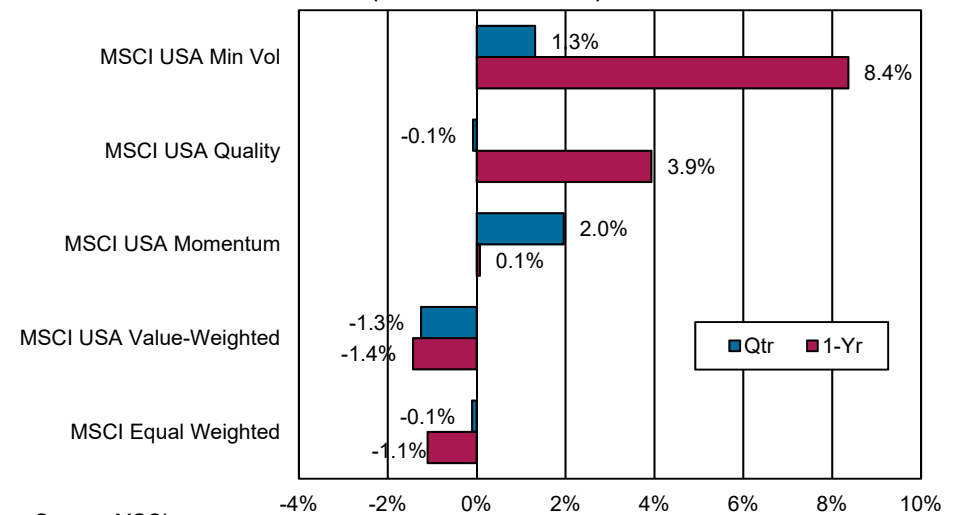
Source: Bloomberg

US Style Performance



Source: Datastream

Relative Factor Performance  
(Relative to MSCI USA)

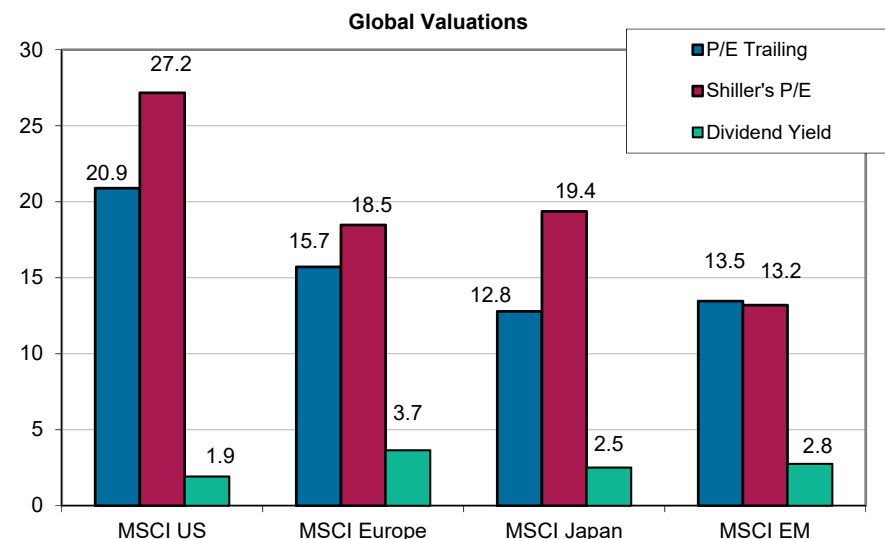


Source: MSCI

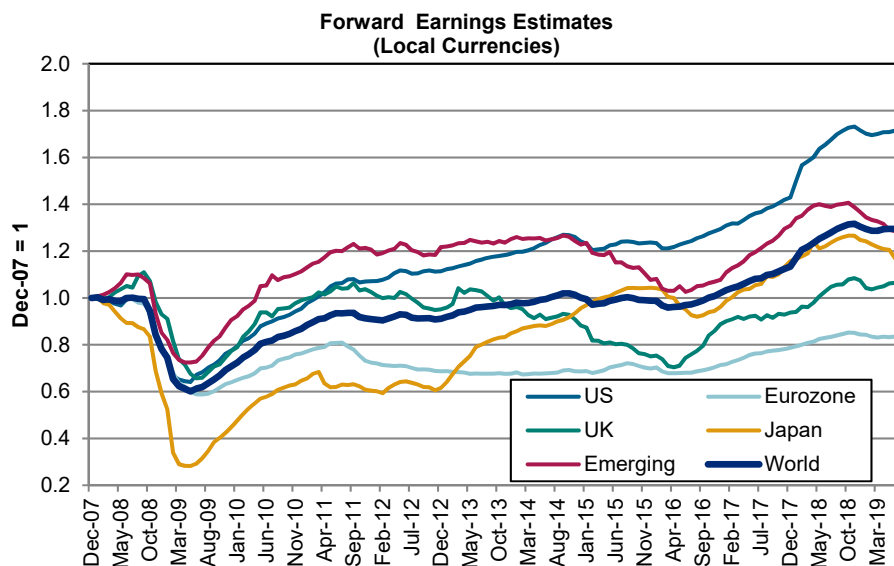
# Equity Valuations

## Valuations Moved Slightly Higher

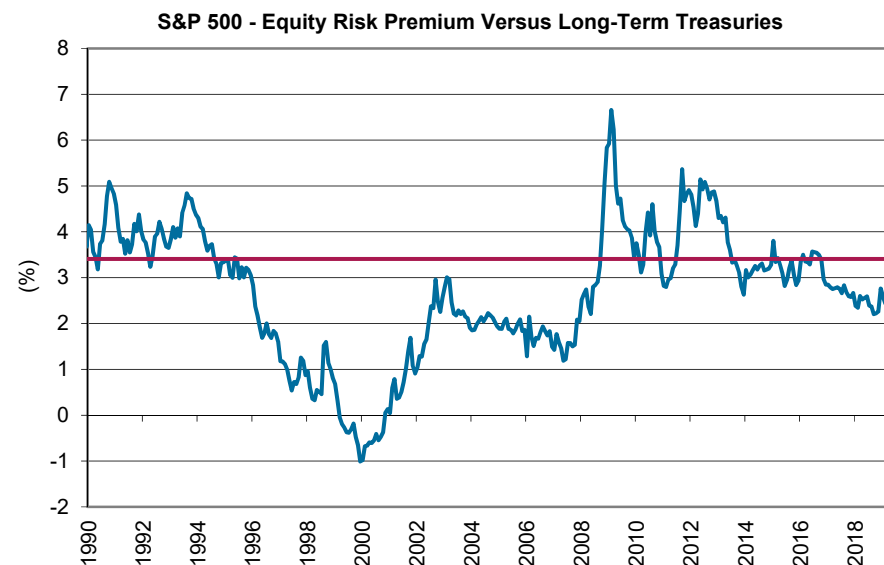
- The market gains during the quarter lifted the trailing P/E ratio on the MSCI US from 20.2x to 20.9x. Our estimate of the equity risk premium over long-term Treasuries was virtually unchanged as the decline in rates offset the uptick in valuations.
- International developed stocks remain more reasonably valued; however, economic and earnings growth is likely to remain subdued.
- EM equity valuations appear relatively attractive, but they are exposed to an increase in trade tensions. A more dovish Fed, however, should ease financial conditions in EM economies.



Source: Bloomberg, Datastream, Mercer



Source: Datastream

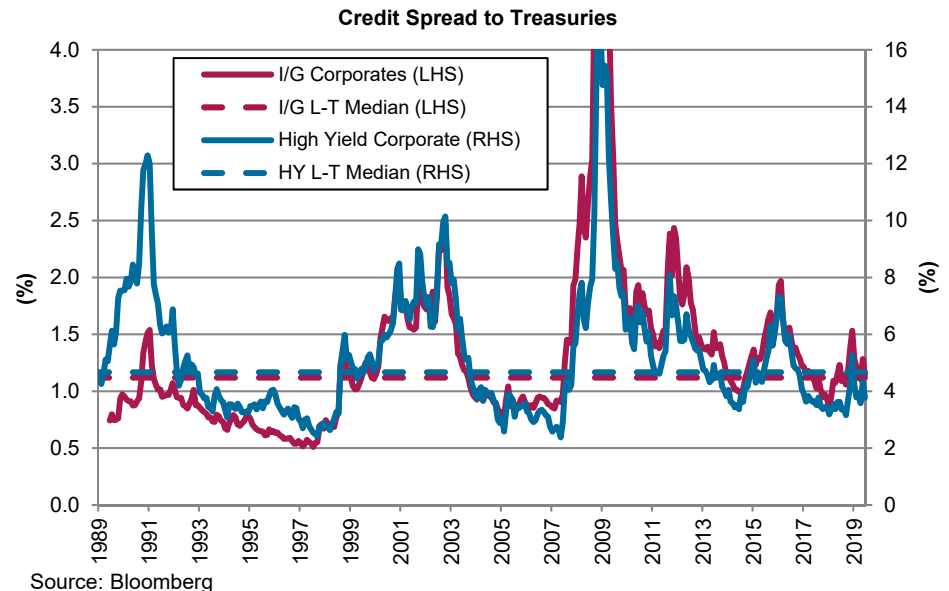
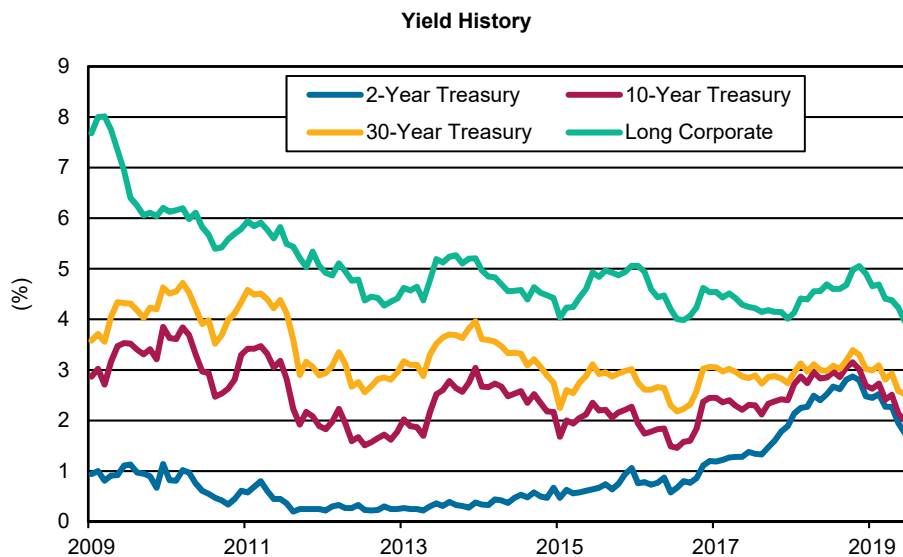
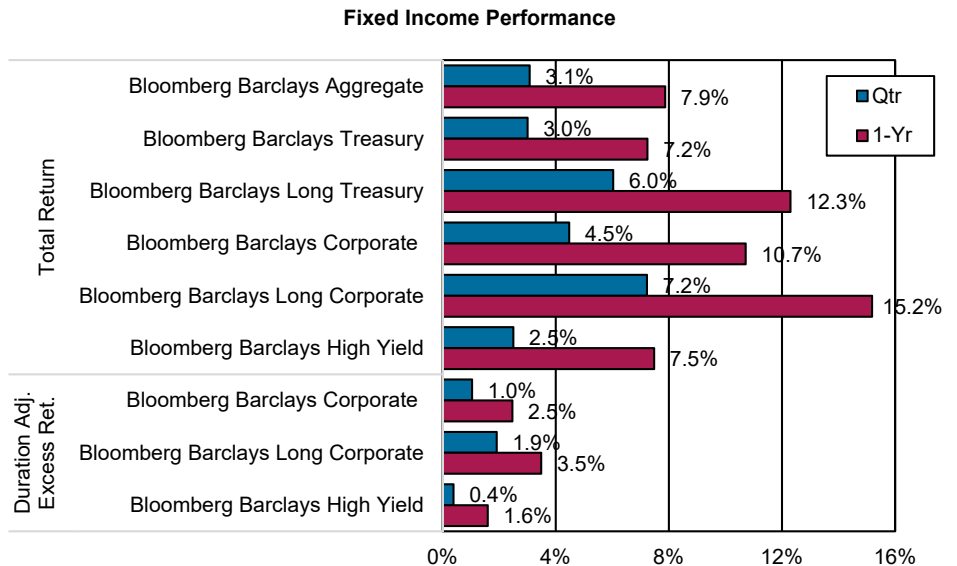


Source: MSCI, Datastream, Mercer

# Interest Rates and Fixed Income

## Another Strong Quarter for Fixed Income as Rates Fall and Spreads Narrow

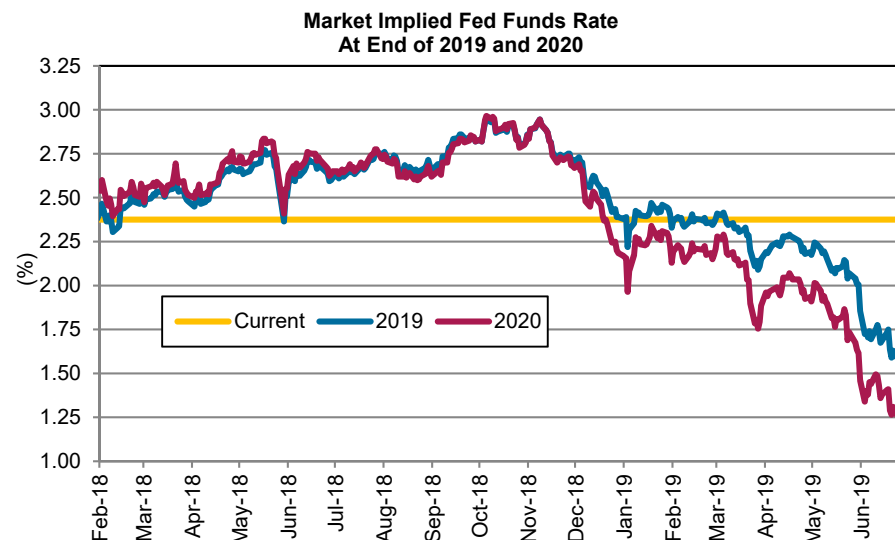
- The Bloomberg Barclays Aggregate returned 3.1% in Q2. Interest rates declined as the Fed's guidance became more dovish, while credit spreads experienced a modest decline.
- Investment-grade corporate spreads narrowed by 5 bps during the quarter, to 115 bps, compared to a long-term median of 112 bps. Long corporate bonds returned 7.5% as the yield fell from 4.5% to 4.0%.
- High yield bonds gained 2.5% during the quarter as yields declined by 56 bps. Credit spreads narrowed by 14 bps for the quarter.



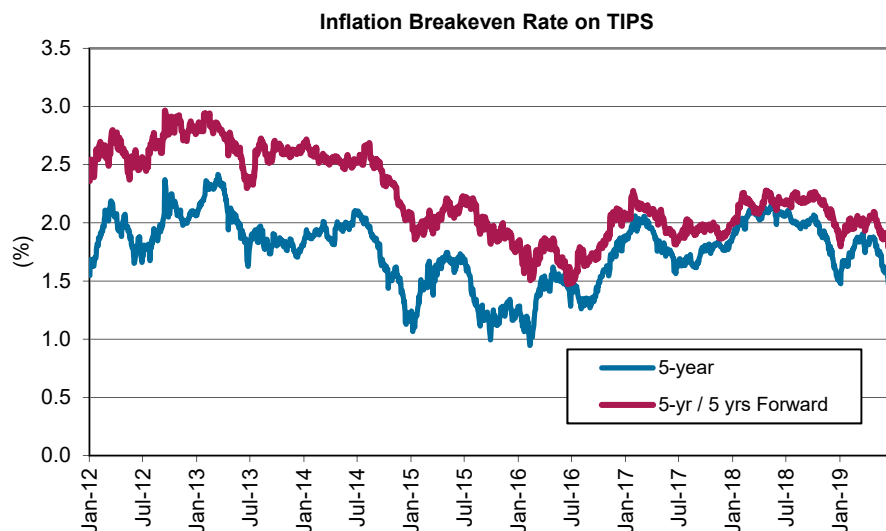
# Monetary Policy

## The Fed Signaled Rate Cuts

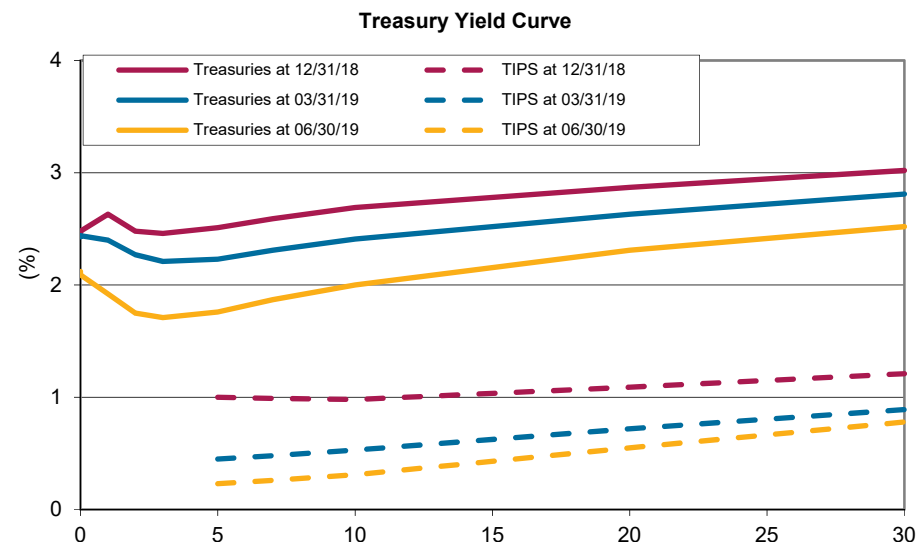
- The Fed has indicated that its next move will be to cut rates. It left rates unchanged in Q2, while its forward guidance became more dovish.
- The bond market suggests a rate cut is highly likely in July. It has priced a total of four rate cuts by the end of 2020.
- The front end of the yield curve remains inverted. This may not yet signal a recession given the expectation that the Fed will cut rates to lift inflation to target and as insurance against slowing growth.



Source: Bloomberg



Source: Bloomberg, Mercer



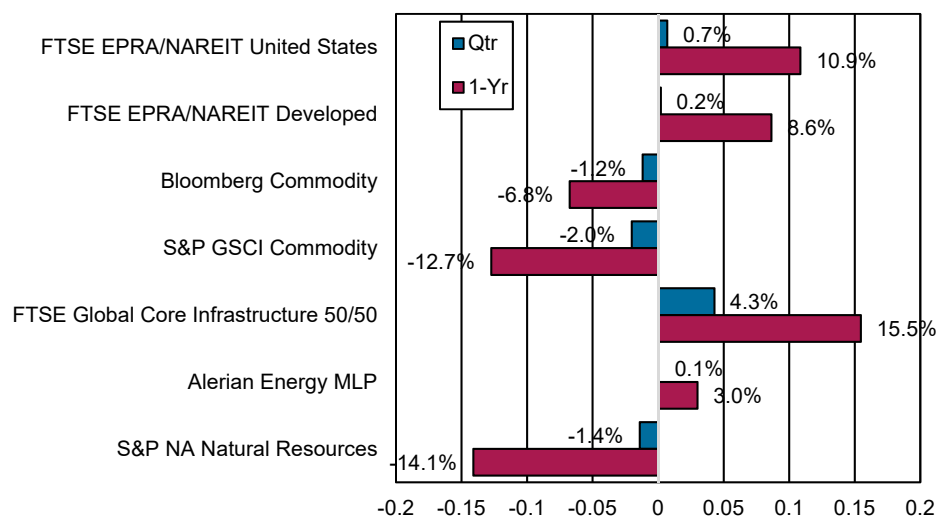
Source: Federal Reserve

# Alternative Investment Performance

## Real Assets Lag the Broad Market; Private Equity Delivers a Nice Premium

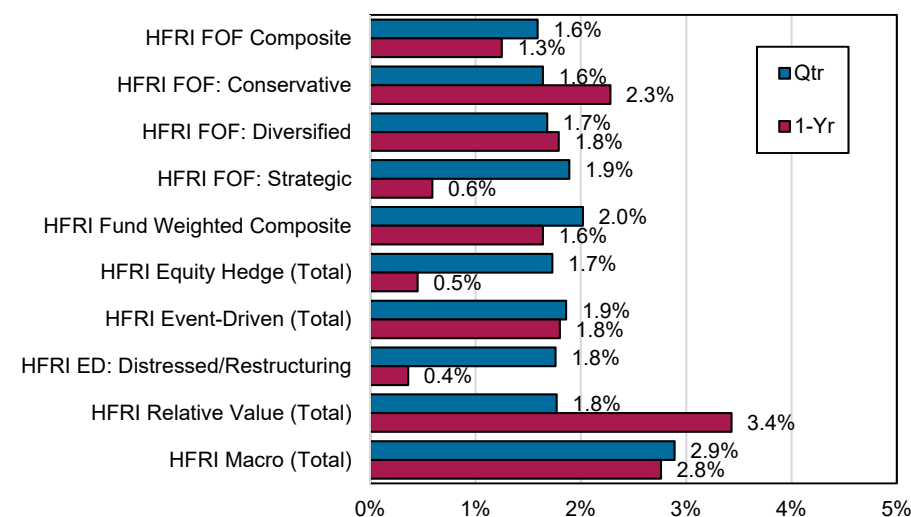
- REITs lagged the broader market for the quarter, while public infrastructure outperformed. Over the past year, REITs performed in line with the broader market while infrastructure outperformed.
- Natural resource stocks declined 1.4% during the quarter, as oil and other commodities declined.
- Hedge funds were up 1.6% during the quarter, and returned 1.3% over the past 1-year.
- Global private equity outperformed global developed stocks by a wide margin over most trailing periods.

Real Asset Performance



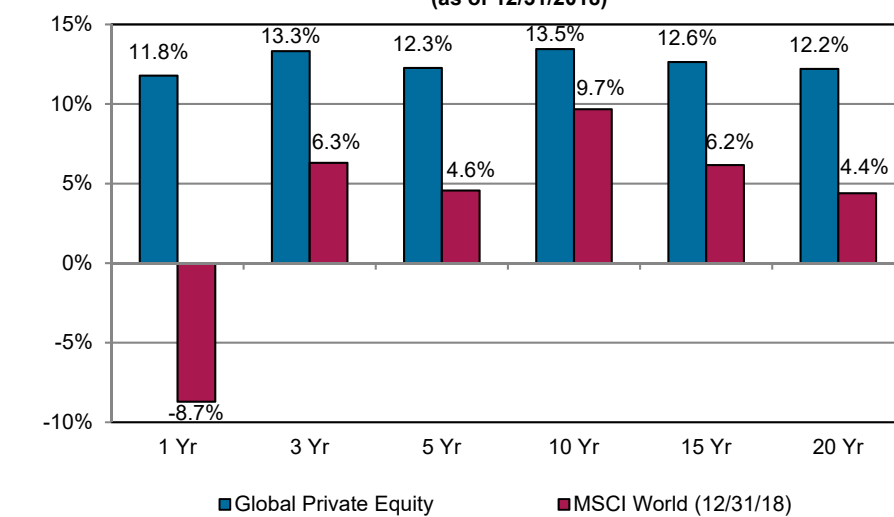
Source: Bloomberg, Datastream

Hedge Fund Performance



Source: Hedge Fund Research

Global Private Equity vs. Global Public Equities  
(as of 12/31/2018)



Source: Burgiss, Bloomberg

# Capital Markets Review

## Index Returns

As of June 30, 2019

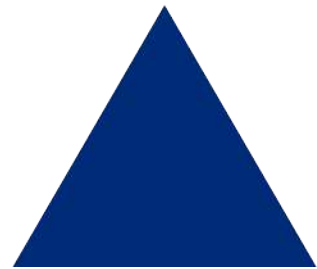
(Percentage Return)

	Quarter	Year To Date	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Domestic Equity Indices</b>								
Dow Jones Wilshire 5000	4.0	18.7	9.1	11.8	14.0	10.3	13.8	14.6
S&P 500	4.3	18.5	10.4	12.4	14.2	10.7	14.0	14.7
Russell 1000 Index	4.2	18.8	10.0	12.3	14.1	10.5	14.0	14.8
Russell 1000 Growth Index	4.6	21.5	11.6	16.9	18.1	13.4	15.8	16.3
Russell 1000 Value Index	3.8	16.2	8.5	7.6	10.2	7.5	12.1	13.2
Russell Midcap Index	4.1	21.3	7.8	10.1	12.2	8.6	13.4	15.2
Russell Midcap Growth Index	5.4	26.1	13.9	16.2	16.5	11.1	14.8	16.0
Russell Midcap Value Index	3.2	18.0	3.7	5.6	8.9	6.7	12.3	14.6
Russell 2000 Index	2.1	17.0	-3.3	6.6	12.3	7.1	11.6	13.4
Russell 2000 Growth Index	2.7	20.4	-0.5	10.1	14.7	8.6	12.9	14.4
Russell 2000 Value Index	1.4	13.5	-6.2	3.0	9.8	5.4	10.3	12.4
<b>International Equity Indices</b>								
MSCI EAFE	3.7	14.0	1.1	3.9	9.1	2.2	7.3	6.9
MSCI EAFE Growth Index	5.7	18.5	4.2	6.8	9.7	4.4	8.5	8.2
MSCI EAFE Value Index	1.5	9.6	-2.1	1.0	8.5	0.1	6.0	5.5
MSCI EAFE Small Cap	1.7	12.5	-6.3	2.6	9.1	4.4	9.9	9.7
MSCI AC World Index	3.6	16.2	5.7	8.2	11.6	6.2	9.9	10.1
MSCI AC World ex US	3.0	13.6	1.3	4.2	9.4	2.2	6.4	6.5
MSCI Emerging Markets Index	0.6	10.6	1.2	4.6	10.7	2.5	4.2	5.8
<b>Fixed Income Indices</b>								
Blmbg. Barc. U.S. Aggregate	3.1	6.1	7.9	3.7	2.3	2.9	2.6	3.9
Blmbg. Barc. Intermed. U.S. Government/Credit	2.6	5.0	6.9	3.1	2.0	2.4	2.2	3.2
Blmbg. Barc. U.S. Long Government/Credit	6.6	13.5	13.8	6.3	3.8	5.7	4.8	7.6
Blmbg. Barc. U.S. Corp: High Yield	2.5	9.9	7.5	5.0	7.5	4.7	6.4	9.2
ICE BofAML 3 Month U.S. T-Bill	0.6	1.2	2.3	1.8	1.4	0.9	0.6	0.5
Blmbg. Barc. U.S. TIPS	2.9	6.2	4.8	3.5	2.1	1.8	1.2	3.6
FTSE Non-U.S. World Government Bond	3.9	5.5	4.5	3.9	0.8	0.2	0.5	1.9
JPM EMBI Global Diversified (external currency)	4.1	11.3	12.4	5.2	5.5	5.3	5.6	7.8
JPM GBI-EM Global Diversified (local currency)	5.6	8.7	9.0	3.2	4.2	-0.5	0.4	3.4
<b>Real Asset Indices</b>								
Bloomberg Commodity Index Total Return	-1.2	5.1	-6.8	0.0	-2.2	-9.1	-6.7	-3.7
Dow Jones Wilshire REIT	1.6	17.9	10.5	7.2	4.1	7.8	8.7	15.7

Returns for periods greater than one year are annualized.



# Portfolio Review



# El Camino Hospital Investment Committee Scorecard

June 30, 2019

Key Performance Indicator	Status	El Camino	Benchmark	El Camino	Benchmark	El Camino	Benchmark	FY19 Year End Budget	Expectation Per Asset Allocation
<b>Investment Performance</b>		<b>2Q 2019</b>		<b>Fiscal Year-to-date</b>		<b>6y 8m Since Inception (annualized)</b>			<b>2019</b>
Surplus cash balance*		\$1,028.7	--	--	--	--	--	\$892.9	--
Surplus cash return		2.9%	2.8%	5.4%	5.7%	5.6%	5.5%	3.2%	5.6%
Cash balance plan balance (millions)		\$277.6	--	--	--	--	--	\$276.9	--
Cash balance plan return		3.1%	3.0%	6.0%	5.9%	7.8%	7.0%	6.0%	6.0%
403(b) plan balance (millions)		\$514.1	--	--	--	--	--	--	--
<b>Risk vs. Return</b>		<b>3-year</b>				<b>6y 8m Since Inception (annualized)</b>			<b>2019</b>
Surplus cash Sharpe ratio		1.06	1.04	--	--	1.02	1.01	--	0.34
Net of fee return		7.2%	6.8%	--	--	5.6%	5.5%	--	5.6%
Standard deviation		5.4%	5.2%	--	--	4.9%	4.8%	--	8.7%
Cash balance Sharpe ratio		1.09	1.03	--	--	1.12	1.06	--	0.32
Net of fee return		8.8%	7.8%	--	--	7.8%	7.0%	--	6.0%
Standard deviation		6.7%	6.2%	--	--	6.3%	6.0%	--	10.3%
<b>Asset Allocation</b>		<b>2Q 2019</b>							
Surplus cash absolute variances to target		7.1%	< 10%	--	--	--	--	--	--
Cash balance absolute variances to target		6.9%	< 10%	--	--	--	--	--	--
<b>Manager Compliance</b>		<b>2Q 2019</b>							
Surplus cash manager flags		17	< 24 Green < 30 Yellow	--	--	--	--	--	--
Cash balance plan manager flags		23	< 27 Green < 34 Yellow	--	--	--	--	--	--

\*Excludes debt reserve funds (~\$83 mm), District assets (~\$41 mm), and balance sheet cash not in investable portfolio (~\$128 mm).

Includes Foundation (~\$31 mm) and Concern (~\$14 mm) assets. Budget adds back in current Foundation and Concern assets and backs out current debt reserve funds.

# Total Surplus Cash Assets

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Total Surplus Cash (1)</b>	<b>1,153,203,670</b>	<b>100.0</b>	<b>2.6</b>	<b>8.7</b>	<b>5.1</b>	<b>5.1</b>	<b>6.2</b>	<b>4.3</b>	<b>5.8</b>	<b>5.1</b>	<b>6y 8m</b>
<b>Total Surplus Cash ex District / Debt Reserves (1)</b>	<b>1,028,698,236</b>	<b>89.2</b>	<b>2.9</b>	<b>9.8</b>	<b>5.4</b>	<b>5.4</b>	<b>7.2</b>	<b>4.8</b>	<b>6.1</b>	<b>5.6</b>	<b>6y 8m</b>
Surplus Cash Total Benchmark			2.8	9.8	5.7	5.7	6.8	4.8	6.0	5.5	
<b>Total Surplus Cash ex District / CONCERN / Debt Reserves (1)</b>	<b>1,014,557,289</b>	<b>88.0</b>	<b>2.9</b>	<b>9.8</b>	<b>5.3</b>	<b>5.3</b>	<b>7.3</b>	<b>4.9</b>	<b>6.2</b>	<b>5.7</b>	<b>6y 8m</b>
Surplus Cash Total Benchmark			2.8	9.8	5.7	5.7	6.8	4.8	6.0	5.5	
<b>Total CONCERN</b>	<b>14,140,947</b>	<b>1.2</b>	<b>3.3</b>	<b>6.5</b>	<b>8.2</b>	<b>8.2</b>	<b>2.7</b>	<b>-</b>	<b>-</b>	<b>3.4</b>	<b>3y 5m</b>
CONCERN Total Benchmark			3.1	6.1	7.8	7.8	2.3	-	-	3.1	
Met West Total Return Bond Plan - CONCERN	14,054,384	1.2	3.3	6.5	8.2	8.2	2.7	3.0	-	3.4	3y 5m
Blmbg. Barc. U.S. Aggregate			3.1	6.1	7.9	7.9	2.3	2.9	3.9	3.2	
Cash Account - CONCERN	86,563	0.0	0.3	0.6	1.2	1.2	0.8	-	-	0.7	3y 5m
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	1.2	
<b>District - Barrow Hanley</b>	<b>41,215,694</b>	<b>3.6</b>	<b>1.3</b>	<b>2.4</b>	<b>3.6</b>	<b>3.6</b>	<b>1.2</b>	<b>1.1</b>	<b>1.3</b>	<b>1.0</b>	<b>6y 8m</b>
Blmbg. Barc. 1-3 Govt			1.5	2.5	4.0	4.0	1.3	1.2	1.2	1.1	
<b>Total Debt Reserves</b>	<b>83,289,740</b>	<b>7.2</b>	<b>0.6</b>	<b>1.3</b>	<b>2.4</b>	<b>2.4</b>	<b>1.6</b>	<b>-</b>	<b>-</b>	<b>1.2</b>	<b>4y 2m</b>
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	1.0	
Ponder Debt Reserves - 2015	8,539,639	0.7	0.6	1.2	2.2	2.2	1.5	-	-	1.2	4y 2m
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	1.0	
Ponder Debt Reserves - 2017	74,750,002	6.5	0.6	1.3	2.4	2.4	-	-	-	1.8	2y 4m
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	1.7	
Capitalized Interest 2017	99	0.0	-0.2	0.2	1.2	1.2	-	-	-	1.3	2y 4m
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	1.7	

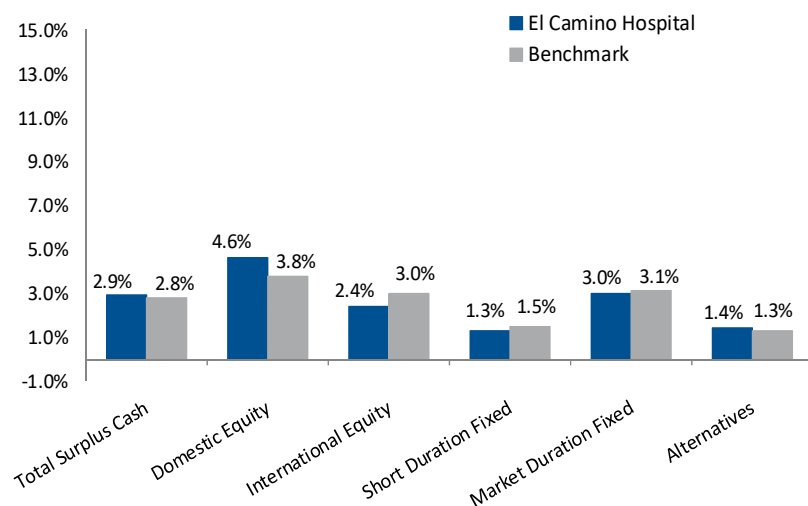
Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. (1) Includes Foundation assets.

# Surplus Cash Executive Summary

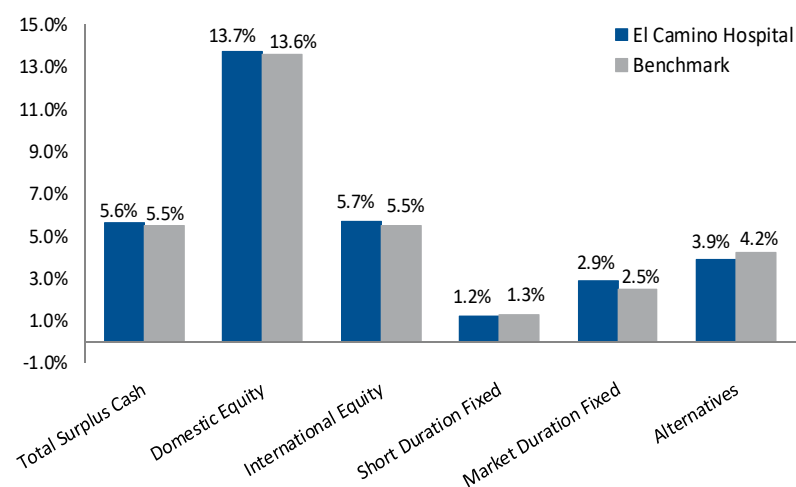
## Dashboard

As of June 30, 2019

### Performance: Most Recent Quarter



### Performance: Since Inception<sup>1</sup>



<sup>1</sup> Reflects the date Pavilion's recommended portfolio was implemented (November 1, 2012).

### Asset Allocation

Manager	Total Assets (\$ mil.)	Percent of Total	Target Allocation	Variance to Target	Target Range	Within Policy Range
Domestic Equity	\$275.3	26.8%	25.0%	+ 1.8%	20-30%	Yes
International Equity	\$147.0	14.3%	15.0%	- 0.7%	10-20%	Yes
Short-Duration Fixed	\$107.1	10.4%	10.0%	+ 0.4%	8-12%	Yes
Market-Duration Fixed	\$322.7	31.4%	30.0%	+ 1.4%	25-35%	Yes
Alternatives	\$176.7	17.2%	20.0%	- 2.8%	17-23%	Yes
<b>Total (X District)</b>	<b>\$1,028.7</b>	<b>100.0%</b>				

### Portfolio Updates

#### Manager News/Issues

- The Surplus Cash Portfolio returned +2.9% for the quarter, outperforming its benchmark by approximately 10 bps. Over the trailing one-year period, the Portfolio returned +5.4%, trailing the benchmark by 30 bps.
- Strong manager results within domestic equities was partially offset by unfavorable manager results within international equities as well as asset allocation positioning.
- The strongest performer on both an absolute and relative basis was small cap growth manager Conestoga (+9.4%), which outperformed its benchmark by 6.7%.
- Other notable relative outperformers included small cap value manager Wellington (+4.6%) and international equity manager BNY Mellon (+4.9%, formerly known as Walter Scott).

#### Second Quarter Funding News/Issues

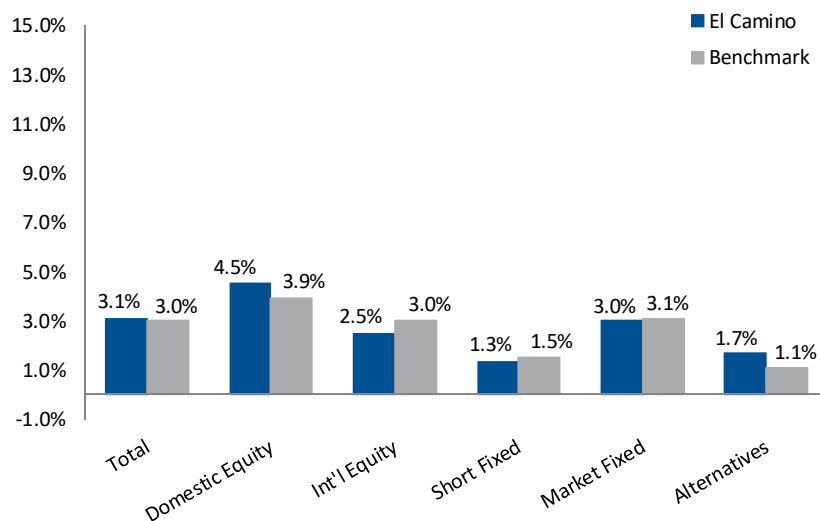
- A \$10 million investment in the Palestra Capital Long/Short Equity Hedge Fund was made April 1, 2019.
- A \$10 million investment in the Man Alternative Risk Premia Fund was made June 10, 2019.
- Oaktree distributed \$0.6 million.
- Walton Street VII distributed \$1.7 million.
- Walton Street VIII called \$0.8 million in capital, which was partially offset by a distribution from the fund, amounting to a total capital call of \$0.1 million. Walton Street VIII made an additional distribution of \$0.2 million.
- AG Realty Value Fund X made its first capital call of \$1.5 million.

# Cash Balance Plan Executive Summary

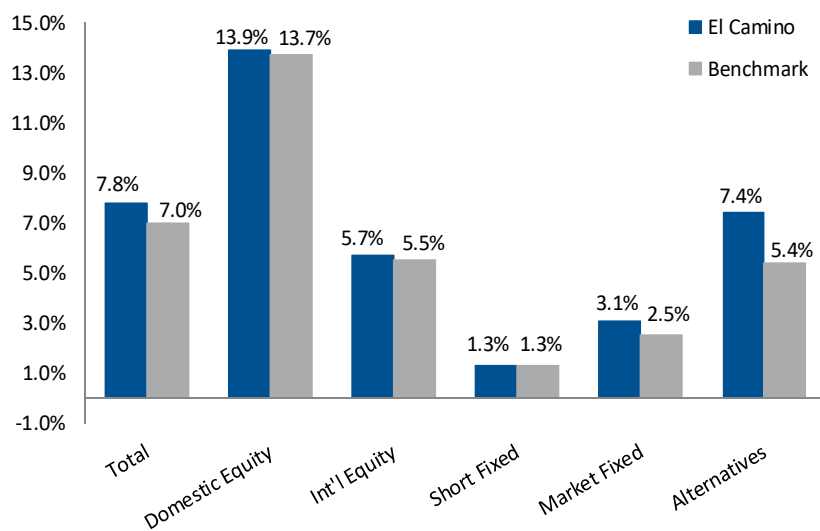
## Dashboard

As of June 30, 2019

### Performance: Most Recent Quarter



### Performance: Since Inception<sup>1</sup>



### Asset Allocation

Manager	Total Assets (\$ mil.)	Percent of Total	Target Allocation	Variance to Target	Target Range	Within Policy Range
Domestic Equity	\$ 94.2	33.9%	32.0%	+ 1.9%	27-37%	Yes
International Equity	\$ 48.9	17.6%	18.0%	- 0.4%	15-21%	Yes
Short-Duration Fixed	\$ 9.8	3.5%	5.0%	- 1.5%	0-8%	Yes
Market-Duration Fixed	\$ 73.6	26.5%	25.0%	+ 1.5%	20-30%	Yes
Alternatives	\$ 51.1	18.4%	20.0%	- 1.6%	17-23%	Yes
<b>Total</b>	<b>\$277.6</b>	<b>100.0%</b>				

### Portfolio Updates

#### Manager News/Issues

- The Cash Balance Plan returned +3.1% for the quarter, outperforming its benchmark by 10 bps. Over the trailing one-year period, the Plan returned +6.0%, outpacing its benchmark by approximately 10 bps.
- Relative outperformance during the second quarter was driven by manager results, particularly within the domestic equity and alternatives composites.
- The strongest performer on both an absolute and relative basis was small cap growth manager Conestoga (+9.4%), which outperformed its benchmark by 6.7%.
- Other notable relative outperformers included small cap value manager Wellington (+4.6%), international equity manager BNY Mellon (+4.9%, formerly known as Walter Scott), and equity-focused hedge fund of fund manager Pointer Offshore (+3.3%).

#### Second Quarter Funding News/Issues

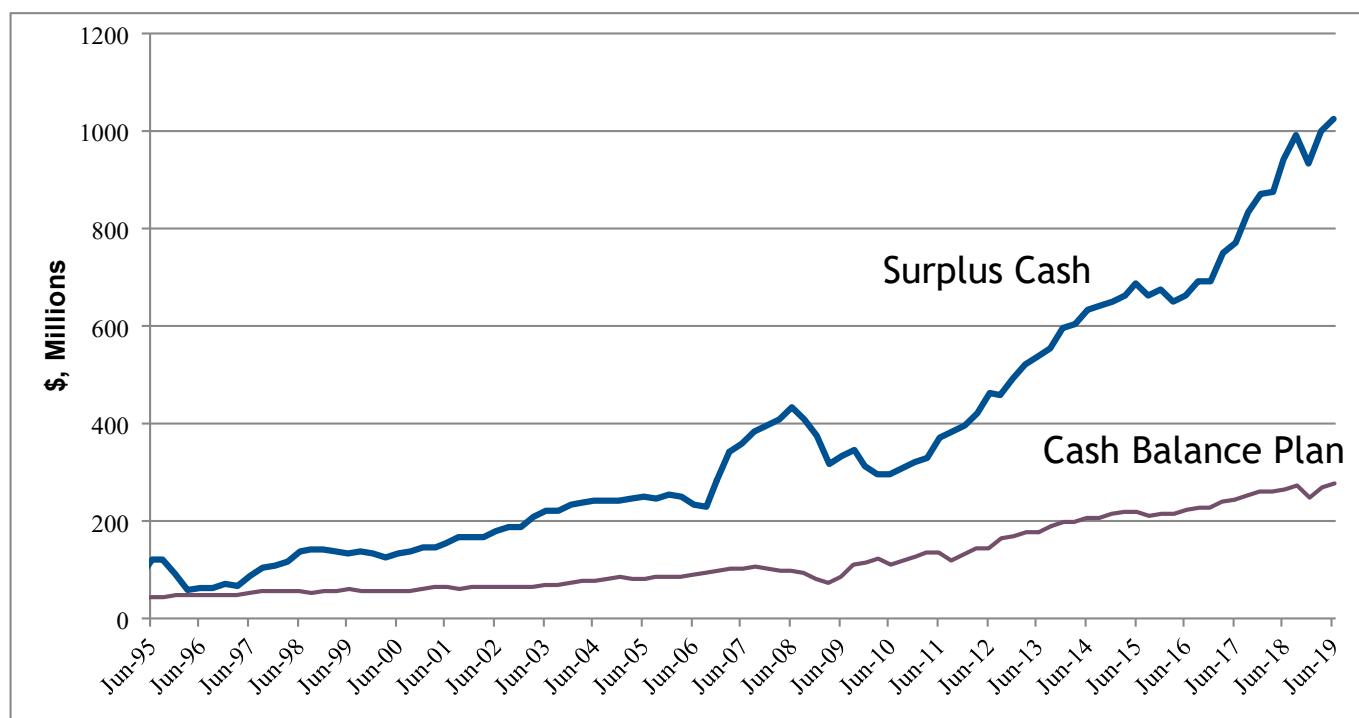
- Oaktree Real Estate VI distributed \$0.4 million.
- Walton Street VII distributed \$1.0 million.
- Walton Street VIII called \$0.6 million in capital, which was partially offset by a distribution from the fund, amounting to a total capital call of \$0.1 million. Walton Street VIII made an additional distribution during the quarter of \$0.2 million.
- An employer contribution of \$3.2 million was made during April.

<sup>1</sup> Reflects the date Pavilion's recommended portfolio was implemented (November 1, 2012).

# Calendar Year Market Value Reconciliation

As of June 30, 2019

\$ in Millions	Surplus Cash					Cash Balance Plan				
	2015	2016	2017	2018	YTD 2019	2015	2016	2017	2018	YTD 2019
<b>Beginning Market Value</b>	\$651.6	\$677.5	\$694.7	\$872.3	\$935.0	\$213.7	\$216.8	\$228.1	\$259.3	\$250.1
<b>Net Cash Flow</b>	\$27.0	(\$17.5)	\$89.0	\$83.1	\$2.8	\$0.6	\$0.4	(\$0.8)	(\$3.9)	(\$0.4)
Income	\$12.6	\$12.4	\$14.2	\$18.1	\$9.5	\$3.3	\$3.4	\$3.6	\$4.1	\$2.6
Realized Gain/(Loss)	\$4.4	\$7.1	\$9.6	\$14.1	\$5.6	\$2.0	\$4.5	\$2.2	\$10.0	\$1.3
Unrealized Gain/(Loss)	(\$18.0)	\$15.1	\$64.8	(\$52.6)	\$75.9	(\$2.7)	\$3.0	\$26.2	(\$19.4)	\$24.0
<b>Capital App/(Dep)</b>	(\$1.0)	\$34.6	\$88.6	(\$20.4)	\$90.9	\$2.5	\$10.9	\$32.0	(\$5.3)	\$27.9
<b>End of Period Market Value</b>	\$677.5	\$694.7	\$872.3	\$935.0	\$1,028.7	\$216.8	\$228.1	\$259.3	\$250.1	\$277.6
<b>Return Net of Fees</b>	-0.2%	5.2%	11.8%	-2.6%	9.8%	1.1%	4.9%	14.5%	-2.8%	11.8%



<sup>1</sup> Beginning 8/1/2012, Surplus Cash market values represent the Surplus Cash portfolio excluding District assets, with \$13.9 million of District assets shown as a cash outflow in the third quarter of 2012.

# Performance Summary

## Compliance Checklist

As of June 30, 2019

Fund Name	Qualitative Compliance	Performance Compliance	Short-Term			Longer-Term		
			3 Year Return	3 Year Rank	3 Year Sharpe	5 Year Return	5 Year Rank	5 Year Sharpe
Sands Large Cap Growth (Touchstone) - Both Plans	✓	✓	✓	✓	✗	✗	✗	✗
Barrow Hanley Large Cap Value - Surplus Cash	✓	✓	✓	✓	✓	✓	✓	✓
Barrow Hanley Large Cap Value - Pension	✓	✓	✓	✓	✓	✓	✓	✓
Wellington Small Cap Value - Surplus Cash	✓	✓	✗	✗	✗	✓	✓	✓
Wellington Small Cap Value - Pension	✓	✓	✗	✗	✗	✓	✓	✓
Conestoga Small-Cap Fund I - Both Plans	✓	✓	✓	✓	✓	✓	✓	✓
BNY Mellon International Stock - Both Plans	✓	✓	✓	✓	✓	✓	✓	✓
Causeway International Value - Both Plans	✓	✓	✗	✗	✗	✓	✗	✓
Harding Loevner Inst. Emerging Markets I - Both Plans	✓	✓	✗	✓	✗	✓	✓	✓
Barrow Hanley Short Fixed - Surplus Cash	✓	✓	✓	✗	✓	✓	✗	✓
Barrow Hanley Short Fixed - Pension	✓	✓	✗	✗	✗	✗	✗	✗
Dodge & Cox Fixed - Surplus Cash	✓	✓	✓	✓	✓	✓	✓	✓
Dodge & Cox Fixed - Pension	✓	✓	✓	✓	✓	✓	✓	✓
MetWest Fixed - Surplus Cash	✓	✓	✓	✗	✓	✓	✗	✓
Met West Fixed - Pension	✓	✓	✓	✗	✓	✗	✗	✓
Lighthouse Diversified - Pension	✓	✓	✗	--	✓	✓	--	✓
Pointer Offshore LTD - Pension	✓	✓	✓	--	✓	✓	--	✓

Legend	
✓	Goals met or no material change
✗	Goals not met or material changes

Portfolio	Score Factor	Comments
Sands Large Cap Growth (Touchstone) - Both Plans	Performance Compliance	Strong outperformance since 2016 is starting to offset the effect of strong style headwinds that Sands faced in 2016. This is the type of rebound we would expect from Sands; it is a high tracking error strategy that will have periods of sharp underperformance at times, but over the long-term we expect Sands to outperform.
Causeway International Value - Both Plans	Qualitative Compliance	Portfolio Manager Foster Corwith resigned from the firm in June. Causeway's other eight fundamental portfolio managers remain in place. This news does not impact our existing ratings for Causeway's fundamental strategies, as we continue to view Sarah Ketterer and Harry Hartford as the key drivers of the philosophy, process and portfolios.

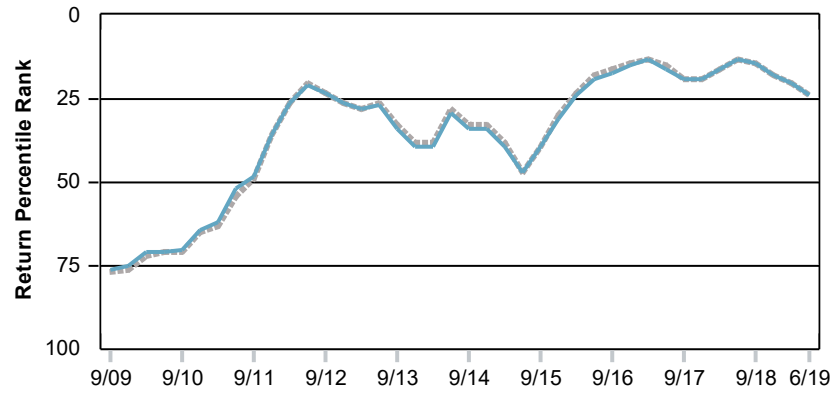
Performance compliance represents Pavilion's view on manager performance relative to Pavilion's expectations for performance, based primarily on manager investment philosophy and process. The three and five year return, rank and Sharpe ratio goals are as follows: the annualized return exceeds the benchmark's return, the manager's peer group rank is better than the 50th percentile, and the manager's Sharpe ratio exceeds the benchmark's.

# Manager Performance Evaluation

## Rolling 3 Year Rankings vs. Peers

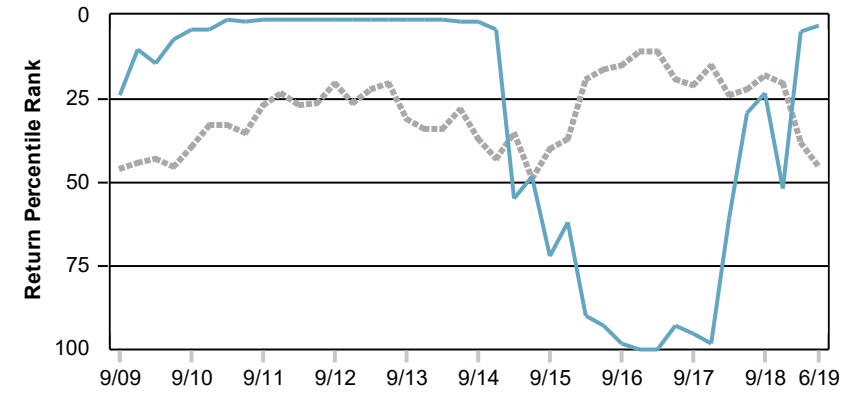
As of June 30, 2019

**Vanguard**



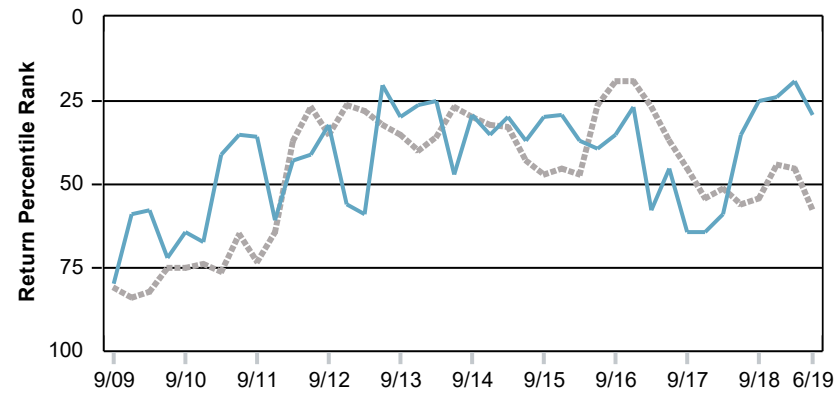
— Vanguard S&P 500 Index    ..... S&P 500

**Sands**



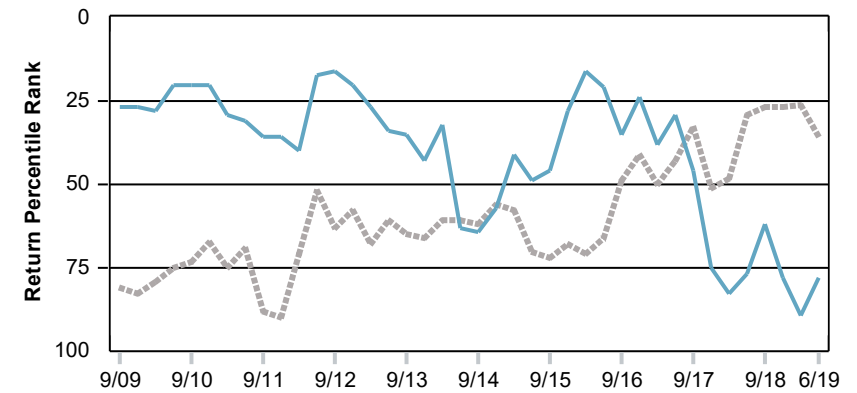
— Sands Large Cap Growth    ..... Russell 1000 Growth Index

**Barrow Hanley**



— Barrow Hanley Large Cap Value    ..... Russell 1000 Value Index

**Wellington**



— Wellington Small Cap Value    ..... Russell 2000 Value Index

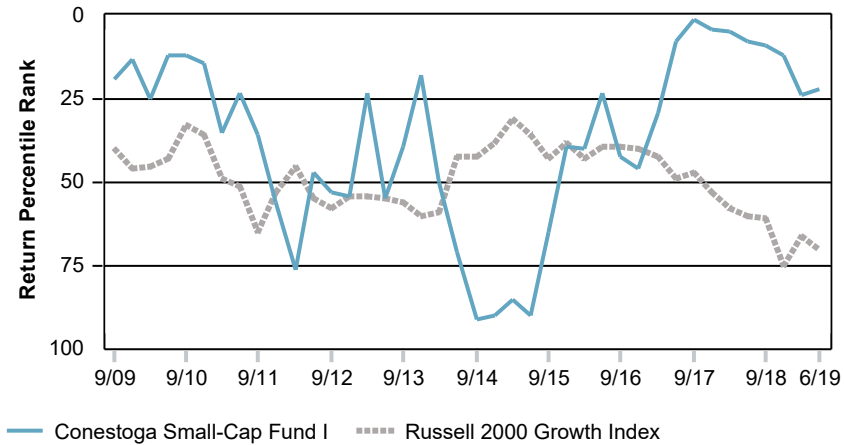


# Manager Performance Evaluation

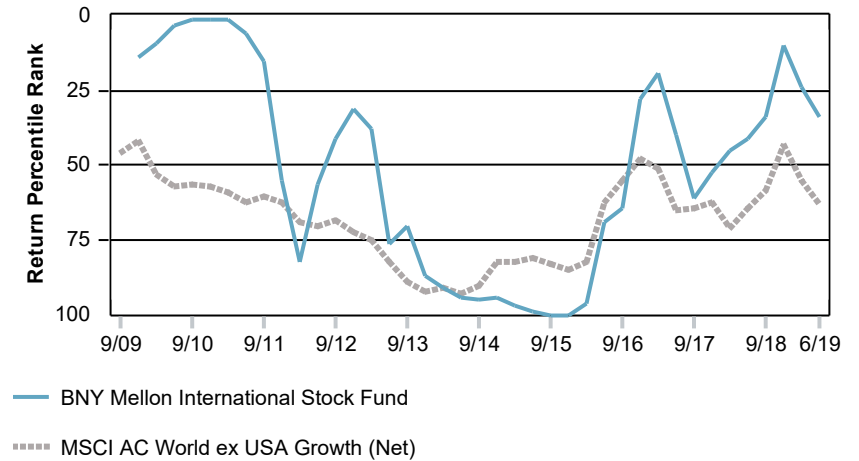
## Rolling 3 Year Rankings vs. Peers

As of June 30, 2019

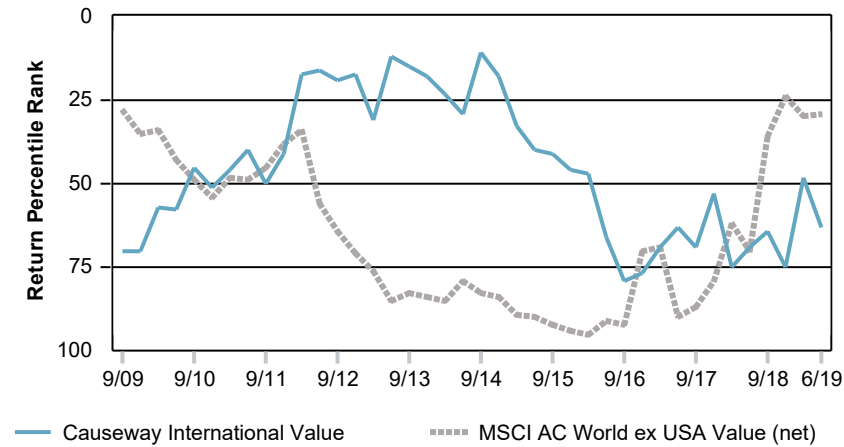
**Conestoga**



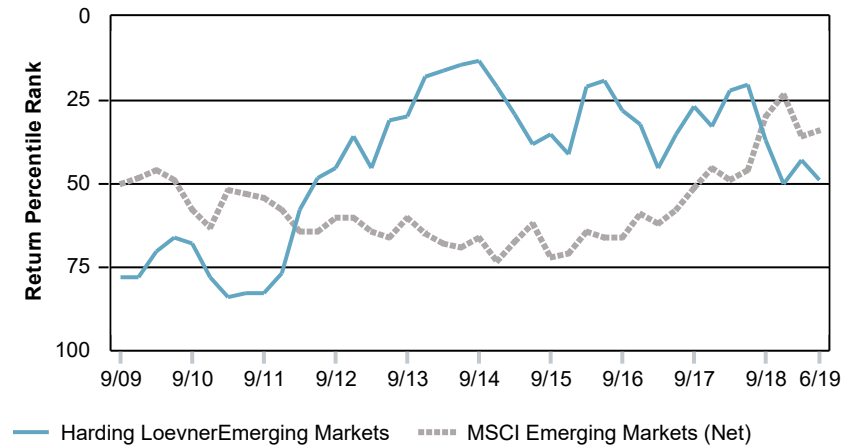
**BNY Mellon**



**Causeway**



**Harding Loevner**

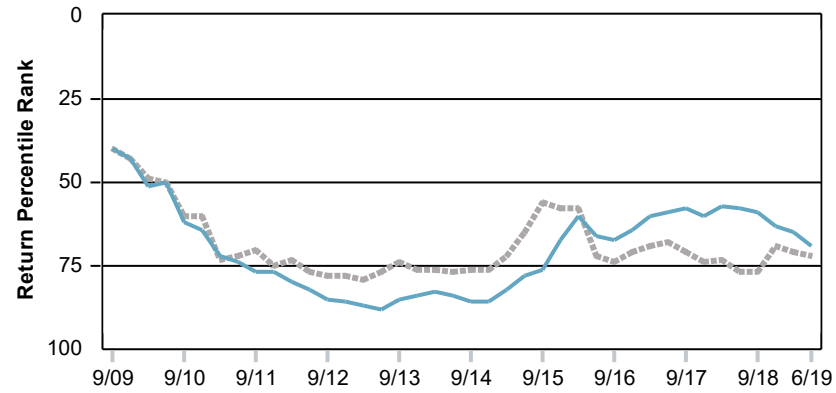


# Manager Performance Evaluation

## Rolling 3 Year Rankings vs. Peers

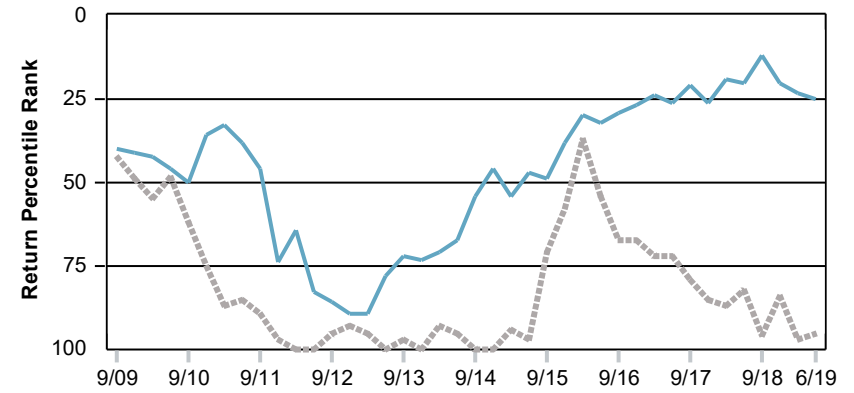
As of June 30, 2019

Barrow Hanley Fixed



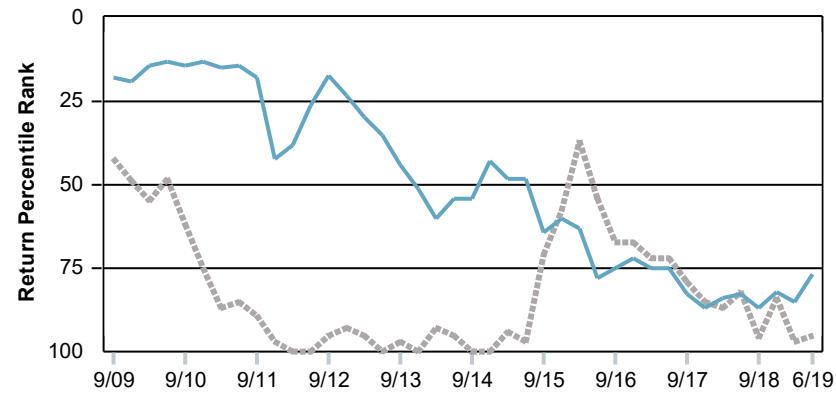
— Barrow Hanley Short Fixed      - - - - - Blmbg. Barc. 1-3 Year Gov/Credit

Dodge & Cox



— Dodge & Cox Fixed      - - - - - Blmbg. Barc. U.S. Aggregate

MetWest



— MetWest Fixed      - - - - - Blmbg. Barc. U.S. Aggregate

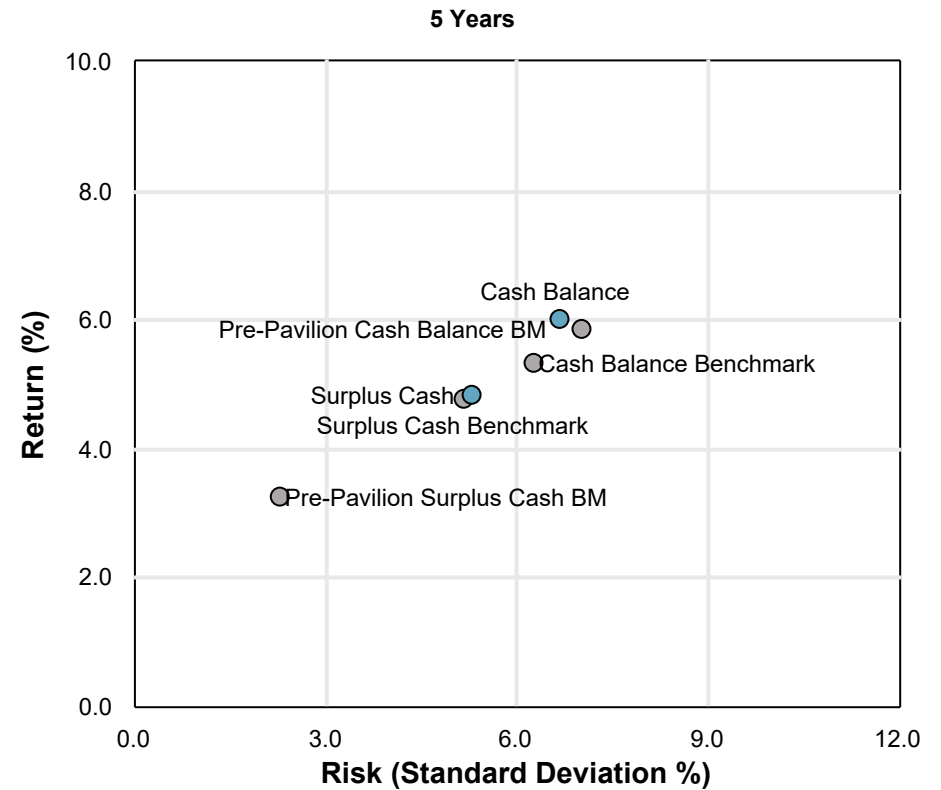
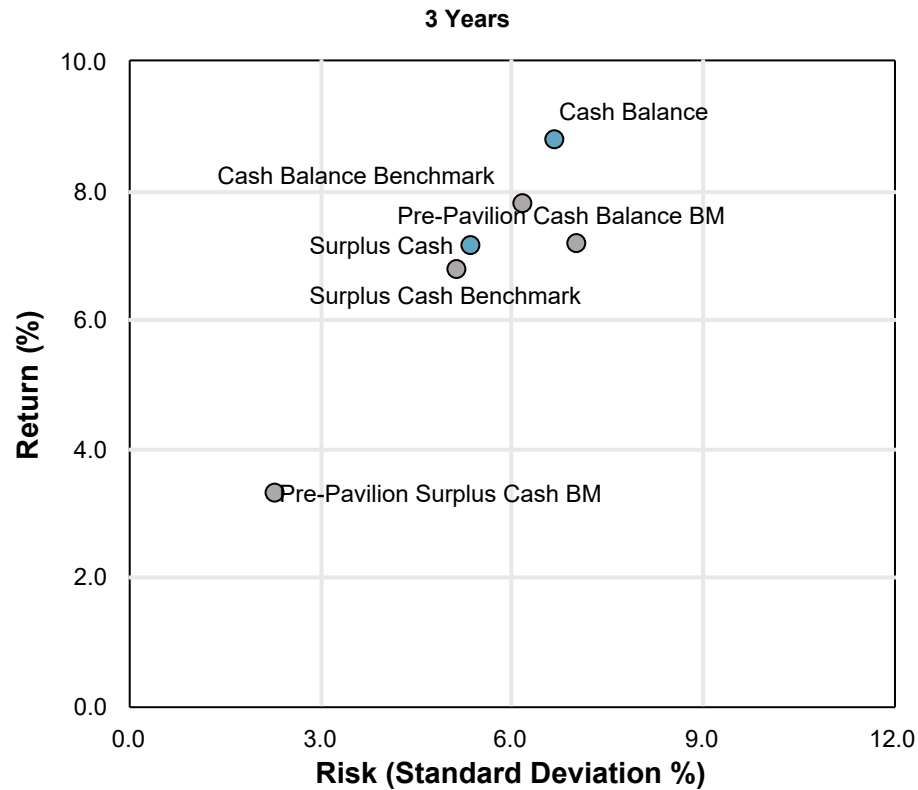
# Performance Summary



# Surplus Cash and Cash Balance Plan

## Risk and Return Summary (Net of Fees)

As of June 30, 2019



# Surplus Cash Portfolio ex District

## Composite Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Total Surplus Cash X District</b>	<b>1,028,698,236</b>	<b>100.0</b>	<b>2.9</b>	<b>9.8</b>	<b>5.4</b>	<b>5.4</b>	<b>7.2</b>	<b>4.8</b>	<b>6.1</b>	<b>5.6</b>	<b>6y 8m</b>
Surplus Cash Total Benchmark			2.8	9.8	5.7	5.7	6.8	4.8	6.0	5.5	
Pre-Pavilion Surplus Cash Total Benchmark			2.8	6.6	7.1	7.1	3.3	3.3	4.7	3.6	
<b>Total Surplus Cash X District X Privates</b>	<b>1,008,860,643</b>	<b>98.1</b>	<b>2.9</b>	<b>10.0</b>	<b>5.4</b>	<b>5.4</b>	<b>7.2</b>	<b>4.7</b>	<b>6.1</b>	<b>5.5</b>	<b>6y 8m</b>
Surplus Cash Total Benchmark x Privates			2.9	10.1	5.8	5.8	6.9	4.8	6.0	5.5	
<b>Total Equity Composite</b>	<b>422,223,497</b>	<b>41.0</b>	<b>3.8</b>	<b>17.7</b>	<b>6.1</b>	<b>6.1</b>	<b>12.7</b>	<b>7.7</b>	<b>12.4</b>	<b>11.0</b>	<b>6y 8m</b>
Total Equity Benchmark - Surplus			3.5	16.6	5.2	5.2	12.2	7.1	12.5	10.7	
<b>Domestic Equity Composite</b>	<b>275,254,882</b>	<b>26.8</b>	<b>4.6</b>	<b>19.3</b>	<b>8.8</b>	<b>8.8</b>	<b>15.1</b>	<b>10.1</b>	<b>14.2</b>	<b>13.7</b>	<b>6y 8m</b>
Domestic Equity Benchmark - Surplus			3.8	18.4	7.4	7.4	13.8	9.9	14.4	13.6	
<b>Large Cap Equity Composite</b>	<b>225,611,684</b>	<b>21.9</b>	<b>4.1</b>	<b>19.2</b>	<b>9.9</b>	<b>9.9</b>	<b>15.3</b>	<b>10.5</b>	<b>14.5</b>	<b>14.2</b>	<b>6y 8m</b>
Large Cap Equity Benchmark			4.3	18.7	10.2	10.2	14.2	10.6	14.7	14.0	
<b>Small Cap Equity Composite</b>	<b>49,643,198</b>	<b>4.8</b>	<b>7.1</b>	<b>19.4</b>	<b>4.0</b>	<b>4.0</b>	<b>14.1</b>	<b>8.9</b>	<b>-</b>	<b>12.2</b>	<b>6y 8m</b>
Small Cap Equity Benchmark			2.1	16.9	-3.4	-3.4	12.3	7.0	13.4	11.8	
<b>International Equity Composite</b>	<b>146,968,615</b>	<b>14.3</b>	<b>2.4</b>	<b>14.8</b>	<b>1.4</b>	<b>1.4</b>	<b>8.5</b>	<b>3.1</b>	<b>-</b>	<b>5.7</b>	<b>6y 8m</b>
MSCI AC World ex USA (Net)			3.0	13.6	1.3	1.3	9.4	2.2	6.5	5.5	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Surplus Cash Portfolio ex District

## Composite Asset Allocation & Performance

As of June 30, 2019

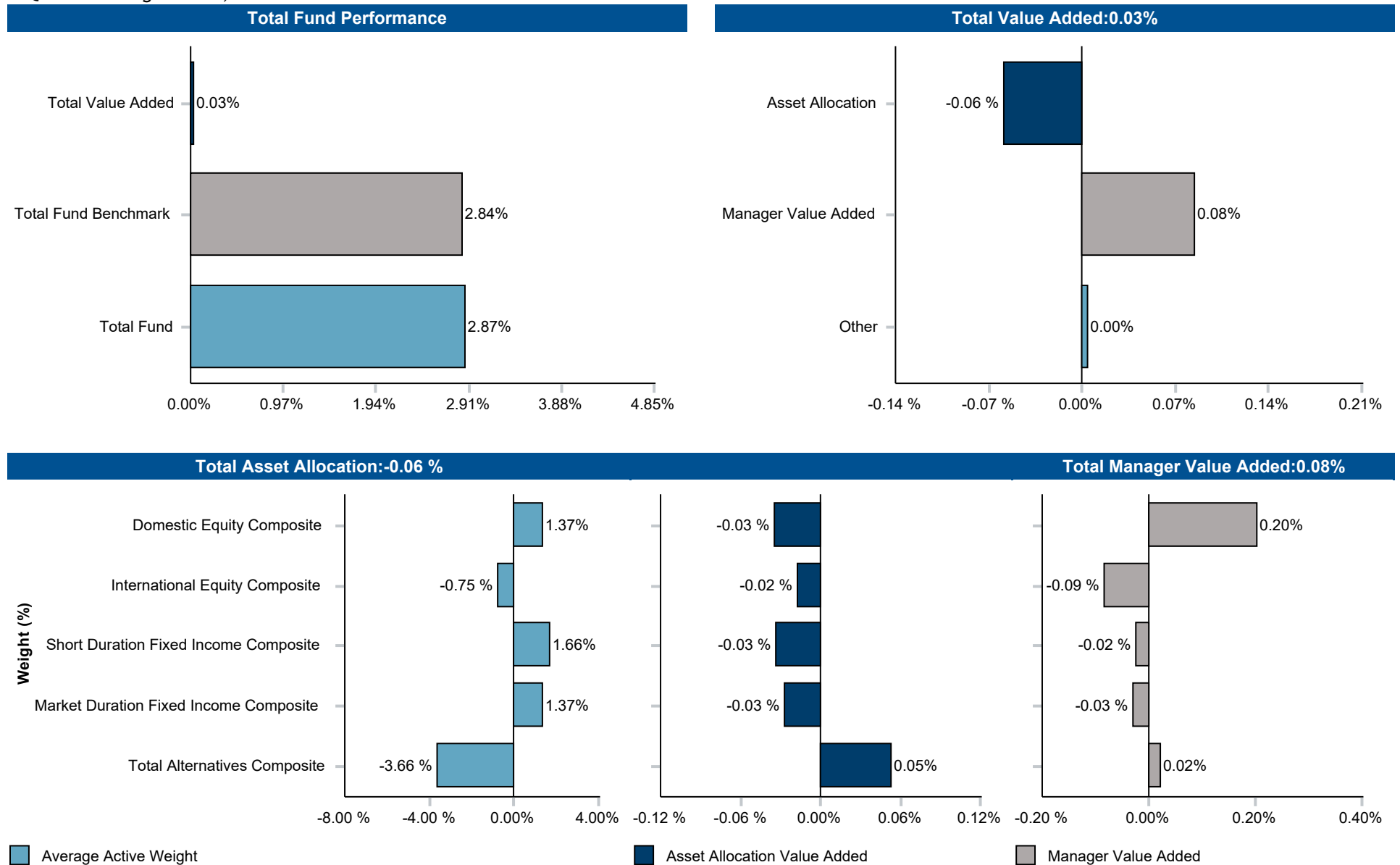
	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Total Fixed Income Composite</b>	<b>429,741,408</b>	<b>41.8</b>	<b>2.5</b>	<b>5.4</b>	<b>6.8</b>	<b>6.8</b>	<b>2.7</b>	<b>2.7</b>	<b>3.7</b>	<b>2.5</b>	<b>6y 8m</b>
Total Fixed Income Benchmark - Surplus			2.7	5.3	7.0	7.0	2.1	2.6	3.3	2.2	
 <b>Short Duration Fixed Income Composite</b>	 <b>107,069,923</b>	 <b>10.4</b>	 <b>1.3</b>	 <b>2.6</b>	 <b>3.9</b>	 <b>3.9</b>	 <b>1.5</b>	 <b>1.4</b>	 <b>2.5</b>	 <b>1.2</b>	 <b>6y 8m</b>
Short Duration Fixed Income Benchmark - Surplus			1.5	2.7	4.3	4.3	1.6	1.5	2.3	1.3	
 <b>Market Duration Fixed Income Composite</b>	 <b>322,671,484</b>	 <b>31.4</b>	 <b>3.0</b>	 <b>6.5</b>	 <b>7.8</b>	 <b>7.8</b>	 <b>3.2</b>	 <b>3.2</b>	 <b>4.9</b>	 <b>2.9</b>	 <b>6y 8m</b>
Blmbg. Barc. U.S. Aggregate			3.1	6.1	7.9	7.9	2.3	2.9	3.9	2.5	
 <b>Total Alternatives Composite</b>	 <b>176,733,331</b>	 <b>17.2</b>	 <b>1.4</b>	 <b>3.6</b>	 <b>0.5</b>	 <b>0.5</b>	 <b>4.7</b>	 <b>3.0</b>	 <b>-</b>	 <b>3.9</b>	 <b>6y 2m</b>
Total Alternatives Benchmark - Surplus			1.3	5.2	2.3	2.3	4.8	3.8	-	4.2	
 <b>Real Estate Composite</b>	 <b>21,337,593</b>	 <b>2.1</b>	 <b>-0.2</b>	 <b>0.7</b>	 <b>2.5</b>	 <b>2.5</b>	 <b>4.8</b>	 <b>8.8</b>	 <b>-</b>	 <b>9.0</b>	 <b>5y 10m</b>
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	8.9	
 <b>Hedge Fund Composite</b>	 <b>155,395,738</b>	 <b>15.1</b>	 <b>1.6</b>	 <b>4.1</b>	 <b>0.2</b>	 <b>0.2</b>	 <b>4.7</b>	 <b>1.7</b>	 <b>-</b>	 <b>2.8</b>	 <b>6y 2m</b>
HFRI Fund of Funds Composite Index			1.7	6.4	1.4	1.4	4.3	2.2	3.2	2.9	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Surplus Cash Portfolio ex District

## Attribution Analysis

1 Quarter Ending June 30, 2019



“Other” includes the effects of all other factors on the Fund’s relative return, including rebalancing and other trading activity.

# Surplus Cash Portfolio ex District

## Manager Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)									
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period	
Large-Cap Equity												
Vanguard S&P 500 Index	134,597,904	13.1	4.3 (42)	18.5 (34)	10.4 (32)	10.4 (32)	14.2 (25)	10.7 (20)	14.7 (17)	14.0 (-)	6y 8m	
S&P 500			4.3 (42)	18.5 (34)	10.4 (32)	10.4 (32)	14.2 (25)	10.7 (20)	14.7 (16)	14.0 (-)		
eV Large Cap Core Median			4.0	17.2	8.1	8.1	12.9	9.3	13.9	-		
Sands Large Cap Growth (Touchstone)	47,727,957	4.6	4.2 (66)	26.9 (7)	11.3 (46)	11.3 (46)	22.9 (4)	12.2 (53)	18.5 (3)	16.0 (-)	6y 8m	
Russell 1000 Growth Index			4.6 (56)	21.5 (52)	11.6 (44)	11.6 (44)	18.1 (46)	13.4 (28)	16.3 (24)	16.1 (-)		
eV Large Cap Growth Median			4.9	21.7	10.8	10.8	17.7	12.4	15.3	-		
Barrow Hanley Large Cap Value	43,285,824	4.2	3.2 (59)	13.7 (75)	6.7 (39)	6.7 (39)	11.7 (30)	8.0 (32)	13.2 (31)	9.1 (-)	18y 11m	
Russell 1000 Value Index			3.8 (41)	16.2 (35)	8.5 (29)	8.5 (29)	10.2 (59)	7.5 (41)	13.2 (32)	7.1 (-)		
eV Large Cap Value Median			3.5	15.2	5.8	5.8	10.5	7.1	12.7	-		
Small-Cap Equity												
Wellington Small Cap Value	23,459,773	2.3	4.6 (13)	15.2 (46)	-2.9 (31)	-2.9 (31)	7.2 (79)	6.0 (31)	13.2 (39)	10.2 (-)	6y 8m	
Russell 2000 Value Index			1.4 (67)	13.5 (68)	-6.2 (60)	-6.2 (60)	9.8 (37)	5.4 (45)	12.4 (62)	10.1 (-)		
eV Small Cap Value Median			2.0	14.9	-5.2	-5.2	8.8	5.2	12.9	-		
Conestoga Small Cap Growth	26,183,425	2.5	9.4 (7)	23.5 (51)	10.7 (23)	10.7 (23)	21.5 (23)	14.5 (10)	16.5 (31)	21.5 (-)	3y	
Russell 2000 Growth Index			2.7 (78)	20.4 (66)	-0.5 (76)	-0.5 (76)	14.7 (71)	8.6 (75)	14.4 (78)	14.7 (-)		
eV Small Cap Growth Median			5.2	23.5	5.3	5.3	17.4	10.5	15.6	-		
International Equity												
Causeway International Value	47,823,800	4.6	0.1 (88)	10.4 (59)	-4.7 (72)	-4.7 (72)	6.8 (64)	0.5 (69)	7.3 (38)	-7.5 (-)	1y 2m	
MSCI AC World ex USA (Net)			3.0 (18)	13.6 (11)	1.3 (18)	1.3 (18)	9.4 (24)	2.2 (28)	6.5 (56)	-2.5 (-)		
MSCI AC World ex USA Value (net)			1.6 (54)	10.0 (63)	-0.1 (25)	-0.1 (25)	8.9 (30)	0.3 (73)	5.4 (83)	-5.4 (-)		
Custom Non US Diversified Value Median			1.7	11.1	-2.9	-2.9	7.7	1.1	6.7	-		
BNY Mellon International Stock Fund	61,984,071	6.0	4.9 (59)	17.6 (71)	8.3 (6)	8.3 (6)	11.6 (35)	6.0 (27)	8.1 (74)	7.1 (-)	6y 8m	
MSCI AC World ex USA (Net)			3.0 (92)	13.6 (100)	1.3 (54)	1.3 (54)	9.4 (74)	2.2 (100)	6.5 (98)	5.5 (-)		
MSCI AC World ex USA Growth (Net)			4.4 (71)	17.2 (78)	2.6 (43)	2.6 (43)	9.8 (64)	4.0 (63)	7.6 (84)	6.8 (-)		
Custom Non US Diversified Growth Median			5.5	19.2	1.9	1.9	10.5	4.5	9.0	-		
Harding Loevner Emerging Markets	37,160,744	3.6	1.3 (49)	16.1 (13)	-1.3 (71)	-1.3 (71)	9.5 (50)	2.8 (43)	7.3 (30)	9.5 (-)	3y 10m	
MSCI Emerging Markets (Net)			0.6 (70)	10.6 (64)	1.2 (50)	1.2 (50)	10.7 (35)	2.5 (50)	5.8 (68)	9.3 (-)		
eV International Emerging Equity Median			1.3	12.1	1.1	1.1	9.4	2.5	6.5	-		

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.



# Surplus Cash Portfolio ex District

## Manager Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
Short Duration Fixed Income											
Barrow Hanley Short Fixed	105,378,955	10.2	1.4 (69)	2.8 (63)	4.1 (54)	4.1 (54)	1.6 (70)	1.5 (67)	1.5 (81)	4.6 (-)	28y 3m
Blmbg. Barc. 1-3 Year Gov/Credit			1.5 (51)	2.7 (70)	4.3 (49)	4.3 (49)	1.6 (73)	1.5 (72)	1.6 (78)	4.1 (-)	
eV US Short Fixed Income Median			1.5	2.9	4.2	4.2	1.9	1.7	2.2	-	
Cash Composite	1,690,968	0.2	-0.1	0.2	0.7	0.7	0.5	0.4	-	0.1	6y 8m
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	0.7	
Market Duration Fixed Income											
Dodge & Cox Fixed	159,308,848	15.5	2.8 (85)	6.6 (62)	7.6 (72)	7.6 (72)	3.7 (26)	3.5 (28)	5.0 (65)	3.4 (-)	6y 8m
Blmbg. Barc. U.S. Aggregate			3.1 (64)	6.1 (85)	7.9 (61)	7.9 (61)	2.3 (96)	2.9 (76)	3.9 (99)	2.5 (-)	
eV Core Plus Fixed Income Median			3.2	6.9	8.0	8.0	3.2	3.2	5.3	-	
MetWest Fixed	149,308,252	14.5	3.2 (51)	6.3 (80)	8.0 (44)	8.0 (44)	2.7 (78)	3.0 (74)	5.6 (34)	2.6 (-)	6y 8m
Blmbg. Barc. U.S. Aggregate			3.1 (64)	6.1 (85)	7.9 (61)	7.9 (61)	2.3 (96)	2.9 (76)	3.9 (99)	2.5 (-)	
eV Core Plus Fixed Income Median			3.2	6.9	8.0	8.0	3.2	3.2	5.3	-	
Met West Total Return Bond Plan - CONCERN	14,054,384	1.4	3.3 (30)	6.5 (64)	8.2 (34)	8.2 (34)	2.7 (78)	3.0 (71)	-	3.4 (-)	3y 5m
Blmbg. Barc. U.S. Aggregate			3.1 (64)	6.1 (85)	7.9 (61)	7.9 (61)	2.3 (96)	2.9 (76)	3.9 (99)	3.2 (-)	
eV Core Plus Fixed Income Median			3.2	6.9	8.0	8.0	3.2	3.2	5.3	-	
Real Estate											
AG Realty Value Fund X, LP	1,500,000	0.1	-	-	-	-	-	-	-	-	0y
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	-	
Oaktree Real Estate Opportunities Fund VI	5,717,628	0.6	-0.6	0.4	1.2	1.2	3.6	7.4	-	7.4	5y 10m
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	8.9	
Walton Street Real Estate Fund VII, L.P.	5,523,489	0.5	0.0	0.0	-1.5	-1.5	5.2	9.8	-	12.3	5y 8m
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	8.8	
Walton Street Real Estate Fund VIII, L.P.	8,596,476	0.8	0.0	1.6	6.9	6.9	-	-	-	12.6	2y 1m
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	6.1	
Hedge Funds											
Hedge Fund Composite	155,395,738	15.1	1.6	4.1	0.2	0.2	4.7	1.7	-	2.8	6y 2m
HFRI Fund of Funds Composite Index			1.7	6.4	1.4	1.4	4.3	2.2	3.2	2.9	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Surplus Cash Portfolio ex District

## Manager Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Total Plan</b>											
Total Surplus Cash X District	1,028,698,236	100.0	2.9	9.8	5.4	5.4	7.2	4.8	6.1	5.6	6y 8m
Total Surplus Cash Benchmark			2.8	9.8	5.7	5.7	6.8	4.8	6.0	5.5	
Pre-Pavilion Total Surplus Cash Benchmark			2.8	6.6	7.1	7.1	3.3	3.3	4.7	3.6	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Cash Balance Plan

## Composite Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Total Cash Balance Plan</b>	<b>277,589,098</b>	<b>100.0</b>	<b>3.1</b>	<b>11.8</b>	<b>6.0</b>	<b>6.0</b>	<b>8.8</b>	<b>6.0</b>	<b>9.5</b>	<b>7.8</b>	<b>6y 8m</b>
Total Cash Balance Plan Benchmark			3.0	11.0	5.9	5.9	7.8	5.3	8.9	7.0	
Pre-Pavilion Total Cash Balance Plan Benchmark			3.7	12.3	8.7	8.7	7.2	5.8	9.6	8.1	
<b>Total Cash Balance Plan X Private Structures</b>	<b>264,275,975</b>	<b>95.2</b>	<b>3.3</b>	<b>12.5</b>	<b>6.2</b>	<b>6.2</b>	<b>9.1</b>	<b>5.8</b>	<b>9.4</b>	<b>7.6</b>	<b>6y 8m</b>
Cash Balance Plan Total X Privates Benchmark			3.2	11.6	5.8	5.8	7.8	5.1	8.8	6.9	
<b>Total Equity Composite</b>	<b>143,031,853</b>	<b>51.5</b>	<b>3.8</b>	<b>17.7</b>	<b>6.3</b>	<b>6.3</b>	<b>13.0</b>	<b>7.7</b>	<b>12.6</b>	<b>11.0</b>	<b>6y 8m</b>
Total Equity Benchmark			3.6	16.7	5.6	5.6	12.3	7.2	12.5	10.7	
<b>Domestic Equity Composite</b>	<b>94,151,083</b>	<b>33.9</b>	<b>4.5</b>	<b>19.4</b>	<b>8.8</b>	<b>8.8</b>	<b>15.5</b>	<b>10.3</b>	<b>14.6</b>	<b>13.9</b>	<b>6y 8m</b>
Domestic Equity Benchmark			3.9	18.4	8.0	8.0	13.9	10.1	14.5	13.7	
Large Cap Equity Composite	79,322,556	28.6	4.0	19.4	9.7	9.7	15.8	10.6	14.8	14.2	6y 8m
Large Cap Equity Benchmark			4.3	18.7	10.2	10.2	14.2	10.6	14.7	14.0	
Small Cap Equity Composite	14,828,527	5.3	7.0	19.3	3.8	3.8	14.0	8.9	-	12.1	6y 8m
Small Cap Equity Benchmark			2.1	16.9	-3.4	-3.4	12.3	7.0	13.4	11.8	
<b>International Equity Composite</b>	<b>48,880,770</b>	<b>17.6</b>	<b>2.5</b>	<b>14.6</b>	<b>1.7</b>	<b>1.7</b>	<b>8.5</b>	<b>3.0</b>	<b>-</b>	<b>5.7</b>	<b>6y 8m</b>
MSCI AC World ex USA (Net)			3.0	13.6	1.3	1.3	9.4	2.2	6.5	5.5	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Cash Balance Plan

## Composite Asset Allocation & Performance

As of June 30, 2019

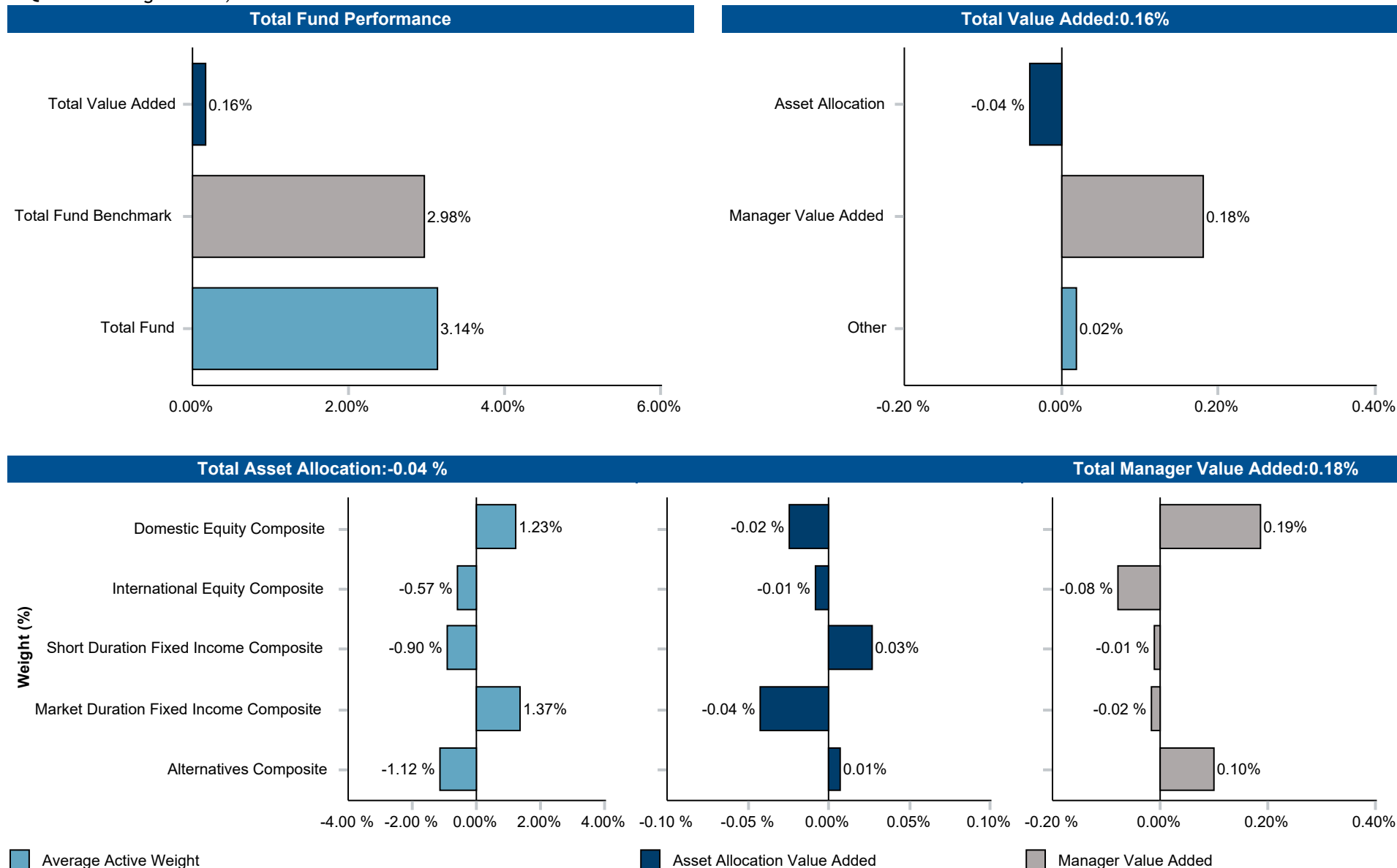
	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Total Fixed Income Composite</b>	<b>83,428,857</b>	<b>30.1</b>	<b>2.8</b>	<b>6.0</b>	<b>7.4</b>	<b>7.4</b>	<b>3.0</b>	<b>2.9</b>	<b>4.8</b>	<b>2.8</b>	<b>6y 8m</b>
Total Fixed Income Benchmark			2.8	5.5	7.3	7.3	2.2	2.6	3.7	2.2	
 <b>Short Duration Fixed Income Composite</b>	 <b>9,795,564</b>	 <b>3.5</b>	 <b>1.3</b>	 <b>2.6</b>	 <b>3.9</b>	 <b>3.9</b>	 <b>1.8</b>	 <b>1.5</b>	 <b>-</b>	 <b>1.3</b>	 <b>6y 8m</b>
Short Duration Fixed Income Benchmark			1.5	2.7	4.3	4.3	1.6	1.5	0.9	1.3	
 <b>Market Duration Fixed Income Composite</b>	 <b>73,633,292</b>	 <b>26.5</b>	 <b>3.0</b>	 <b>6.6</b>	 <b>7.9</b>	 <b>7.9</b>	 <b>3.2</b>	 <b>3.1</b>	 <b>5.0</b>	 <b>3.1</b>	 <b>6y 8m</b>
Blmbg. Barc. U.S. Aggregate			3.1	6.1	7.9	7.9	2.3	2.9	3.9	2.5	
 <b>Total Alternatives Composite</b>	 <b>51,128,388</b>	 <b>18.4</b>	 <b>1.7</b>	 <b>6.6</b>	 <b>2.3</b>	 <b>2.3</b>	 <b>5.8</b>	 <b>5.8</b>	 <b>-</b>	 <b>7.4</b>	 <b>6y 8m</b>
Total Alternatives Benchmark			1.1	4.8	2.6	2.6	5.0	4.3	-	5.4	
 <b>Hedge Fund of Fund Composite</b>	 <b>37,815,265</b>	 <b>13.6</b>	 <b>2.3</b>	 <b>9.0</b>	 <b>1.9</b>	 <b>1.9</b>	 <b>6.2</b>	 <b>4.2</b>	 <b>-</b>	 <b>6.3</b>	 <b>6y 8m</b>
HFRI Fund of Funds Composite Index			1.7	6.4	1.4	1.4	4.3	2.2	3.2	3.6	
 <b>Real Estate Composite</b>	 <b>13,313,123</b>	 <b>4.8</b>	 <b>0.0</b>	 <b>1.0</b>	 <b>3.1</b>	 <b>3.1</b>	 <b>5.0</b>	 <b>8.9</b>	 <b>-</b>	 <b>9.1</b>	 <b>6y 6m</b>
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	9.1	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Cash Balance Plan

## Attribution Analysis

1 Quarter Ending June 30, 2019



“Other” includes the effects of all other factors on the Fund’s relative return, including rebalancing and other trading activity.

# Cash Balance Plan

## Manager Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Large-Cap Equity</b>											
Vanguard Institutional Index Fund	38,084,571	13.7	4.3 (42)	18.5 (34)	10.4 (32)	10.4 (32)	14.2 (25)	10.7 (20)	14.7 (17)	14.0 (-)	6y 8m
S&P 500			4.3 (42)	18.5 (34)	10.4 (32)	10.4 (32)	14.2 (25)	10.7 (20)	14.7 (16)	14.0 (-)	
<i>eV Large Cap Core Median</i>			4.0	17.2	8.1	8.1	12.9	9.3	13.9	-	
Sands Large Cap Growth (Touchstone)	20,954,919	7.5	4.2 (66)	26.9 (7)	11.3 (46)	11.3 (46)	22.9 (4)	12.2 (53)	18.5 (3)	16.0 (-)	6y 8m
Russell 1000 Growth Index			4.6 (56)	21.5 (52)	11.6 (44)	11.6 (44)	18.1 (46)	13.4 (28)	16.3 (24)	16.1 (-)	
<i>eV Large Cap Growth Median</i>			4.9	21.7	10.8	10.8	17.7	12.4	15.3	-	
Barrow Hanley Large Cap Value	20,283,066	7.3	3.3 (57)	13.9 (70)	7.0 (37)	7.0 (37)	12.0 (25)	8.3 (28)	13.4 (27)	12.5 (-)	6y 8m
Russell 1000 Value Index			3.8 (41)	16.2 (35)	8.5 (29)	8.5 (29)	10.2 (59)	7.5 (41)	13.2 (32)	11.8 (-)	
<i>eV Large Cap Value Median</i>			3.5	15.2	5.8	5.8	10.5	7.1	12.7	-	
<b>Small-Cap Equity</b>											
Wellington Small Cap Value	7,276,330	2.6	4.6 (13)	15.2 (46)	-3.0 (32)	-3.0 (32)	7.0 (81)	6.0 (32)	13.1 (40)	10.1 (-)	6y 8m
Russell 2000 Value Index			1.4 (67)	13.5 (68)	-6.2 (60)	-6.2 (60)	9.8 (37)	5.4 (45)	12.4 (62)	10.1 (-)	
<i>eV Small Cap Value Median</i>			2.0	14.9	-5.2	-5.2	8.8	5.2	12.9	-	
Conestoga Small Cap Growth	7,552,196	2.7	9.4 (7)	23.5 (51)	10.7 (23)	10.7 (23)	21.5 (23)	14.5 (10)	16.5 (31)	21.5 (-)	3y
Russell 2000 Growth Index			2.7 (78)	20.4 (66)	-0.5 (76)	-0.5 (76)	14.7 (71)	8.6 (75)	14.4 (78)	14.7 (-)	
<i>eV Small Cap Growth Median</i>			5.2	23.5	5.3	5.3	17.4	10.5	15.6	-	
<b>International Equity</b>											
Causeway International Value	18,418,137	6.6	0.1 (88)	10.4 (59)	-4.7 (72)	-4.7 (72)	6.8 (64)	0.5 (69)	7.3 (38)	-7.5 (-)	1y 2m
MSCI AC World ex USA (Net)			3.0 (18)	13.6 (11)	1.3 (18)	1.3 (18)	9.4 (24)	2.2 (28)	6.5 (56)	-2.5 (-)	
MSCI AC World ex USA Value (net)			1.6 (54)	10.0 (63)	-0.1 (25)	-0.1 (25)	8.9 (30)	0.3 (73)	5.4 (83)	-5.4 (-)	
<i>Custom Non US Diversified Value Median</i>			1.7	11.1	-2.9	-2.9	7.7	1.1	6.7	-	
BNY Mellon International Stock Fund	23,712,962	8.5	4.9 (59)	17.6 (71)	8.3 (6)	8.3 (6)	11.6 (35)	6.0 (27)	8.1 (74)	7.1 (-)	6y 8m
MSCI AC World ex USA (Net)			3.0 (92)	13.6 (100)	1.3 (54)	1.3 (54)	9.4 (74)	2.2 (100)	6.5 (98)	5.5 (-)	
MSCI AC World ex USA Growth (Net)			4.4 (71)	17.2 (78)	2.6 (43)	2.6 (43)	9.8 (64)	4.0 (63)	7.6 (84)	6.8 (-)	
<i>Custom Non US Diversified Growth Median</i>			5.5	19.2	1.9	1.9	10.5	4.5	9.0	-	
Harding Loevner Inst. Emerging Markets I	6,749,672	2.4	1.3 (49)	16.1 (13)	-1.3 (71)	-1.3 (71)	9.5 (50)	2.8 (43)	7.3 (30)	8.0 (-)	2y 8m
MSCI Emerging Markets (Net)			0.6 (70)	10.6 (64)	1.2 (50)	1.2 (50)	10.7 (35)	2.5 (50)	5.8 (68)	8.4 (-)	
<i>eV International Emerging Equity Median</i>			1.3	12.1	1.1	1.1	9.4	2.5	6.5	-	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Cash Balance Plan

## Manager Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)								
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Period
<b>Short Duration Fixed Income</b>											
Barrow Hanley Short Fixed	6,423,704	2.3	1.5 (57)	2.9 (53)	4.2 (51)	4.2 (51)	1.6 (75)	1.4 (79)	1.5 (84)	1.2 (-)	6y 8m
Blmbg. Barc. 1-3 Year Gov/Credit			1.5 (51)	2.7 (70)	4.3 (49)	4.3 (49)	1.6 (73)	1.5 (72)	1.6 (78)	1.3 (-)	
<i>eV US Short Fixed Income Median</i>			1.5	2.9	4.2	4.2	1.9	1.7	2.2	-	
Cash Composite	3,371,861	1.2	0.6	1.2	2.1	2.1	2.5	2.6	-	2.0	6y 8m
90 Day U.S. Treasury Bill			0.6	1.2	2.3	2.3	1.4	0.9	0.5	0.7	
<b>Market Duration Fixed Income</b>											
Dodge & Cox Income Fund	36,625,022	13.2	2.8 (86)	6.6 (62)	7.6 (74)	7.6 (74)	3.7 (26)	3.3 (38)	4.9 (71)	6.7 (-)	30y 6m
Blmbg. Barc. U.S. Aggregate			3.1 (64)	6.1 (85)	7.9 (61)	7.9 (61)	2.3 (96)	2.9 (76)	3.9 (99)	6.2 (-)	
<i>eV Core Plus Fixed Income Median</i>			3.2	6.9	8.0	8.0	3.2	3.2	5.3	-	
Met West Total Return Fund Pl	37,008,271	13.3	3.3 (30)	6.5 (64)	8.3 (34)	8.3 (34)	2.7 (80)	2.9 (76)	5.9 (23)	3.0 (-)	6y 8m
Blmbg. Barc. U.S. Aggregate			3.1 (64)	6.1 (85)	7.9 (61)	7.9 (61)	2.3 (96)	2.9 (76)	3.9 (99)	2.5 (-)	
<i>eV Core Plus Fixed Income Median</i>			3.2	6.9	8.0	8.0	3.2	3.2	5.3	-	
<b>Hedge Fund of Funds</b>											
Lighthouse Diversified	18,797,237	6.8	1.3	4.7	1.2	1.2	3.5	3.0	5.1	4.8	6y 8m
HFRI Fund of Funds Composite Index			1.7	6.4	1.4	1.4	4.3	2.2	3.2	3.6	
Pointer Offshore LTD	19,018,028	6.9	3.3	13.7	2.6	2.6	9.4	5.6	8.3	7.9	6y 6m
HFRI Fund of Funds Composite Index			1.7	6.4	1.4	1.4	4.3	2.2	3.2	3.4	
<b>Real Estate</b>											
Oaktree RE Opportunities Fund VI	3,394,156	1.2	0.0	1.0	1.8	1.8	4.0	7.7	-	8.1	6y 5m
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	9.1	
Walton Street Real Estate Fund VII, L.P.	3,306,292	1.2	0.0	0.0	-1.5	-1.5	5.3	9.8	-	11.7	6y
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	8.9	
Walton Street Real Estate Fund VIII, L.P.	6,612,674	2.4	0.0	1.6	6.9	6.9	-	-	-	12.6	2y 1m
NCREIF Property Index			0.0	1.8	4.9	4.9	6.4	8.5	9.1	6.1	
<b>Total Plan</b>											
Total Cash Balance Plan	277,589,098	100.0	3.1	11.8	6.0	6.0	8.8	6.0	9.5	7.8	6y 8m
Total Cash Balance Plan Benchmark			3.0	11.0	5.9	5.9	7.8	5.3	8.9	7.0	
Pre-Pavilion Total Cash Balance Plan Benchmark			3.7	12.3	8.7	8.7	7.2	5.8	9.6	8.1	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. Peer group percentile ranks are shown in parentheses.

# Private Real Estate Summary

As of June 30, 2019 (\$ in Millions)

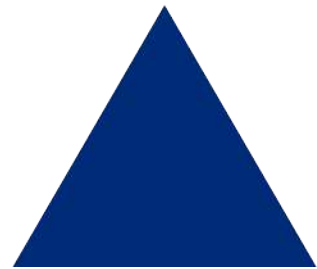
Partnership	Vintage Year	Committed Capital	Paid-in Capital	Unfunded Commitment	Market Value <sup>1</sup>	Distributions	Total Value	Net IRR <sup>2</sup>	TV / PI	D / PI
<b>Surplus Cash</b>										
Oaktree RE Opportunities VI	2012	\$14.0	\$14.0	\$0.0	\$5.7	\$14.1	\$19.8	9.8%	1.4	1.0
Walton Street RE Fund VII	2012	\$14.0	\$12.3	\$1.7	\$5.5	\$10.6	\$16.1	12.1%	1.3	0.9
Walton Street RE Fund VIII	2017	\$13.0	\$8.3	\$4.7	\$8.6	\$0.9	\$9.4	10.9%	1.1	0.1
Angelo Gordon Realty Value Fund X	2018	\$20.0	\$1.5	\$18.5	\$1.5	\$0.0	\$1.5	n/a	n/a	n/a
Total		\$61.0	\$36.1	\$24.9	\$21.3	\$25.5	\$45.4		1.3	0.7
<b>Cash Balance</b>										
Oaktree RE Opportunities VI	2012	\$8.4	\$8.4	\$0.0	\$3.4	\$8.8	\$12.2	9.5%	1.4	1.0
Walton Street RE Fund VII	2012	\$8.4	\$7.7	\$0.7	\$3.3	\$6.0	\$9.3	12.0%	1.2	0.8
Walton Street RE Fund VIII	2017	\$10.0	\$6.4	\$3.6	\$6.6	\$0.6	\$7.3	10.8%	1.1	0.1
Total		\$26.8	\$22.4	\$4.4	\$13.3	\$15.4	\$28.7		1.3	0.7

<sup>1</sup> If a market value has not yet been released for a particular fund, the previous quarter's value is adjusted according to subsequent contributions and distributions.

<sup>2</sup> Net IRR is through the previous quarter end.



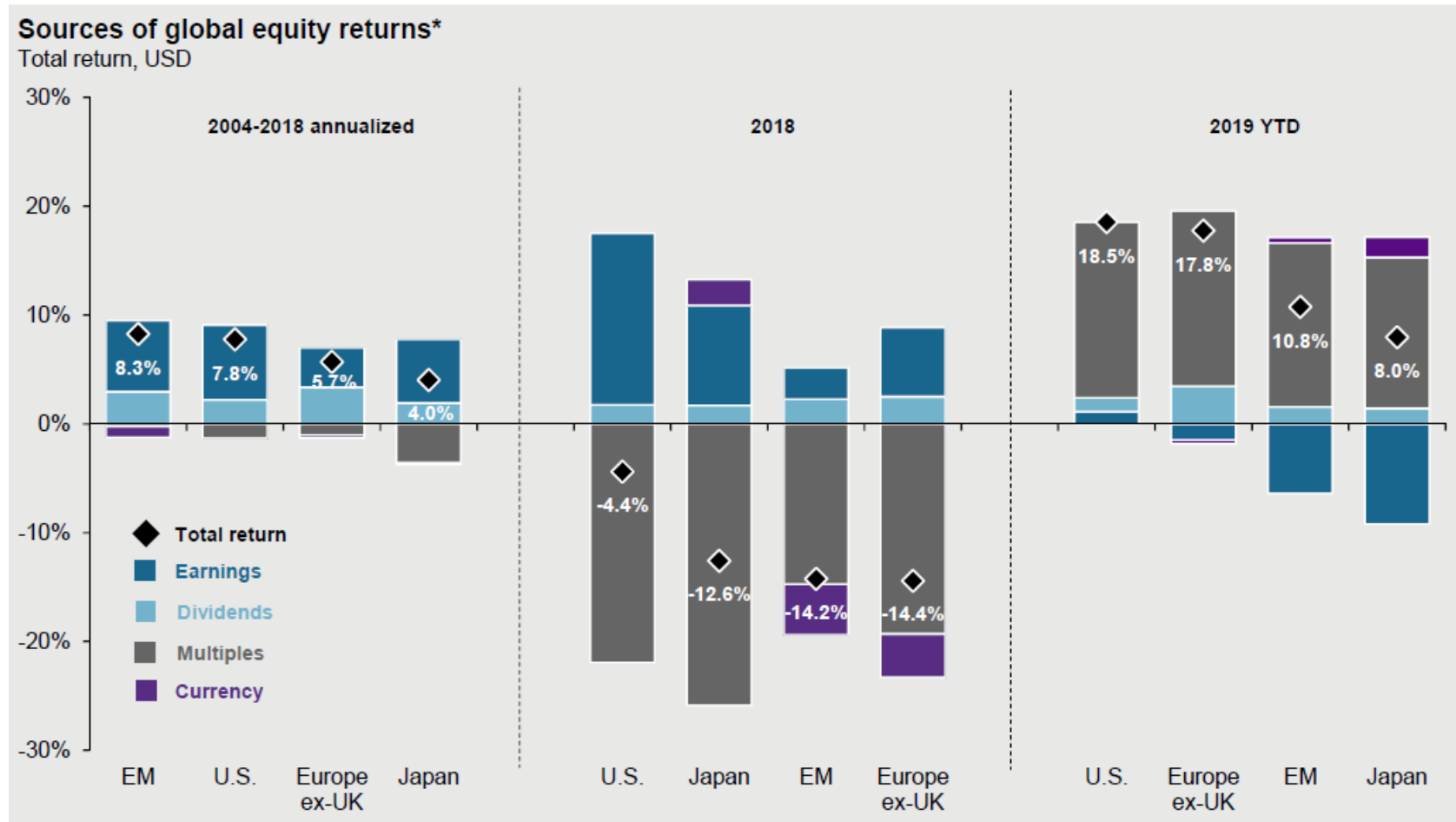
# Asset Class Diversification



# SUMMARY

- **After first quarter's ascent, markets rose at a more subdued pace, as earnings expectations bottomed and the cost of capital declined.**
  - Relative growth expectations continued to support US equities outperformance while political tensions and idiosyncratic risks held back international equity performance, particularly in emerging markets.
  - Declining interest rates across the yield curve, especially in the belly, buoyed fixed income.
  - While rising tensions in the middle east increased energy costs in June, declining industrial demand weighed on input costs.
- **Elevated uncertainty has hindered business investment, and while the service sector has not been immune, the consumer continues to drive growth.**
  - Manufacturing: Business investment in equipment and structures continues to weaken, as companies emphasize meeting consumer demand rather expanding in an uncertain business climate.
  - Monetary policy: Restrained inflation has allowed for central bankers to proceed with caution in 2019, and amend forward guidance toward easing as they evaluate the economic landscape.
  - Consumers: Household demand remains robust, benefitting from a healthy labor market, low inflation, and strong balance sheets.
- **Late cycle dynamics will likely persist.**
  - Economic fundamentals (Manufacturing & Services) are experiencing a tug-of-war, widening the path of future economic growth outcomes.
  - Diversified portfolios with proper liquidity should provide investors with an ability to exploit future dislocations while accruing incremental cash flow.

# MARKETS HAVE REPRICED RISK



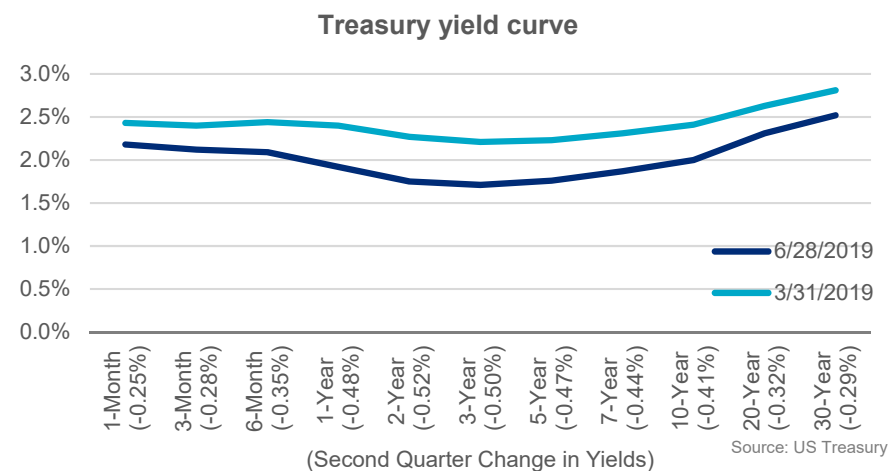
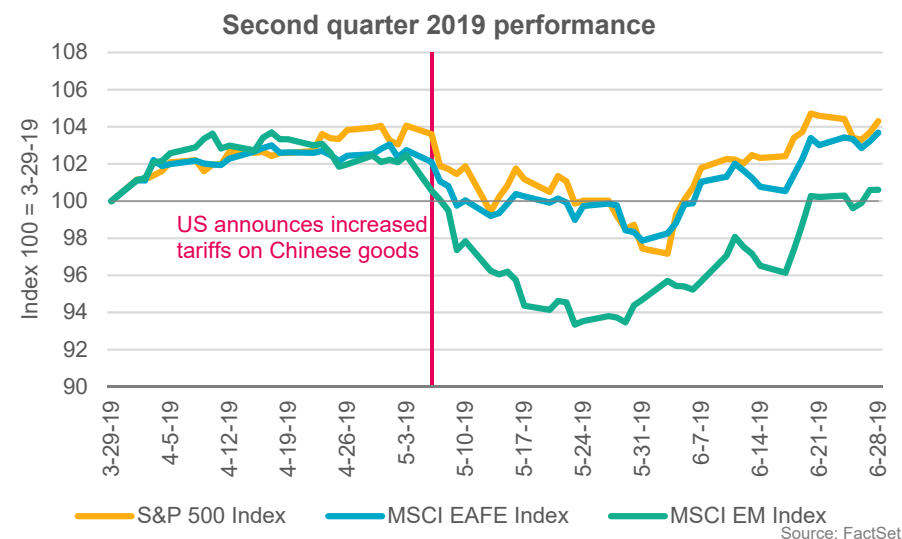
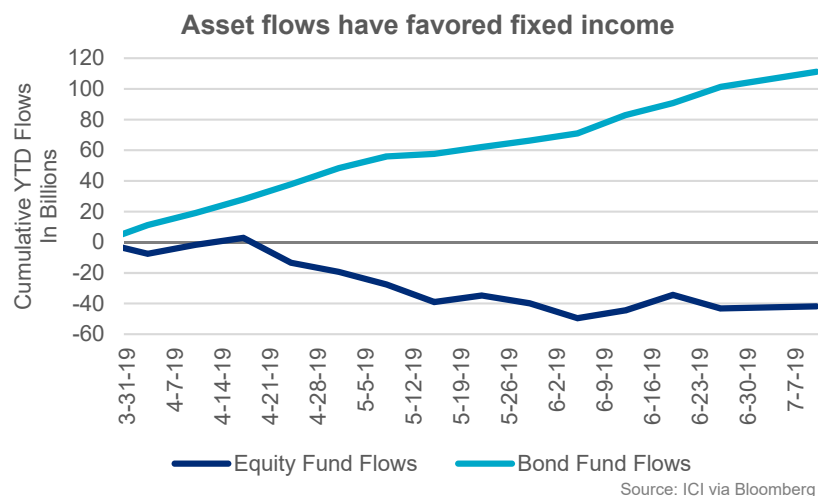
Source: FactSet, MSCI, Standard & Poor's, & JPMorgan Asset Management

All Returns are MSCI Gross Index (official) data, except the US, which is the S&P 500. \*Multiple expansion is based on the forward P/E ratio and EPS growth outlook is based on NTMA earnings estimates. Data are as of June 30, 2019

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# QUARTER RECAP

- Markets continued to climb in the second quarter, as earnings weakness is expected to be transitory with limited impairment.
- Trade tensions once again sparked uncertainty, driving equities lower and spreads wider.
- Globally, cautious central bank guidance turned more dovish during the quarter, pushing rates down along the yield curve.
- While risk assets generated positive returns, flows and asset manager positioning imply a more defensive posture.



# WHERE ARE WE IN THE CYCLE



## Broad Indicators

- Global growth: **Slowing, at or near trend**
- Inflation risks: **Muted**
- Interest rates: **Inverted belly, upward sloping beyond 5-ys**
- Volatility: **Near normal**
- Accommodation: **positive**
- Earnings: **Short-term softening, bottoming in some markets**
- Valuations: **Near long-term levels**

# GLOBAL GROWTH IS NEAR TREND

	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>Global</b>	53.6	53.5	53.9	53.8	53.9	54.0	54.3	54.6	54.8	53.3	53.8	54.0	54.2	53.7	53.4	52.8	53.0	53.1	52.7	52.1	52.6	52.7	52.2	51.2	51.2
<b>Developed</b>	54.5	54.4	54.6	54.6	55.0	54.8	54.8	54.9	55.4	53.6	54.4	54.8	55.0	54.2	54.0	53.3	53.6	53.3	52.7	52.3	52.9	52.7	52.0	51.1	51.3
<b>Emerging</b>	51.5	51.4	52.0	51.9	51.5	51.9	53.0	53.5	53.3	52.3	52.4	52.2	52.4	52.4	51.8	51.6	51.3	52.6	52.5	51.6	51.7	52.9	52.4	51.3	50.9
<b>United States</b>	53.9	54.6	55.3	54.8	55.2	54.5	54.1	53.8	55.8	54.2	54.9	56.6	56.2	55.7	54.7	53.9	54.9	54.7	54.4	54.4	55.5	54.6	53.0	50.9	51.5
<b>Canada*</b>	54.7	55.5	54.6	55.0	54.3	54.4	54.7	55.9	55.6	55.7	55.5	56.2	57.1	56.9	56.8	54.8	53.9	54.9	53.6	53.0	52.6	50.5	49.7	49.1	49.2
<b>U.K</b>	53.9	54.2	53.9	54.0	55.9	54.9	54.8	53.4	54.5	52.4	53.2	54.4	55.1	53.5	54.2	54.1	52.1	50.8	51.4	50.3	51.5	50.0	50.9	50.9	49.7
<b>Euro Zone</b>	56.3	55.7	55.7	56.7	56.0	57.5	58.1	58.8	57.1	55.2	55.1	54.1	54.9	54.3	54.5	54.1	53.1	52.7	51.1	51.0	51.9	51.6	51.5	51.8	52.2
<b>Germany</b>	56.4	54.7	55.8	57.7	56.6	57.3	58.9	59.0	57.6	55.1	54.6	53.4	54.8	55.0	55.6	55.0	53.4	52.3	51.6	52.1	52.8	51.4	52.2	52.6	52.6
<b>France</b>	56.6	55.6	55.2	57.1	57.4	60.3	59.6	59.6	57.3	56.3	56.9	54.2	55.0	54.4	54.9	54.0	54.1	54.2	48.7	48.2	50.4	48.9	50.1	51.2	52.7
<b>Italy</b>	54.5	56.2	55.8	54.3	53.9	56.0	56.5	59.0	56.0	53.5	52.9	52.9	53.9	53.0	51.7	52.4	49.3	49.3	50.0	48.8	49.6	51.5	49.5	49.9	50.1
<b>Spain</b>	57.7	56.7	55.3	56.4	55.1	55.2	55.4	56.7	57.1	55.8	55.4	55.9	54.8	52.7	53.0	52.5	53.7	53.9	53.4	54.5	53.5	55.4	52.9	52.1	52.1
<b>Greece*</b>	50.5	50.5	52.2	52.8	52.1	52.2	53.1	55.2	56.1	55.0	52.9	54.2	53.5	53.5	53.9	53.6	53.1	54.0	53.8	53.7	54.2	54.7	56.6	54.2	52.4
<b>Ireland</b>	58.0	57.0	58.2	57.6	56.0	57.7	60.2	59.0	56.8	53.7	57.6	57.7	58.1	56.8	58.4	58.4	56.1	56.6	55.5	53.3	55.4	54.1	53.4	54.1	54.4
<b>Australia</b>	53.8	57.2	57.5	54.4	51.2	57.0	57.0	58.2	56.4	62.5	58.6	56.8	55.6	52.5	55.9	57.1	54.7	50.8	50.0	52.5	54.0	51.0	54.8	52.7	49.4
<b>Japan</b>	52.9	51.8	51.9	51.7	53.4	52.2	52.2	52.8	52.2	51.3	53.1	51.7	52.1	51.8	52.0	50.7	52.5	52.4	52.0	50.9	50.7	50.4	50.8	50.7	50.8
<b>China</b>	51.1	51.9	52.4	51.4	51.0	51.6	53.0	53.7	53.3	51.8	52.3	52.3	53.0	52.3	52.0	52.1	50.5	51.9	52.2	50.9	50.7	52.9	52.7	51.5	50.6
<b>Indonesia*</b>	49.5	48.6	50.7	50.4	50.1	50.4	49.3	49.9	51.4	50.7	51.6	51.7	50.3	50.5	51.9	50.7	50.5	50.4	51.2	49.9	50.1	51.2	50.4	51.6	50.6
<b>S. Korea*</b>	50.1	49.1	49.9	50.6	50.2	51.2	49.9	50.7	50.3	49.1	48.4	48.9	49.8	48.3	49.9	51.3	51.0	48.6	49.8	48.3	47.2	48.8	50.2	48.4	47.5
<b>Taiwan*</b>	53.3	53.6	54.3	54.2	53.6	56.3	56.6	56.9	56.0	55.3	54.8	53.4	54.5	53.1	53.0	50.8	48.7	48.4	47.7	47.5	46.3	49.0	48.2	48.4	45.5
<b>India</b>	52.7	46.0	49.0	51.1	51.3	50.3	53.0	52.5	49.7	50.8	51.9	50.4	53.3	54.1	51.9	51.6	53.0	54.5	53.6	53.6	53.8	52.7	51.7	51.7	50.8
<b>Brazil</b>	48.5	49.4	49.6	51.1	49.5	48.9	48.8	50.7	53.1	51.5	50.6	49.7	47.0	50.4	47.8	47.3	50.5	51.6	52.4	52.3	52.6	53.1	50.6	48.4	49.0
<b>Mexico*</b>	52.3	51.2	52.2	52.8	49.2	52.4	51.7	52.6	51.6	52.4	51.6	51.0	52.1	52.1	50.7	51.7	50.7	49.7	49.7	50.9	52.6	49.8	50.1	50.0	49.2
<b>Russia</b>	54.8	53.4	54.2	54.8	53.2	56.3	56.0	54.8	55.2	53.2	54.9	53.4	52.0	51.7	52.1	53.5	55.8	55.0	53.9	53.6	54.1	54.6	53.0	51.5	49.2

Key

Contraction

Expansion

Source: Bloomberg, JP Morgan, composite indices illustrated except for \*, which indicates manufacturing PMI data

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# MANUFACTURING IS BROADLY CONTRACTING

	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>Global</b>	52.5	52.6	53.1	53.2	53.4	53.9	54.4	54.3	54.0	53.2	53.4	53.0	52.9	52.7	52.5	52.1	52.0	51.9	51.4	50.8	50.6	50.5	50.4	49.8	49.4
<b>Developed</b>	53.8	53.9	54.2	54.6	55.2	55.8	56.2	56.3	55.7	54.8	55.1	54.7	54.4	54.0	53.8	53.6	53.2	52.8	52.3	51.8	50.4	49.9	50.2	49.2	48.9
<b>Emerging</b>	50.8	50.9	51.7	51.4	51.2	51.5	52.1	51.8	51.9	51.3	51.3	51.1	51.2	51.0	50.8	50.3	50.5	50.7	50.2	49.5	50.6	51.0	50.5	50.4	49.9
<b>United States</b>	52.0	53.3	52.8	53.1	54.6	53.9	55.1	55.5	55.3	55.6	56.5	56.4	55.4	55.3	54.7	55.6	55.7	55.3	53.8	54.9	53.0	52.4	52.6	50.5	50.6
<b>Canada</b>	54.7	55.5	54.6	55.0	54.3	54.4	54.7	55.9	55.6	55.7	55.5	56.2	57.1	56.9	56.8	54.8	53.9	54.9	53.6	53.0	52.6	50.5	49.7	49.1	49.2
<b>U.K</b>	54.2	55.5	57.0	55.5	56.6	58.2	55.7	55.2	55.3	54.8	53.8	54.3	54.0	53.9	52.9	53.7	51.1	53.3	54.3	52.8	52.1	55.1	53.1	49.4	48.0
<b>Euro Zone</b>	57.4	56.6	57.4	58.1	58.5	60.1	60.6	59.6	58.6	56.6	56.2	55.5	54.9	55.1	54.6	53.2	52.0	51.8	51.4	50.5	49.3	47.5	47.9	47.7	47.6
<b>Germany</b>	59.6	58.1	59.3	60.6	60.6	62.5	63.3	61.1	60.6	58.2	58.1	56.9	55.9	56.9	55.9	53.7	52.2	51.8	51.5	49.7	47.6	44.1	44.4	44.3	45.0
<b>France</b>	54.8	54.9	55.8	56.1	56.1	57.7	58.8	58.4	55.9	53.7	53.8	54.4	52.5	53.3	53.5	52.5	51.2	50.8	49.7	51.2	51.5	49.7	50.0	50.6	51.9
<b>Italy</b>	55.2	55.1	56.3	56.3	57.8	58.3	57.4	59.0	56.8	55.1	53.5	52.7	53.3	51.5	50.1	50.0	49.2	48.6	49.2	47.8	47.7	47.4	49.1	49.7	48.4
<b>Spain</b>	54.7	54.0	52.4	54.3	55.8	56.1	55.8	55.2	56.0	54.8	54.4	53.4	53.4	52.9	53.0	51.4	51.8	52.6	51.1	52.4	49.9	50.9	51.8	50.1	47.9
<b>Greece</b>	50.5	50.5	52.2	52.8	52.1	52.2	53.1	55.2	56.1	55.0	52.9	54.2	53.5	53.5	53.9	53.6	53.1	54.0	53.8	53.7	54.2	54.7	56.6	54.2	52.4
<b>Ireland</b>	56.0	54.6	56.1	55.4	54.4	58.1	59.1	57.6	56.2	54.1	55.3	55.4	56.6	56.3	57.5	56.3	54.9	55.4	54.5	52.6	54.0	53.9	52.5	50.4	49.8
<b>Australia</b>	53.8	57.2	57.5	54.4	51.2	57.0	57.0	58.2	56.4	62.5	58.6	56.8	55.6	52.5	55.9	57.1	54.7	50.8	50.0	52.5	54.0	51.0	54.8	52.7	49.4
<b>Japan</b>	52.4	52.1	52.2	52.9	52.8	53.6	54.0	54.8	54.1	53.1	53.8	52.8	53.0	52.3	52.5	52.5	52.9	52.2	52.6	50.3	48.9	49.2	50.2	49.8	49.3
<b>China</b>	50.4	51.1	51.6	51.0	51.0	50.8	51.5	51.5	51.6	51.0	51.1	51.1	51.0	50.8	50.6	50.0	50.1	50.2	49.7	48.3	49.9	50.8	50.2	50.2	49.4
<b>Indonesia</b>	49.5	48.6	50.7	50.4	50.1	50.4	49.3	49.9	51.4	50.7	51.6	51.7	50.3	50.5	51.9	50.7	50.5	50.4	51.2	49.9	50.1	51.2	50.4	51.6	50.6
<b>S. Korea</b>	50.1	49.1	49.9	50.6	50.2	51.2	49.9	50.7	50.3	49.1	48.4	48.9	49.8	48.3	49.9	51.3	51.0	48.6	49.8	48.3	47.2	48.8	50.2	48.4	47.5
<b>Taiwan</b>	53.3	53.6	54.3	54.2	53.6	56.3	56.6	56.9	56.0	55.3	54.8	53.4	54.5	53.1	53.0	50.8	48.7	48.4	47.7	47.5	46.3	49.0	48.2	48.4	45.5
<b>India</b>	50.9	47.9	51.2	51.2	50.3	52.6	54.7	52.4	52.1	51.0	51.6	51.2	53.1	52.3	51.7	52.2	53.1	54.0	53.2	53.9	54.3	52.6	51.8	52.7	52.1
<b>Brazil</b>	50.5	50.0	50.9	50.9	51.2	53.5	52.4	51.2	53.2	53.4	52.3	50.7	49.8	50.5	51.1	50.9	51.1	52.7	52.6	52.7	53.4	52.8	51.5	50.2	51.0
<b>Mexico</b>	52.3	51.2	52.2	52.8	49.2	52.4	51.7	52.6	51.6	52.4	51.6	51.0	52.1	52.1	50.7	51.7	50.7	49.7	49.7	50.9	52.6	49.8	50.1	50.0	49.2
<b>Russia</b>	50.3	52.7	51.6	51.9	51.1	51.5	52.0	52.1	50.2	50.6	51.3	49.8	49.5	48.1	48.9	50.0	51.3	52.6	51.7	50.9	50.1	52.8	51.8	49.8	48.6

Key

Contraction

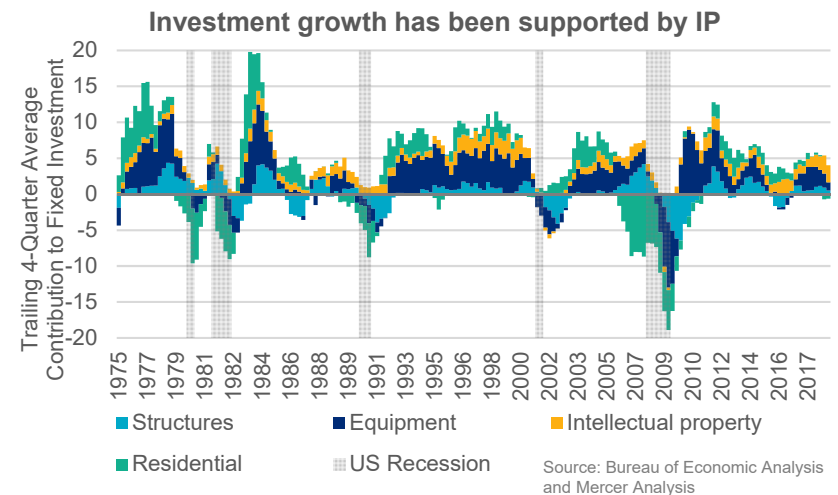
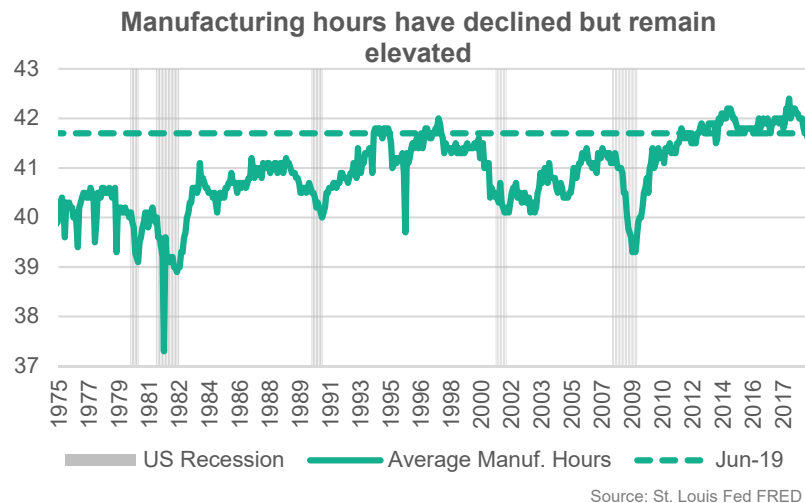
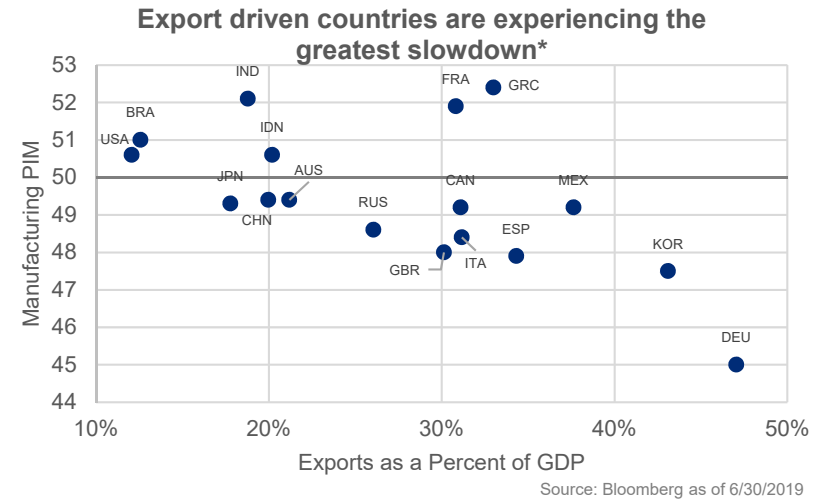
Expansion

Source: Bloomberg & JP Morgan

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# MANUFACTURING WOES CONTINUE

- Trade uncertainty between the US and China along with Brexit have hampered manufacturing globally and reduced trade.
- While investment has remained positive, companies have focused on intellectual property to help scale rather than overextending headcounts in a tightening labor market (fixed costs). Similarly, manufacturers have increased hours (variable costs) to meet demand.
- The changes in this dynamic may help manufacturing traverse the near-term slowdown.

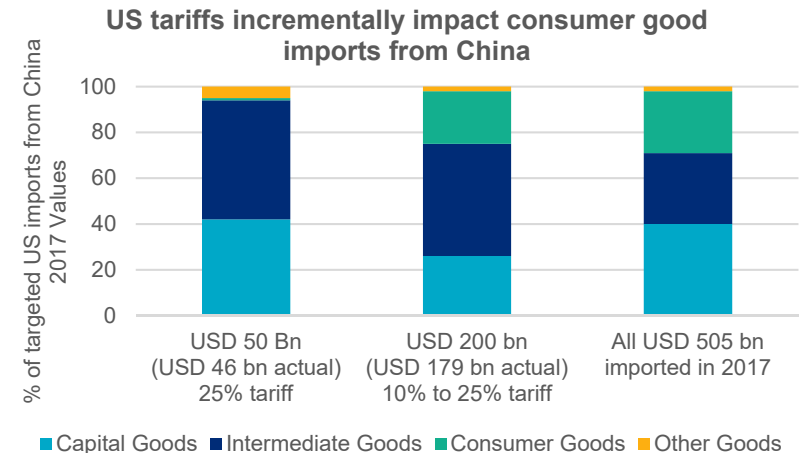


Includes the following countries: United States (USA), Canada (CAN), United Kingdom (GBR), Germany (DEU), France (FRA), Italy (ITA), Spain (ESP), Greece (GRC), Australia (AUS), Japan (JPN), China (CHN), Indonesia (IDN), India (IND), Brazil (BRA), Mexico (MEX), S. Korea (KOR), & Russia (RUS).



# TRADE UNCERTAINTY AND NEW TARGETS

- Trade tensions have not only persisted, but the targets have grown and shifted over time.
- The initial rounds of US tariffs on Chinese goods targeted capital and intermediate goods with a limited impact on US consumers; however, further expansion could more directly affect these goods.
- In 2018, US agriculture suffered from direct attacks. More recently, Chinese leaders appear to have transitioned toward US companies generating revenue in China.
- Trade disputes stretch beyond the US and China, which further complicates the business environment.
  - A week long tension between the US and Mexico not only soured the recent USMCA,\* but was used as a negotiating tactic on border security rather than trade.
  - A long-standing US/EU rivalry on aircraft subsidies has drawn more products into the fray. Additionally, European autos remain a potential target in an already weakening and critical manufacturing sector.
  - Japan has placed restrictions on three chemical materials destined for South Korea that are crucial for manufacturing, stemming from a decades long feud.



Source: Scotiabank Economics, US ITC, International Trade Centre, USTR



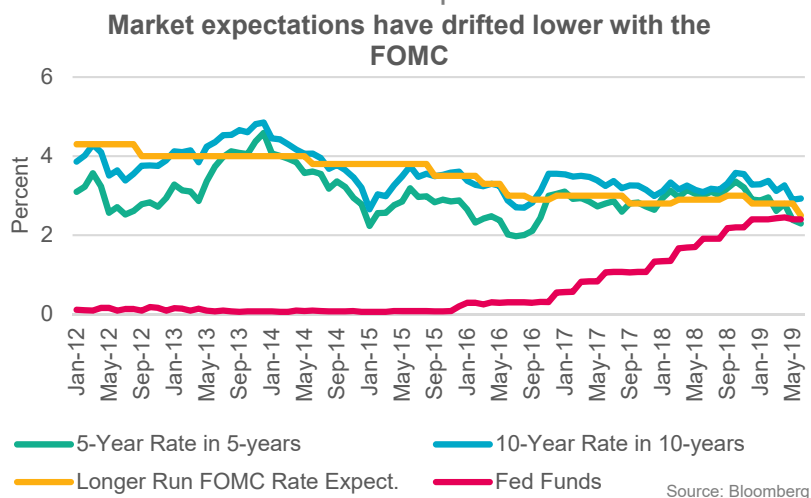
Source: Brookings, BEA, Sales data as of 2016

USMCA: United States, Mexico, Canada Agreement, NAFTA (North American Free Trade Agreement) replacement

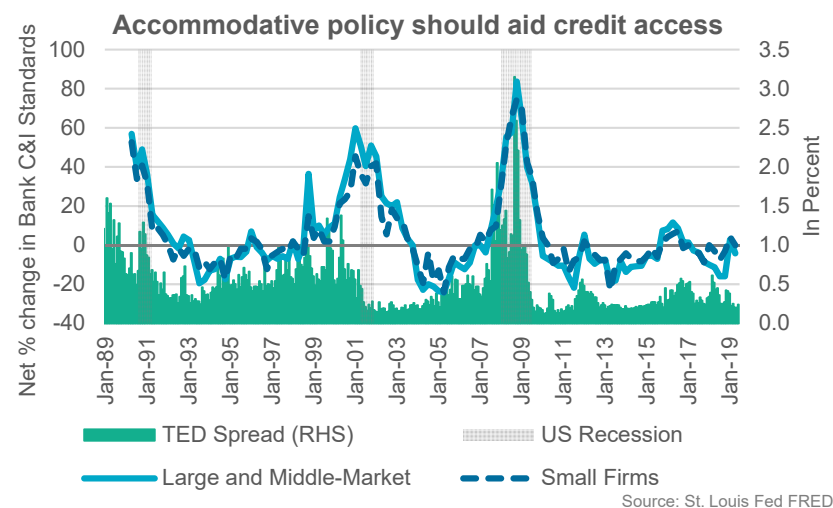
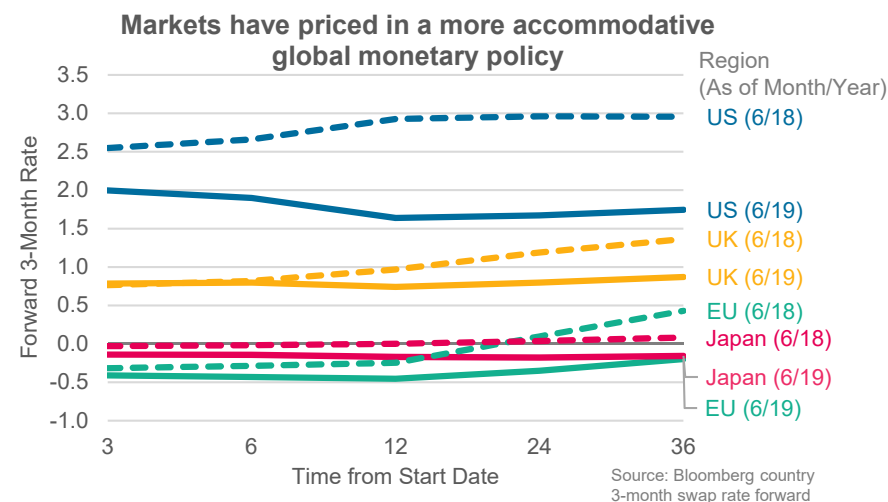
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# CENTRAL BANKERS AFFIRM SUPPORT

- As growth decelerated in 2018, global central bankers shifted from normalizing policy to assessing future accommodation. Markets have taken note and driven yields down globally.
- Accommodative policy may come in the form of rate cuts, credit programs (TLTRO III\*), or open market operations (QE\*\*). The facilitation of credit creation should limit tightening of financial conditions, which exacerbates downturns in economic growth.
- Over the past several years, markets and policymakers have reduced the expectations for long-term neutral interest rates with current rates near neutral expectations.



\*Targeted longer-term refinancing operations  
\*\* Quantitative easing



# SERVICES REMAIN IN EXPANSION

Jun-17 Jul-17 Aug-17 Sep-17 Oct-17 Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19 May-19 Jun-19

Global	53.8	53.6	54.0	53.8	54.1	53.7	53.8	54.2	54.8	53.2	53.8	54.3	54.6	54.0	53.5	52.9	53.4	53.7	53.0	52.6	53.3	53.7	52.7	51.6	51.9
Developed	54.5	54.5	54.7	54.6	54.9	54.4	54.1	54.3	55.3	53.4	54.2	54.9	55.3	54.4	54.1	53.2	53.9	53.7	52.8	52.5	53.7	53.7	52.6	51.5	52.0
Emerging	51.6	51.0	51.7	51.4	51.6	51.5	52.8	53.8	53.5	52.5	52.6	52.5	52.6	52.8	51.7	52.1	51.9	53.8	53.6	52.9	52.1	53.7	53.2	51.7	51.5
United States	54.2	54.7	56.0	55.3	55.3	54.5	53.7	53.3	55.9	54.0	54.6	56.8	56.5	56.0	54.8	53.5	54.8	54.7	54.4	54.2	56.0	55.3	53.0	50.9	51.5
Canada	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U.K	53.4	53.8	53.2	53.6	55.6	53.8	54.2	53.0	54.5	51.7	52.8	54.0	55.1	53.5	54.3	53.9	52.2	50.4	51.2	50.1	51.3	48.9	50.4	51.0	50.2
Euro Zone	55.4	55.4	54.7	55.8	55.0	56.2	56.6	58.0	56.2	54.9	54.7	53.8	55.2	54.2	54.4	54.7	53.7	53.4	51.2	51.2	52.8	53.3	52.8	52.9	53.6
Germany	54.0	53.1	53.5	55.6	54.7	54.3	55.8	57.3	55.3	53.9	53.0	52.1	54.5	54.1	55.0	55.9	54.7	53.3	51.8	53.0	55.3	55.4	55.7	55.4	55.8
France	56.9	56.0	54.9	57.0	57.3	60.4	59.1	59.2	57.4	56.9	57.4	54.3	55.9	54.9	55.4	54.8	55.3	55.1	49.0	47.8	50.2	49.1	50.5	51.5	52.9
Italy	53.6	56.3	55.1	53.2	52.1	54.7	55.4	57.7	55.0	52.6	52.6	53.1	54.3	54.0	52.6	53.3	49.2	50.3	50.5	49.7	50.4	53.1	50.4	50.0	50.5
Spain	58.3	57.6	56.0	56.7	54.6	54.4	54.6	56.9	57.3	56.2	55.6	56.4	55.4	52.6	52.7	52.5	54.0	54.0	54.0	54.7	54.5	56.8	53.1	52.8	53.6
Greece	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ireland	57.6	58.3	58.4	58.7	57.5	56.0	60.4	59.8	57.2	56.5	58.4	59.3	59.5	57.4	58.0	58.7	57.2	57.1	56.3	54.2	55.9	55.3	54.7	57.0	56.9
Australia	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Japan	53.3	52.0	51.6	51.0	53.4	51.2	51.1	51.9	51.7	50.9	52.5	51.0	51.4	51.3	51.5	50.2	52.4	52.3	51.0	51.6	52.3	52.0	51.8	51.7	51.9
China	51.6	51.5	52.7	50.6	51.2	51.9	53.9	54.7	54.2	52.3	52.9	52.9	53.9	52.8	51.5	53.1	50.8	53.8	53.9	53.6	51.1	54.4	54.5	52.7	52.0
Indonesia	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S. Korea	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
India	53.1	45.9	47.5	50.7	51.7	48.5	50.9	51.7	47.8	50.3	51.4	49.6	52.6	54.2	51.5	50.9	52.2	53.7	53.2	52.2	52.5	52.0	51.0	50.2	49.6
Brazil	47.4	48.8	49.0	50.7	48.8	46.9	47.4	50.0	52.7	50.4	50.0	49.5	47.0	50.4	46.8	46.4	50.5	51.3	51.9	52.0	52.2	52.7	49.9	47.8	48.2
Mexico	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Russia	55.5	52.6	54.2	55.2	53.9	57.4	56.8	55.1	56.5	53.7	55.5	54.1	52.3	52.8	53.3	54.7	56.9	55.6	54.4	54.9	55.3	54.4	52.6	52.0	49.7

Key

Contraction

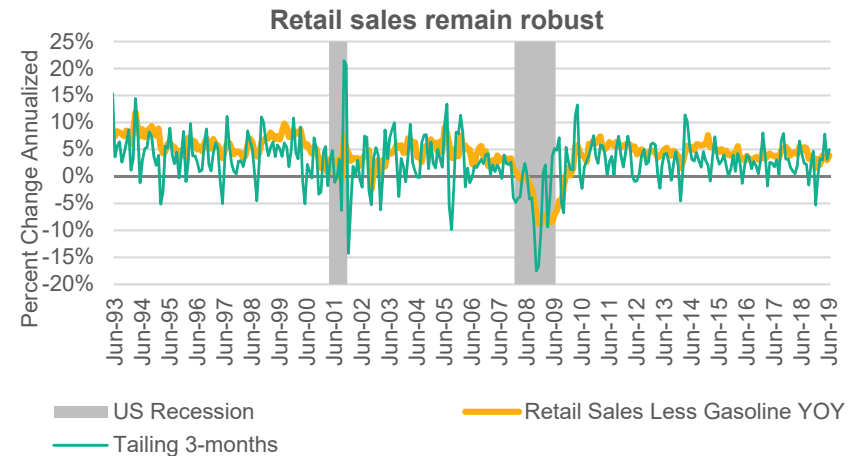
Expansion

Source: Bloomberg & JP Morgan

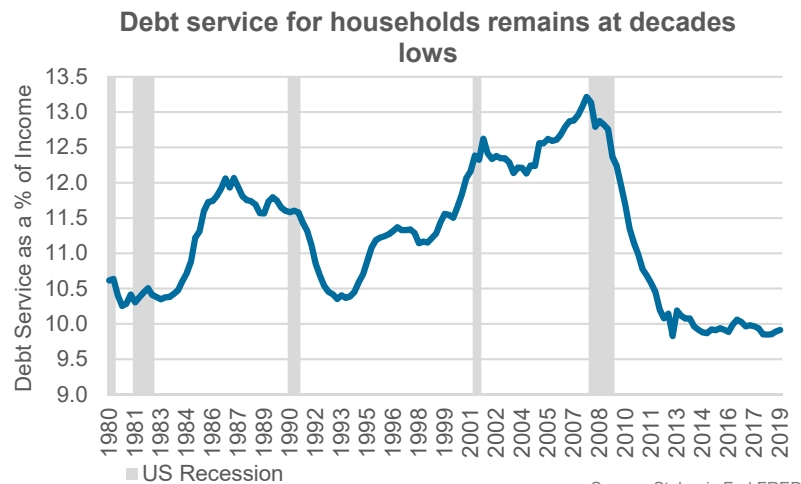
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# CONSUMER STRENGTH BUOYS GROWTH

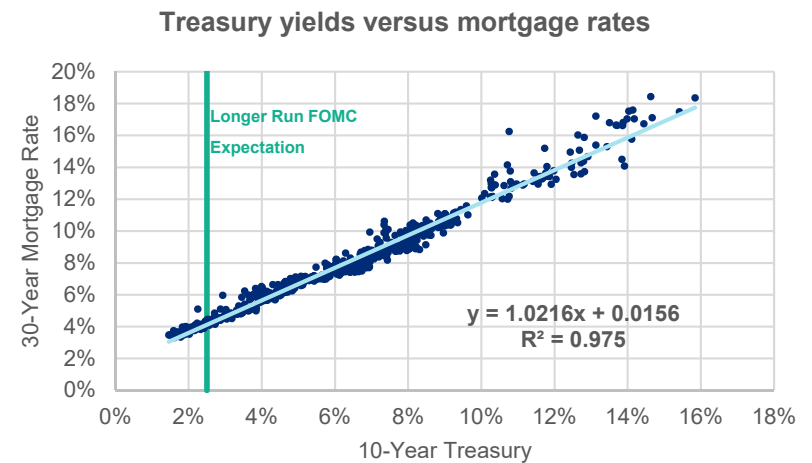
- Consumer demand continues to be the powerhouse behind US economic growth, as labor and earnings continue to advance.
- After a clear softening in the fourth quarter, retail sales picked up in the first and second quarter of 2019, and while manufacturing is slowing, auto sales continue to hover near post crisis highs of 18 million annual units.\*
- Lower rates, more moderate home price appreciation, and low debt service should help support demand for the critical housing sector.



Source: St. Louis Fed FRED



Source: St. Louis Fed FRED



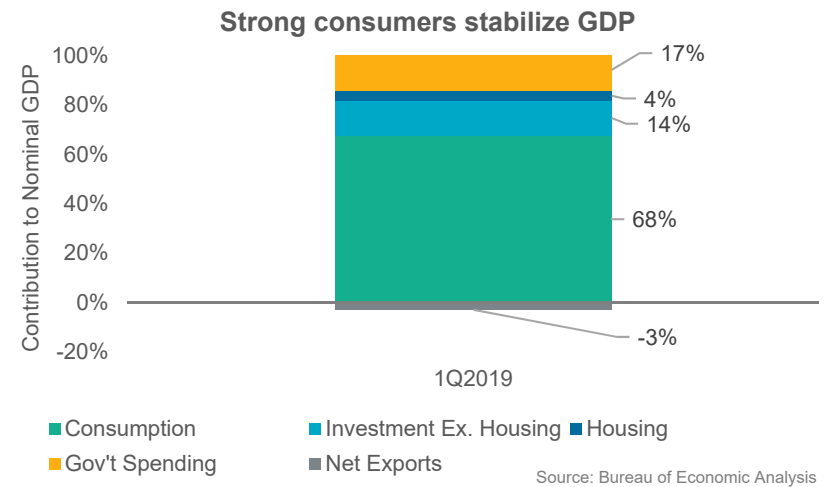
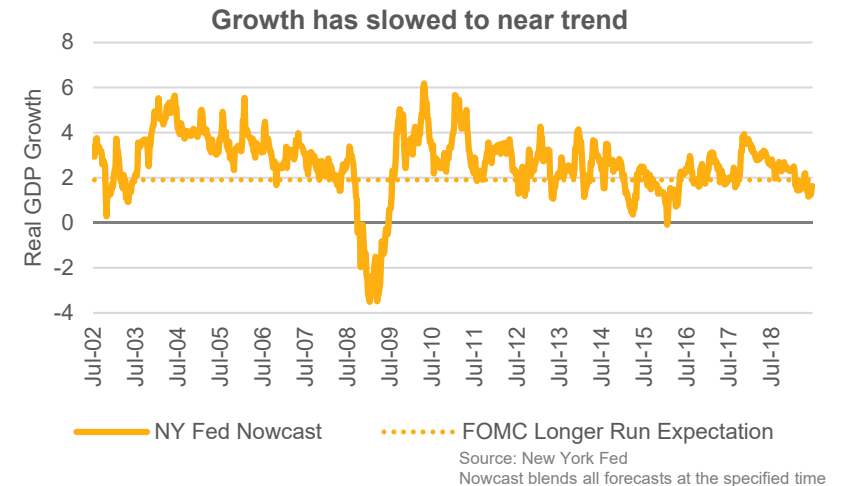
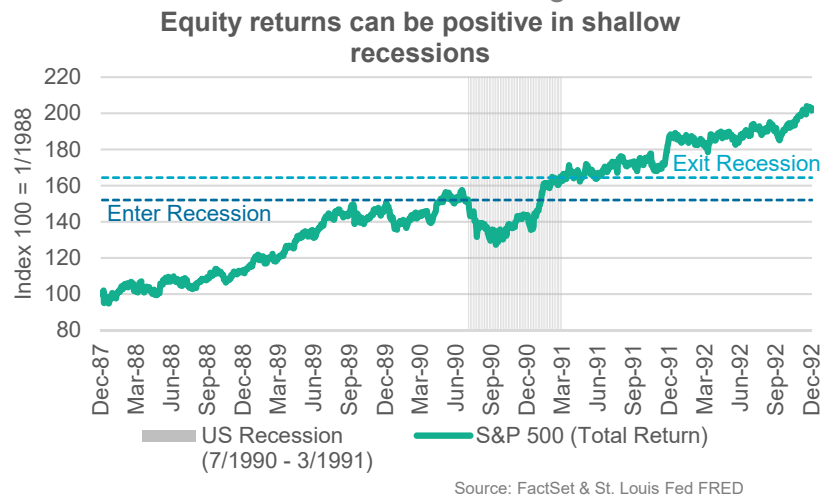
Source: St. Louis Fed FRED & Mercer Analysis

\*Source: Bureau of Economic Analysis

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# ASSESSING SLOWDOWNS

- Economic growth has slowed to near trend levels, but reduced business investment and a struggling manufacturing sector could challenge growth near-term.
- With financial conditions unlikely to become excessively tight, limited economic excesses, and strong consumer balance sheets, deviations below trend are unlikely to spark a deep recession.
- Slowdowns can produce drawdowns that quickly reverse, absent a material impairment of fundamentals. The slowdown of 1991 provides an interesting case study, as the market sold-off -19% but still returned 8% through the recession.



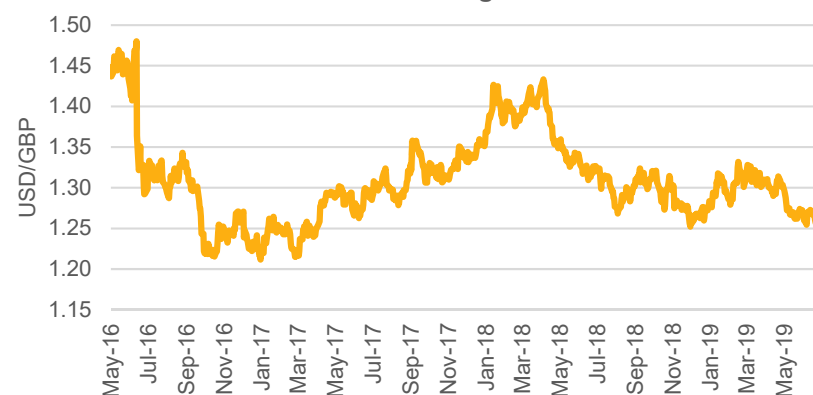
# POLITICAL RISKS

- Technology companies have repeatedly come under fire the past several years on issues ranging from data security to monopolistic power. While Europe has been more aggressive thus far, support in the US has increased which may challenge the sector's dominance.
- Europe:
  - While the UK received an extension,\* many hurdles remain. The most daunting is the Irish backstop which significantly impacted May's legislation and could result in a no-deal BREXIT.
  - After avoiding sanctions\*\* in 2018, Italy's deficit troubles once again are returning to the fore. Additionally, political turmoil is challenging the governing coalition, threatening snap elections.
- Middle East:
  - Turkey's political environment continues to generate headlines including: unauthorized gas drilling, central bank independence, and defense contracts, which has tightened financial conditions and held back growth.
  - One year after the US exited the Iran deal, tensions in the region have increased and pushed up oil prices, but risks of excessive supply constraints are less likely with the US representing ~20% of world production.

\*October 31, 2019

\*\* Breaching deficit limits

**BREXIT continues to weight on the Pound**



Source: St. Louis Fed FRED

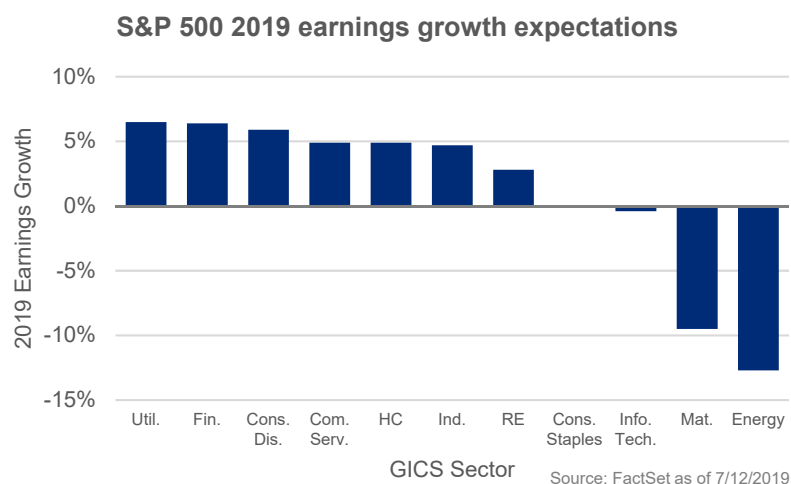
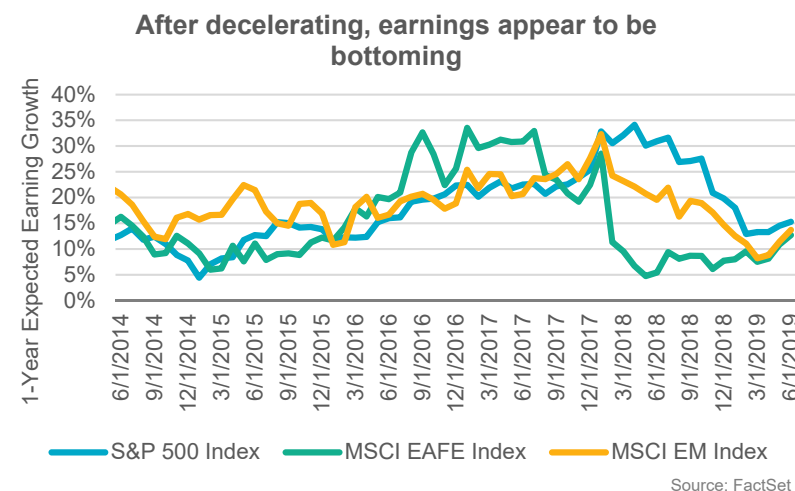
**10-Year Italian/German spread**



Source: Bloomberg

# GROWTH PROSPECTS

- The deceleration of earnings expectations since mid 2018 appears to have bottomed in the second quarter. In the US, earnings are expected to be marginally positive in 2019 with 8 of 11 sectors generating positive growth.
- With strong consumer demand, the consumer discretionary sector is expected to lead growth. Other secular trends such as an aging global demographic and intellectual property investment also likely will produce tailwinds for the tech and health care sectors.

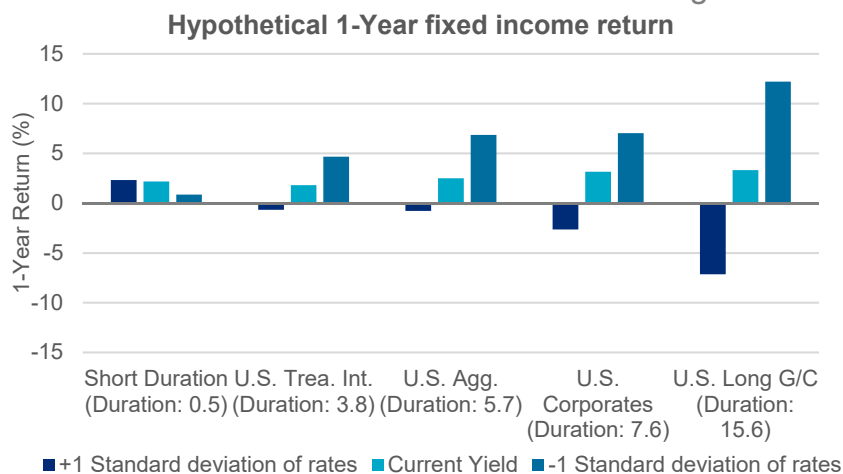


Sector (Growth*)	Estimated Percent Contribution to Earnings Growth			
	ACWI	S&P 500	EAFE	EM
Cons. Dis. (16%)	16%	17%	9%	22%
Info. Tech. (12%)	19%	23%	14%	2%
Com. Serv. (12%)	9%	12%	1%	18%
Ind. (11%)	11%	9%	20%	6%
HC (10%)	11%	12%	13%	4%
Energy (9%)	5%	5%	6%	2%
Financials (9%)	14%	10%	15%	27%
RE (9%)	3%	3%	2%	4%
Mat. (8%)	4%	3%	5%	5%
Cons. Staples (8%)	6%	4%	12%	7%
Utilities (6%)	2%	2%	3%	3%

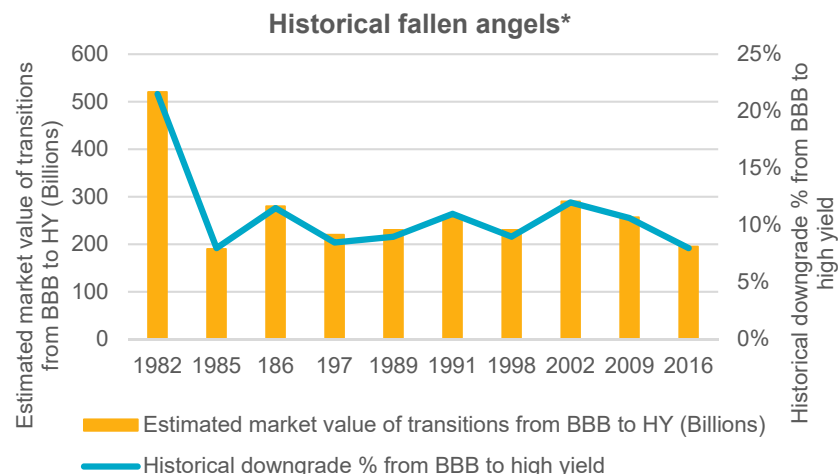
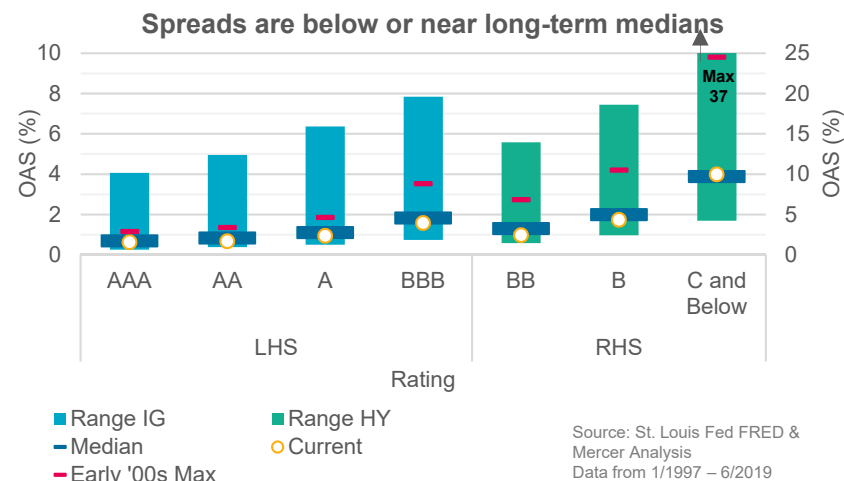
Source: FactSet as of 6/28/2019  
 \*Earnings growth is expectations for 3-5 years  
 Contributions based on market capitalization

# FIXED INCOME VALUATIONS

- Fixed income valuations are near long-term medians, limiting the upside to capturing spreads, and while spreads may widen, it is unlikely that they will achieve financial crisis levels.
- BBB's have grown from ~40% to ~50% of the investment grade market over the past ten years. While the overall risk of the universe has increased, a review of historical fallen angel transitions suggests that markets could weather the downgrades, absent a broader financial shock.
- The inversion of the yield curve has increased the attractiveness of short-duration bonds; however, the diversification benefits of duration should not be ignored.



Source: Bloomberg & Mercer Analysis



Source: Aegon AM US, Bloomberg Barclays and Moody's

\*Aegon AM US, Bloomberg Barclays and Moody's. Reflects top 10 largest ratings transition years from BBB to high yield ratings based on data from Moody's from 1970 to 2017. Applies historical downgrade percentages to BBB market size as of June 30, 2018.



# CONCLUSIONS

- Financial markets have reflected compressing risk premiums, stabilizing growth expectations, and declining rate expectations in 2019. These factors have helped global equity markets produce double digit returns while safe haven assets have risen also.
- Three key considerations will be critical to the growth path going forward.
  - Manufacturing: Business investment in equipment and structures continues to weaken, as companies emphasize meeting consumer demand rather expanding in an uncertain business climate.
  - Monetary policy: Restrained inflation has allowed central bankers to proceed with caution in 2019, and amend forward guidance toward easing as they evaluate the economic landscape.
  - Consumers: Household demand remains robust, supported by a healthy employment market, low inflation, and strong balance sheets.
- Late cycle dynamics likely will persist.
  - Economic fundamentals (Manufacturing & Services) are experiencing a tug-of-war, widening the path of future economic growth outcomes.
  - Diversified portfolios with proper liquidity should provide investors with optionality to exploit future dislocations while accruing incremental cash flow.

# ASSET CLASS OUTLOOKS

	L-T Return*	Qualitative Assessment
U.S. Large Cap Equity	7.8%	<ul style="list-style-type: none"> <li>Though slowing, global growth remains positive. Economic fundamentals (Manufacturing &amp; Services) are experiencing a tug-of-war, widening the path of future economic growth outcomes. For this reason, global growth continues to be uneven, as prolonged trade uncertainty and Brexit weigh on export driven countries, especially in Europe.</li> <li>Current risks are unlikely to abate quickly, so exposure to consumer demand and secular themes (e.g., aging demographics, growing middle class in emerging economies, intellectual property investment) should help provide for return opportunities and manage volatility over the intermediate-term.</li> </ul>
U.S. Small Cap Equity	9.0%	
Developed Int'l Equity	8.2%	
Emerging Markets	9.8%	
Private Equity	11.1%	
Long/Short Equity	5.9%	
Bonds – Core (US)	3.3%	<ul style="list-style-type: none"> <li>Looming uncertainty, weak investment, and slowing growth has encouraged central banks to amend forward guidance and assess increased accommodation. Similarly, the yield curve has inverted in the belly (1 to 7 year maturities), reflecting future decreases in short-term rates. With the inverted yield curve, short-term rates now match long-term Treasuries and have made money market and short-term funds a more attractive destination for liquidity needs.</li> <li>For long-term investors with an ability to sacrifice liquidity for yield pick-up, private credit provides an attractive opportunity. Select opportunities still exist for top quality managers possessing broad credit platforms that can focus on off-market transactions.</li> </ul>
Bonds – Core (Non-Dollar)	3.0%	
Bonds – Spread Sectors	4.2%	
Bonds – Emerging Markets	6.1%	
Long/Short Fixed Income	5.3%	
Distressed	8.5%	
Diversified Hedge Funds	5.4/5.8%	<ul style="list-style-type: none"> <li>Opportunities exist for nimble, specialized multi-strategy and diversifying strategies.</li> </ul>
Real Assets – Commodities	3.8%	<ul style="list-style-type: none"> <li>Ongoing long-term secular trends continue to mute inflationary tail risks. As a result, investors are probably best served with equity positions providing near-term inflation protection.</li> <li>Strategies with income streams and some sensitivity to inflation, such as real estate and listed infrastructure, may offer diversifying income opportunities, especially within private markets.</li> </ul>
Real Assets – Real Estate	6.1%	
Real Assets - TIPS	2.8%	
Real Assets – Infrastructure	6.9%	

\*Represents 2019 Pavilion Advisory Group Inc. Asset Allocation Assumptions published in January 2019

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# EQUITY OUTLOOK

## Summary

Global growth has been slowing gradually for several quarters, led primarily by a deceleration in China and Europe. This gradual slowing so far represents a transition from above trend growth in 2017 to a pace of growth closer to the estimated long-term trend. Similarly, earnings growth expectations have coalesced around moderate growth levels after two quarters of strong downward revisions.

## Themes & Implementation

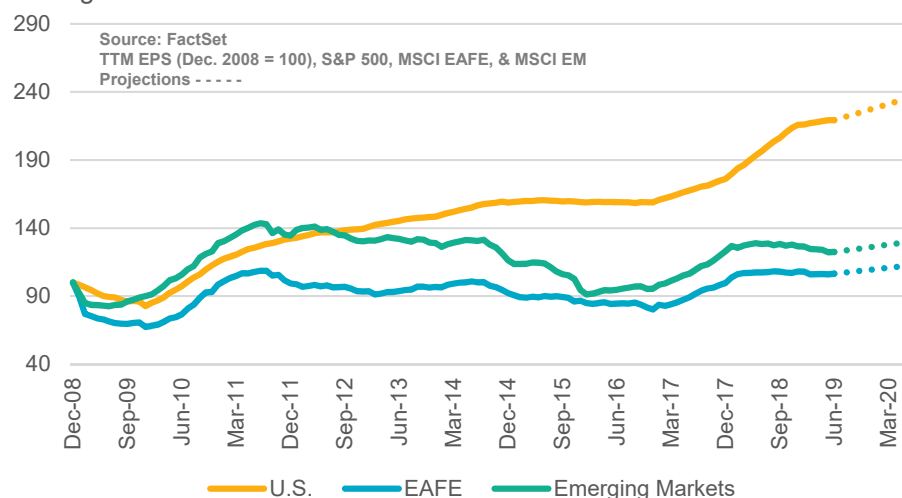
Trend Growth	Evaluate overall equity portfolio beta, concentration, and up/down market capture to assure appropriate upside participation and volatility control.
Uneven Regional Risks	Developed international markets, in particular Europe, face challenges, as countries within the region continue to experience an uneven recovery.
Emerging Market Opportunities	Turmoil lingers in select emerging economies, but broadly these developing economies continue to benefit from positive secular trends, such as a growing middle class as well as markets that are growth oriented. An overweight to emerging markets can increase a portfolio's beta. Investors should monitor total portfolio sensitivities, and may want to consider strategically greater allocations to the U.S. or defensive managers.

## Key Risks

Investment	Future U.S. growth likely will be driven by corporate and residential investment and any weakness in these sectors would result in a downgrade to growth expectations. It is unclear whether new home construction will continue or stall, or whether trade uncertainty will delay or reduce planned business investment (manufacturing).
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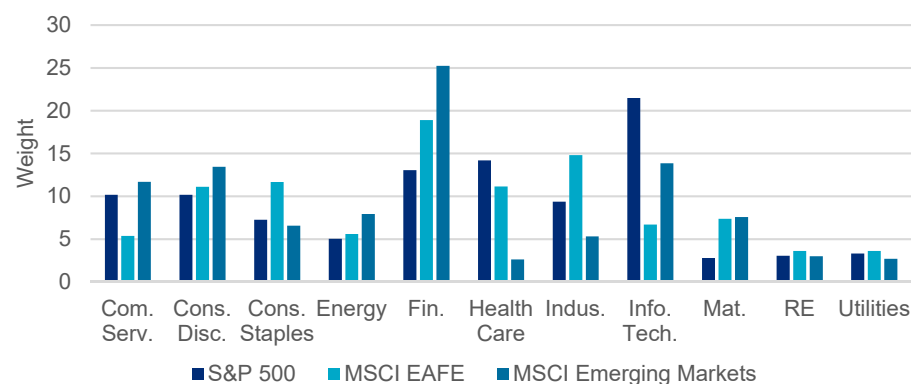
## Earnings Growth Accelerating Globally

U.S. Demonstrating Steadiest Growth While Emerging Markets Demonstrating Strongest Acceleration



## U.S. & Emerging Markets: Greater Concentration in Growth Sectors

About 30% of U.S. and EM Represented by IT and Communication Services; EAFE is Underweight these Sectors and Heavy Financials and Industrials



Source: FactSet as of 6/30/2019

# FIXED INCOME OUTLOOK

## Summary

The yield curve partially inverted with global developed central banks evaluating increased accommodation. Investors should review their yield curve exposure. While longer duration positions can provide a ballast in flight-to-quality environments, shorter duration securitized or credit allocations represent competitive yields with muted risk in the event of interest rate increases.

## Themes & Implementation

**Selective Carry Positions** The securitized markets tied to U.S. housing and the consumer are providing managers with attractive value add opportunities and diversified income streams, while remaining somewhat insulated from global macro risks.

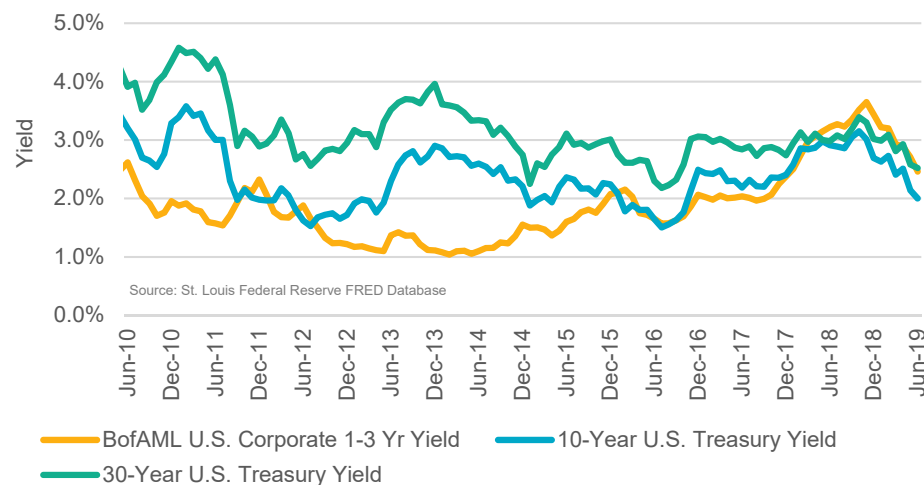
**Short Term Yield** Rising interest rates at the front-end of the curve have made money market and short-term funds a more attractive destination for liquidity needs. Short-term credit yields now match long-term Treasuries, providing portfolio ballast with low interest rate risk while investors wait for more attractive entry points.

**Emerging Markets** While spreads have compressed, nimble managers are still seeing opportunities, but allocation sizes should be considered carefully and in light of overall portfolio exposure to emerging markets. Downside volatility can be painful and the range of potential outcomes is quite wide.

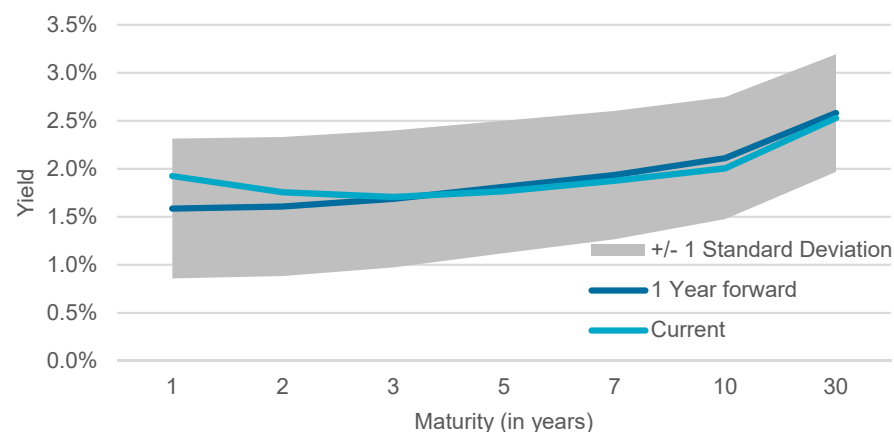
## Key Risks

**Central Bank Policy** Economic conditions have motivated developed central bankers to pause monetary policy normalization and assess policy accommodation, with markets pricing several rate cuts in the US. Should policy miss expectations, markets may exhibit spikes in correlations between risk (equity) and defensive assets (fixed income).

## Rising Short-Term Yields



## U.S. Rates and Expectations



Source: Bloomberg as of 3/29/2019

# REAL ASSETS OUTLOOK

## Summary

Inflationary risks remain muted, as a multitude of factors weigh on overall price levels. As a result, risk assets, like equities, should defend portfolios from small increases in inflation.

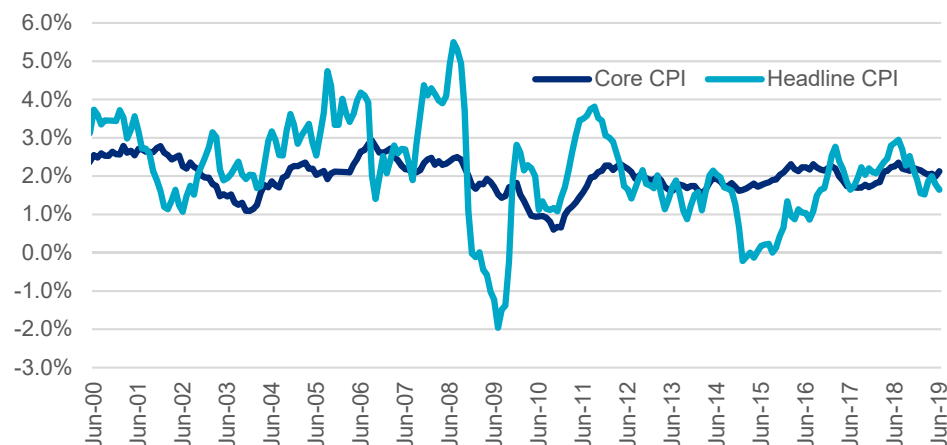
## Themes & Implementation

Economic Growth	We expect continued positive economic growth. Real assets are expected to have a modest tailwind from earnings growth.
Diversified Earnings	Inflation-linked allocations with economic growth drivers represent a balance between return diversification and inflation protection.
Stabilizing Inflation	With inflation unlikely to produce abnormal risks, assets that provide protection against unexpected inflation, like commodities and natural resource equities, likely will be constrained.

## Key Risks

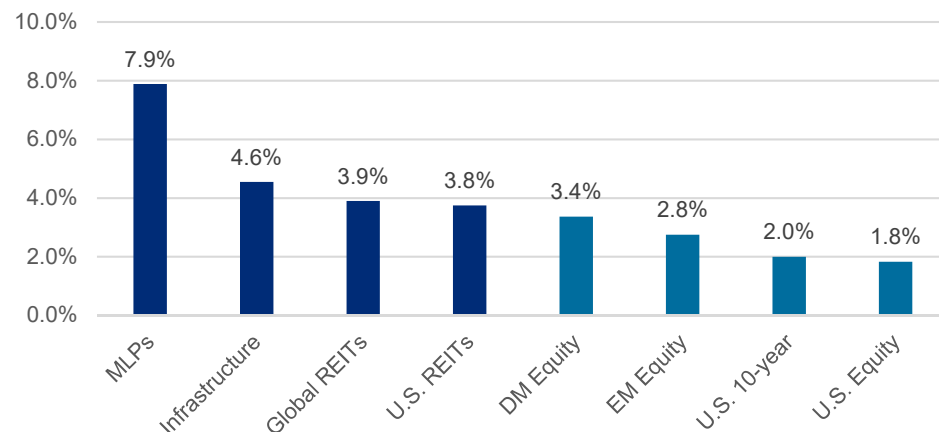
Geopolitical Tensions	While the U.S. has increased oil production, tensions in the Middle East and OPEC decisions still significantly influence price moves.
Trade Policy	The introduction of tariffs has reignited trade war concerns. The full impact is not yet known. While discussions have resulted in updated trade agreements with South Korea, Mexico, and Canada, negotiations between the U.S. and China are ongoing. Additionally, recent communications between the U.S. and European Union have reignited historical frictions and further escalation could hurt an already slowing manufacturing sector. De-globalization could add to inflation, but is unlikely to cause large price spikes.

## Year-Over-Year U.S. Inflation



Source: St. Louis Federal Reserve FRED Database

## Asset Class Yields



Source: Alerian, Elementum, FactSet, MSCI, Federal Reserve

# Asset Class Diversification

## Surplus Cash Investment Program Structure

As of June 30, 2019

Manager	Asset Class/Type	Total Assets (\$ mil.)	Percent of Total	Target Allocation	Weighting Relative to Target	Target Range
<b>Large-Cap Domestic Equity</b>		<b>\$225.6</b>	<b>21.9%</b>	<b>20.0%</b>	<b>+ 1.9%</b>	<b>20-30%</b>
Vanguard S&P 500 Index	Large-Cap Index	\$134.6	13.1%	10.0%	+ 3.1%	
Sands	Large-Cap Growth	\$ 47.7	4.6%	5.0%	- 0.4%	
Barrow Hanley	Large-Cap Value	\$ 43.3	4.2%	5.0%	- 0.8%	
<b>Small-Cap Domestic Equity</b>		<b>\$ 49.6</b>	<b>4.8%</b>	<b>5.0%</b>	<b>- 0.2%</b>	
Conestoga	Small-Cap Growth	\$ 26.2	2.5%	2.5%	+ 0.0%	<b>10-20%</b>
Wellington	Small-Cap Value	\$ 23.5	2.3%	2.5%	- 0.2%	
<b>International Equity</b>		<b>\$147.0</b>	<b>14.3%</b>	<b>15.0%</b>	<b>- 0.7%</b>	
Causeway	International Value	\$ 47.8	4.6%			
BNY Mellon	International Growth	\$ 62.0	6.0%			
Harding Loevner	Emerging	\$ 37.2	3.6%			
<b>Short-Duration Fixed Income</b>		<b>\$107.1</b>	<b>10.4%</b>	<b>10.0%</b>	<b>+ 0.4%</b>	<b>8-12%</b>
Barrow Hanley	Short Duration	\$105.4	10.2%			<b>25-35%</b>
Cash	Money Market	\$ 1.7	0.2%			
<b>Market-Duration Fixed Income</b>		<b>\$322.7</b>	<b>31.4%</b>	<b>30.0%</b>	<b>+ 1.4%</b>	
Dodge & Cox	Market Duration	\$159.3	15.5%	15.0%	+ 0.5%	
MetWest	Market Duration	\$163.4	15.9%	15.0%	+ 0.9%	
<b>Alternatives</b>		<b>\$176.7</b>	<b>17.2%</b>	<b>20.0%</b>	<b>- 2.8%</b>	<b>17-23%</b>
Angelo Gordon Realty Value X	Real Estate	\$ 1.5	0.1%			
Oaktree RE Opps VI	Real Estate	\$ 5.7	0.6%			
Walton Street RE VII	Real Estate	\$ 5.5	0.5%			
Walton Street RE VIII	Real Estate	\$ 8.6	0.8%			
Direct Hedge Fund Composite	Hedge Fund	\$155.4	15.1%			
<b>Total (X District)</b>		<b>\$1,028.7</b>	<b>100.0%</b>			
District Assets - Barrow Hanley	Short Duration	\$ 41.2				
Debt Reserves - Ponder	Short Duration	\$ 83.3				
<b>Total Surplus Cash</b>		<b>\$1,153.2</b>				

\*Totals may not add due to rounding.

# Liquidity Schedule

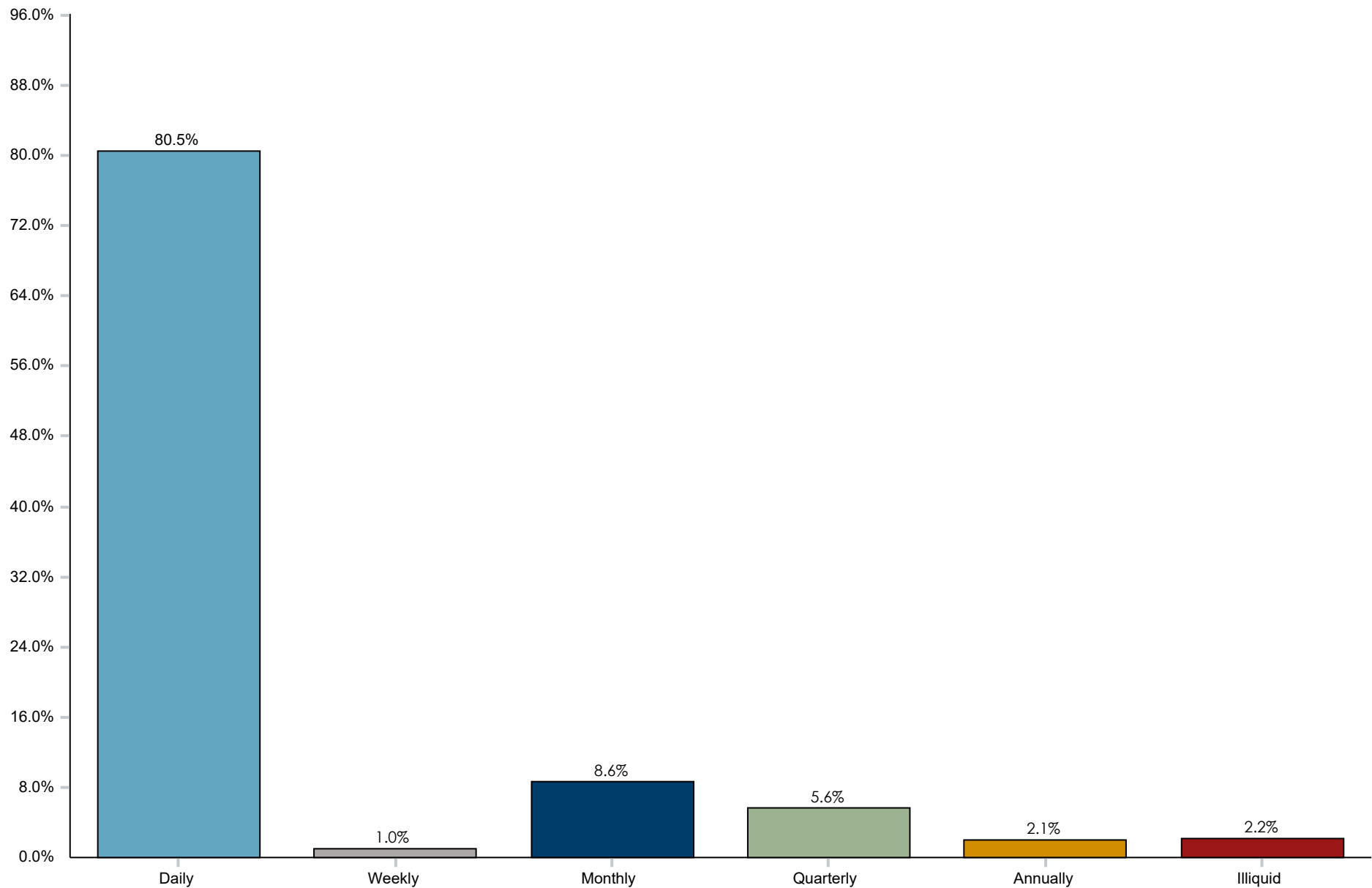
As of June 30, 2019

Investments	Market Value (\$)	Daily (\$)	Weekly (\$)	Monthly (\$)	Quarterly (\$)	Annually (\$)	Illiquid (\$)	Withdrawals	Notes
Vanguard S&P 500 Index	134,597,904	134,597,904	--	--	--	--	--	Daily	Daily, No Lock-Up
Sands Large Cap Growth (Touchstone)	47,727,957	47,727,957	--	--	--	--	--	Daily	Daily, No Lock-Up
Barrow Hanley Large Cap Value	43,285,824	43,285,824	--	--	--	--	--	Daily	Daily, No Lock-Up
Wellington Small Cap Value	23,459,773	--	--	23,459,773	--	--	--	Monthly	10 Day Notice, No Lock-Up
Conestoga Small-Cap Fund I	26,183,425	26,183,425	--	--	--	--	--	Daily	Daily, No Lock-Up
BNY Mellon International Stock Fund	61,984,071	61,984,071	--	--	--	--	--	Daily	Daily, No Lock-Up
Causeway International Value	47,823,800	47,823,800	--	--	--	--	--	Daily	Daily, No Lock-Up
Harding Loevner Inst. Emerging Markets I	37,160,744	37,160,744	--	--	--	--	--	Daily	Daily, No Lock-Up
Barrow Hanley Short Fixed	105,378,955	105,378,955	--	--	--	--	--	Daily	Daily, No Lock-Up
Cash Account	1,558,610	1,558,610	--	--	--	--	--	Daily	Daily, No Lock-Up
Cash Account - CONCERN	86,563	86,563	--	--	--	--	--	Daily	Daily, No Lock-Up
Hedge Funds Cash	45,795	45,795	--	--	--	--	--	Daily	Daily, No Lock-Up
Dodge & Cox Fixed	159,308,848	159,308,848	--	--	--	--	--	Daily	Daily, No Lock-Up
MetWest Fixed	149,308,252	149,308,252	--	--	--	--	--	Daily	Daily, No Lock-Up
Met West Total Return Bond Plan - CONCERN	14,054,384	14,054,384	--	--	--	--	--	Daily	Daily, No Lock-Up
AG Realty Value Fund X, LP	1,500,000	--	--	--	--	--	1,500,000	Illiquid	Illiquid
Oaktree Capital Management RE Opportunities Fund VI	5,717,628	--	--	--	--	--	5,717,628	Illiquid	Illiquid
Walton Street Real Estate Fund VII, L.P.	5,523,489	--	--	--	--	--	5,523,489	Illiquid	Illiquid
Walton Street Real Estate Fund VIII, L.P.	8,596,476	--	--	--	--	--	8,596,476	Illiquid	Illiquid
Bloom Tree Offshore Fund Ltd.	11,214,537	--	--	--	11,214,537	--	--	Quarterly	45 Day Notice, No Lock-Up
Capeview Azri 2X Fund USD B - U	3,639,334	--	--	3,639,334	--	--	--	Monthly	30 Day Notice, No Lock-Up
Capeview Azri Fund USD B – UV	6,220,686	--	--	--	6,220,686	--	--	Quarterly	30 Day Notice, 2.5% Redemption Penalty
Chatham Asset High Yield Offshore Fund, Ltd	10,458,416	--	--	--	10,458,416	--	--	Quarterly	45 Day Notice, 20% Fund level gate
DK Distressed Opportunities International, Ltd.	10,915,704	--	--	--	--	10,915,704	--	Annually	90 Day Notice, No Lock-Up
EMSO Saguaro, Ltd.	10,501,100	--	--	10,501,100	--	--	--	Monthly	60 Day Notice, 15% Fund level gate
Fir Tree International Value Fund (Non-US), L.P.[CE]	272,714	--	--	--	--	--	272,714	Illiquid	Redemption in Progress
Indus Japan Fund Ltd.	8,730,609	--	--	--	8,730,609	--	--	Quarterly	30 Day Notice, No Lock-up
Luxor Capital Partners Offshore, Ltd.	736,298	--	--	--	--	--	736,298	Illiquid	Redemption in Progress
Man Alternative Risk Premia SP Fund	10,024,034	--	10,024,034	--	--	--	--	Weekly	7 Day Notice, No Lock-Up
Marshall Wace Eureka Fund Class B2	10,352,614	--	--	10,352,614	--	--	--	Monthly	30 Day Notice, No Lock-Up
Moore Macro Managers Fund	10,399,470	--	--	--	10,399,470	--	--	Quarterly	60 Day Notice, No Lock-Up
Palestra Capital Offshore	10,670,569	--	--	--	10,670,569	--	--	Quarterly	60 Day Notice, 12 mth soft lock
Pine River Fund Ltd.	54,290	--	--	--	--	--	54,290	Illiquid	Redemption in Progress
Renaissance RIDGE	9,961,858	--	--	9,961,858	--	--	--	Monthly	45 Days Notice, No Lock-Up
Carlson Black Diamond Arbitrage Ltd.	10,520,430	--	--	10,520,430	--	--	--	Monthly	45 Day Notice, No Lock-Up
Robeco Transtrend Diversified Fund LLC	10,379,167	--	--	10,379,167	--	--	--	Monthly	5 Day Notice, No Lock-Up
Stone Milliner Macro Inc Class A NI	10,030,298	--	--	10,030,298	--	--	--	Monthly	60 Day Notice, 25% Master Fund level gate
York Credit Opportunities Unit Trust	10,313,613	--	--	--	--	10,313,613	--	Annually	60 Day Notice, No Lock-Up
<b>Total (\$)</b>	<b>1,028,698,236</b>	<b>828,505,132</b>	<b>10,024,034</b>	<b>88,844,573</b>	<b>57,694,287</b>	<b>21,229,317</b>	<b>22,400,895</b>		
<b>Total (%)</b>	<b>100.0</b>	<b>80.5</b>	<b>1.0</b>	<b>8.6</b>	<b>5.6</b>	<b>2.1</b>	<b>2.2</b>		

# Liquidity Schedule

As of June 30, 2019

## Liquidity of Total Portfolio





# Asset Class Diversification

## Cash Balance Plan Investment Program Structure

As of June 30, 2019

Manager	Asset Class/Type	Total Assets (\$ mil.)	Percent of Total	Target Allocation	Weighting Relative to Target	Target Range
<b>Large-Cap Domestic Equity</b>		<b>\$ 79.3</b>	<b>28.6%</b>	<b>27.0%</b>	<b>+ 1.6%</b>	<b>27-37%</b>
Vanguard S&P 500 Index	Large-Cap Index	\$ 38.1	13.7%	13.5%	+ 0.2%	
Sands	Large-Cap Growth	\$ 21.0	7.5%	6.8%	+ 0.7%	
Barrow Hanley	Large-Cap Value	\$ 20.3	7.3%	6.8%	+ 0.5%	
<b>Small-Cap Domestic Equity</b>		<b>\$ 14.8</b>	<b>5.3%</b>	<b>5.0%</b>	<b>+ 0.3%</b>	
Conestoga	Small-Cap Growth	\$ 7.6	2.7%	2.5%	+ 0.2%	
Wellington	Small-Cap Value	\$ 7.3	2.6%	2.5%	+ 0.1%	
<b>International Equity</b>		<b>\$ 48.9</b>	<b>17.6%</b>	<b>18.0%</b>	<b>- 0.4%</b>	<b>15-21%</b>
Causeway	International Value	\$ 18.4	6.6%			
BNY Mellon	International Growth	\$ 23.7	8.5%			
Harding Loevner	Emerging Markets	\$ 6.7	2.4%			
<b>Short-Duration Fixed Income</b>		<b>\$ 9.8</b>	<b>3.5%</b>	<b>5.0%</b>	<b>- 1.5%</b>	<b>0-8%</b>
Barrow Hanley	Short Duration	\$ 6.4	2.3%			
Cash	Money Market	\$ 3.4	1.2%			
<b>Market-Duration Fixed Income</b>		<b>\$ 73.6</b>	<b>26.5%</b>	<b>25.0%</b>	<b>+ 1.5%</b>	<b>20-30%</b>
Dodge & Cox	Market Duration	\$ 36.6	13.2%	12.5%	+ 0.7%	
MetWest	Market Duration	\$ 37.0	13.3%	12.5%	+ 0.8%	
<b>Alternatives</b>		<b>\$ 51.1</b>	<b>18.4%</b>	<b>20.0%</b>	<b>- 1.6%</b>	<b>17-23%</b>
Lighthouse	HFOF	\$ 18.8	6.8%			
Pointer	HFOF	\$ 19.0	6.9%			
Oaktree RE Opps VI	Real Estate	\$ 3.4	1.2%			
Walton Street RE VII	Real Estate	\$ 3.3	1.2%			
Walton Street RE VIII	Real Estate	\$ 6.6	2.4%			
<b>Total</b>		<b>\$277.6</b>	<b>100.0%</b>			

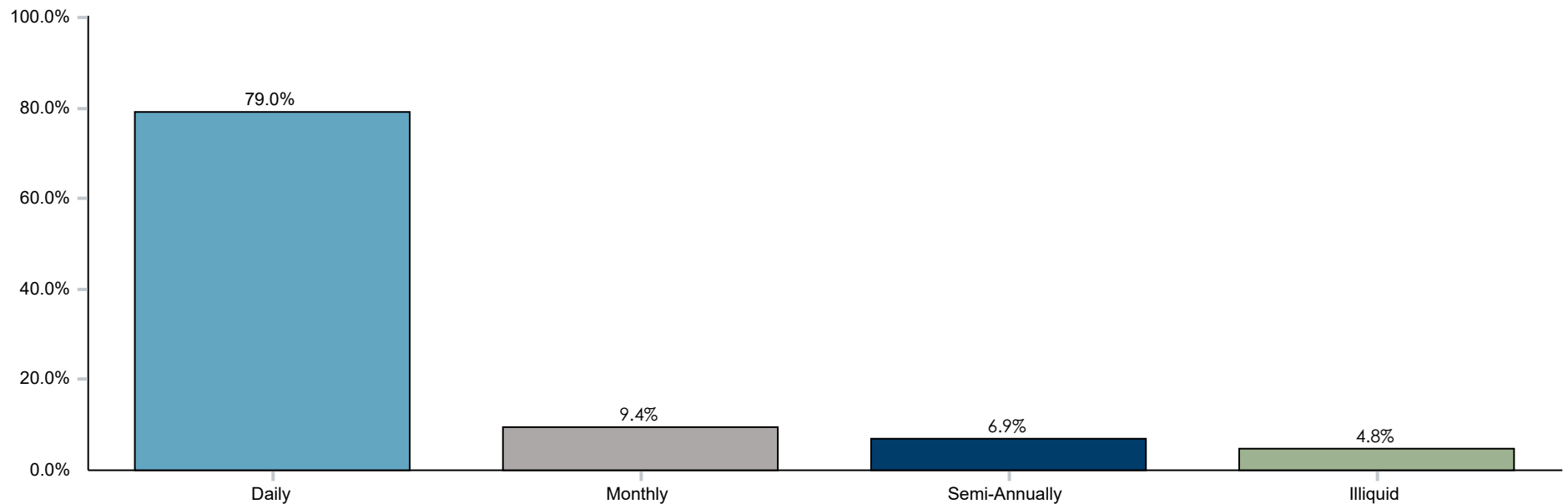
\*Totals may not add due to rounding.

# Liquidity Schedule - Cash Balance

As of June 30, 2019

Investments	Market Value (\$)	Daily (\$)	Monthly (\$)	Semi-Annually (\$)	Illiquid (\$)	Contributions	Withdrawals	Notes
Vanguard Institutional Index Fund	38,084,571	38,084,571	--	--	--	Daily	Daily	Daily, No Lock-Up
Sands Large Cap Growth (Touchstone)	20,954,919	20,954,919	--	--	--	Daily	Daily	Daily, No Lock-Up
Barrow Hanley Large Cap Value	20,283,066	20,283,066	--	--	--	Daily	Daily	Daily, No Lock-Up
Conestoga Small-Cap Fund I	7,552,196	7,552,196	--	--	--	Daily	Daily	Daily, No Lock-Up
Wellington Small Cap Value	7,276,330	--	7,276,330	--	--	Monthly	Monthly	10 Day Notice, No Lock-Up
Causeway International Value	18,418,137	18,418,137	--	--	--	Daily	Daily	Daily, No Lock-Up
BNY Mellon International Stock Fund	23,712,962	23,712,962	--	--	--	Daily	Daily	Daily, No Lock-Up
Harding Loevner Inst. Emerging Markets I	6,749,672	6,749,672	--	--	--	Daily	Daily	Daily, No Lock-Up
Barrow Hanley Short Fixed	6,423,704	6,423,704	--	--	--	Daily	Daily	Daily, No Lock-Up
Cash Account	3,371,861	3,371,861	--	--	--	Daily	Daily	Daily, No Lock-Up
Dodge & Cox Income Fund	36,625,022	36,625,022	--	--	--	Daily	Daily	Daily, No Lock-Up
Met West Total Return Fund Pl	37,008,271	37,008,271	--	--	--	Daily	Daily	Daily, No Lock-Up
Lighthouse Diversified	18,797,237	--	18,797,237	--	--	Monthly	Monthly	90 Day Notice, No Lock-Up
Pointer Offshore LTD	19,018,028	--	--	19,018,028	--	Semi-Annually	Semi-Annually	Notice by Mar 15/Sept 15
Oaktree RE Opportunities Fund V	3,394,156	--	--	--	3,394,156	Illiquid	Illiquid	Illiquid
Walton Street Real Estate Fund VII, L.P.	3,306,292	--	--	--	3,306,292	Illiquid	Illiquid	Illiquid
Walton Street Real Estate Fund VIII, L.P.	6,612,674	--	--	--	6,612,674	Illiquid	Illiquid	Illiquid
<b>Total (\$)</b>	<b>277,589,098</b>	<b>219,184,380</b>	<b>26,073,567</b>	<b>19,018,028</b>	<b>13,313,123</b>			
<b>Total (%)</b>	<b>100.0</b>	<b>79.0</b>	<b>9.4</b>	<b>6.9</b>	<b>4.8</b>			

Liquidity of Total Portfolio



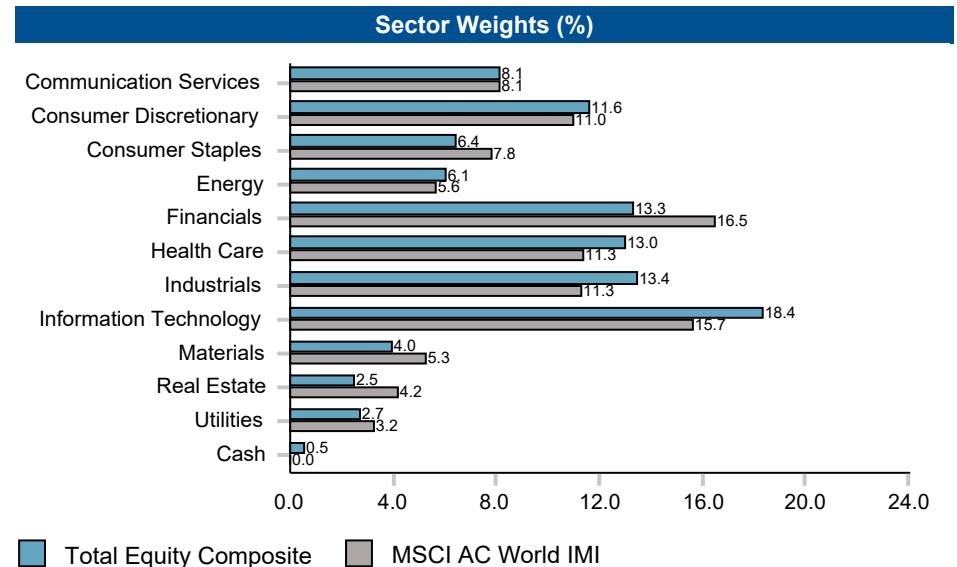
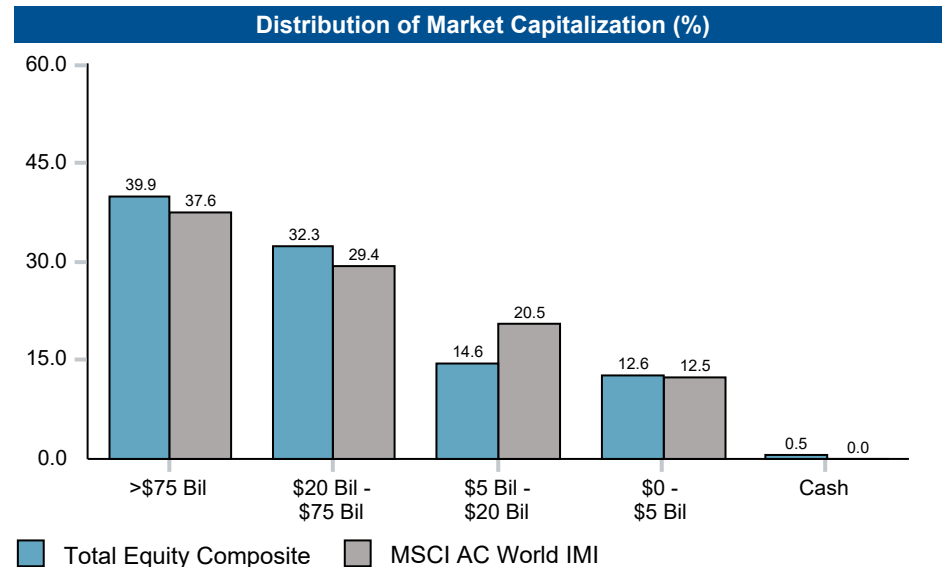
# Surplus Cash Equity Portfolio Characteristics

## Surplus Cash Equity Composite vs. MSCI AC World IMI

As of June 30, 2019

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	140,564	136,029
Median Mkt. Cap (\$M)	17,771	1,679
Price/Earnings ratio	20.5	16.9
Price/Book ratio	3.4	2.8
5 Yr. EPS Growth Rate (%)	14.5	13.0
Current Yield (%)	2.0	2.5
Debt to Equity	1.2	1.5
Number of Stocks	816	8,866
Beta (5 Years, Monthly)	1.01	1.00
Consistency (5 Years, Monthly)	53.33	0.00
Sharpe Ratio (5 Years, Monthly)	0.61	0.53
Information Ratio (5 Years, Monthly)	0.57	-
Up Market Capture (5 Years, Monthly)	104.66	100.00
Down Market Capture (5 Years, Monthly)	98.62	100.00

Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)
Amazon.com Inc	2.0	1.5	0.5
Microsoft Corp	1.7	1.8	-0.1
Visa Inc	1.4	0.6	0.8
Apple Inc	1.1	1.7	-0.6
Alibaba Group Holding Ltd	1.1	0.5	0.6
Facebook Inc	1.1	0.9	0.2
ServiceNow Inc	1.0	0.1	0.9
Alphabet Inc	1.0	0.6	0.4
Netflix Inc	1.0	0.3	0.7
JPMorgan Chase & Co	0.8	0.7	0.1
% of Portfolio	12.2	8.7	3.5



Equity composite holdings are a consolidation of the underlying manager exposures weighted by the ending market value. Cash holdings for certain managers may not be included.

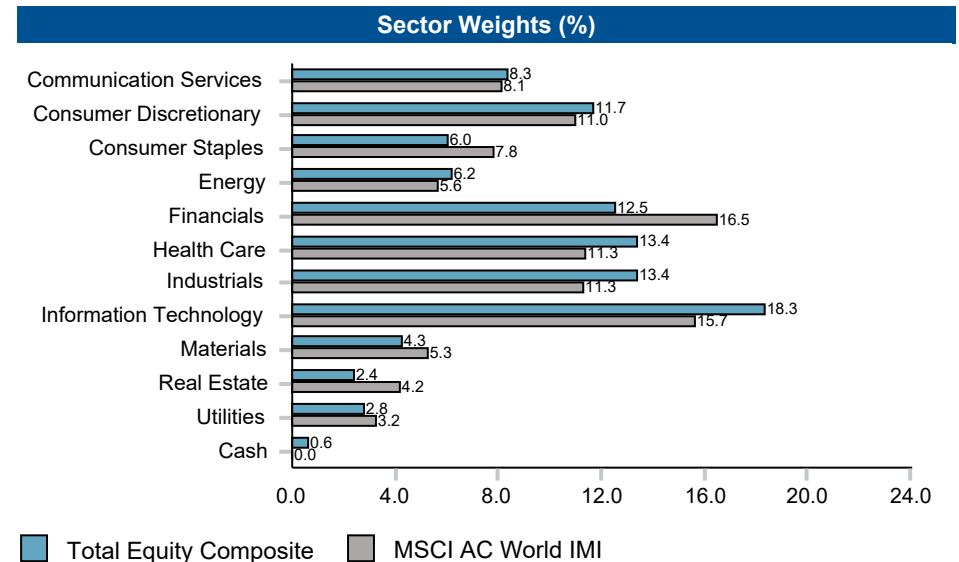
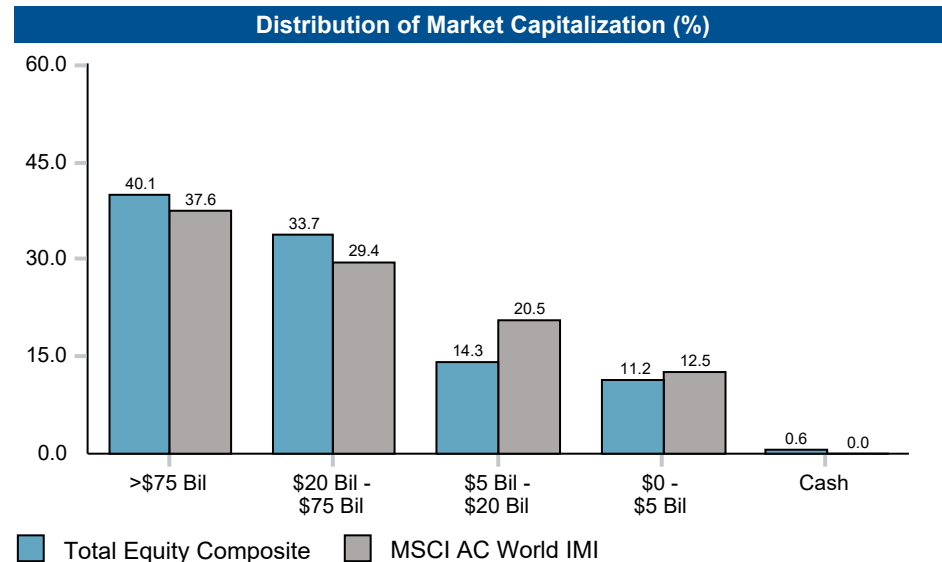
# Cash Balance Plan Equity Portfolio Characteristics

## Cash Balance Plan Equity Composite vs. MSCI AC World IMI

As of June 30, 2019

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	140,115	136,029
Median Mkt. Cap (\$M)	17,771	1,679
Price/Earnings ratio	20.6	16.9
Price/Book ratio	3.4	2.8
5 Yr. EPS Growth Rate (%)	14.6	13.0
Current Yield (%)	2.0	2.5
Debt to Equity	1.2	1.5
Number of Stocks	816	8,866
Beta (5 Years, Monthly)	1.01	1.00
Consistency (5 Years, Monthly)	51.67	0.00
Sharpe Ratio (5 Years, Monthly)	0.61	0.53
Information Ratio (5 Years, Monthly)	0.56	-
Up Market Capture (5 Years, Monthly)	105.24	100.00
Down Market Capture (5 Years, Monthly)	99.41	100.00

Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)
Amazon.com Inc	2.1	1.5	0.6
Visa Inc	1.6	0.6	1.0
Microsoft Corp	1.6	1.8	-0.2
ServiceNow Inc	1.3	0.1	1.2
Alibaba Group Holding Ltd	1.2	0.5	0.7
Netflix Inc	1.1	0.3	0.8
Facebook Inc	1.1	0.9	0.2
Alphabet Inc	1.1	0.6	0.5
Apple Inc	1.0	1.7	-0.7
JPMorgan Chase & Co	0.9	0.7	0.2
% of Portfolio	13.0	8.7	4.3



Equity composite holdings are a consolidation of the underlying manager exposures weighted by the ending market value. Cash holdings for certain managers may not be included.

# Surplus Cash Equity Portfolio - Country/Region Allocation

## Surplus Cash Equity Composite vs. MSCI AC World IMI

As of June 30, 2019

	Total Equity Composite	MSCI AC World IMI
Canada	1.5	3.2
United States	60.6	52.8
Australia	0.5	2.2
Hong Kong	3.6	2.5
New Zealand	0.0	0.1
Singapore	0.0	0.5
<b>Pacific ex Japan</b>	<b>4.1</b>	<b>5.2</b>
Japan	4.9	7.5
Austria	0.0	0.1
Belgium	0.0	0.4
Denmark	1.0	0.5
Finland	0.4	0.4
France	2.2	2.9
Germany	2.3	2.5
Ireland	1.7	1.1
Italy	0.4	0.7
Netherlands	1.2	1.7
Norway	0.0	0.3
Portugal	0.1	0.1
Spain	0.4	0.9
Sweden	0.0	0.9
Switzerland	3.6	2.9
<b>Europe ex UK</b>	<b>13.2</b>	<b>15.4</b>
United Kingdom	6.2	5.1
Israel	0.0	0.2
<b>Middle East</b>	<b>0.0</b>	<b>0.2</b>
<b>Developed Markets</b>	<b>90.4</b>	<b>89.4</b>

	Total Equity Composite	MSCI AC World IMI
China	2.2	2.0
India	0.7	1.1
Indonesia	0.3	0.3
Korea	1.1	1.5
Malaysia	0.0	0.3
Pakistan	0.0	0.0
Philippines	0.0	0.1
Taiwan	1.0	1.4
Thailand	0.2	0.4
<b>EM Asia</b>	<b>5.4</b>	<b>7.0</b>
Czech Republic	0.1	0.0
Greece	0.0	0.0
Hungary	0.0	0.0
Poland	0.0	0.1
Russia	0.7	0.4
Turkey	0.0	0.1
<b>EM Europe</b>	<b>0.9</b>	<b>0.7</b>
Argentina	0.0	0.1
Brazil	0.7	0.9
Cayman Islands	0.0	0.0
Chile	0.0	0.1
Colombia	0.1	0.0
Mexico	0.4	0.3
Peru	0.0	0.0
Virgin Islands	0.0	0.0
<b>EM Latin America</b>	<b>1.3</b>	<b>1.5</b>
Egypt	0.1	0.0
Qatar	0.0	0.1
South Africa	0.4	0.7
United Arab Emirates	0.1	0.1
<b>EM Mid East+Africa</b>	<b>0.6</b>	<b>0.9</b>
<b>Emerging Markets</b>	<b>8.2</b>	<b>10.0</b>
<b>Frontier Markets</b>	<b>0.1</b>	<b>0.0</b>
Cash	0.5	0.0
Other	0.7	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

# Cash Balance Plan Equity Portfolio - Country/Region Allocation

## Cash Balance Plan Equity Composite vs. MSCI AC World IMI

As of June 30, 2019

	Total Equity Composite	MSCI AC World IMI
Canada	1.6	3.2
United States	60.6	52.8
Australia	0.6	2.2
Hong Kong	3.1	2.5
New Zealand	0.0	0.1
Singapore	0.0	0.5
<b>Pacific ex Japan</b>	<b>3.7</b>	<b>5.2</b>
Japan	5.5	7.5
Austria	0.0	0.1
Belgium	0.0	0.4
Denmark	1.1	0.5
Finland	0.4	0.4
France	2.5	2.9
Germany	2.6	2.5
Ireland	1.8	1.1
Italy	0.5	0.7
Netherlands	1.3	1.7
Norway	0.0	0.3
Portugal	0.2	0.1
Spain	0.5	0.9
Sweden	0.0	0.9
Switzerland	4.0	2.9
<b>Europe ex UK</b>	<b>14.8</b>	<b>15.4</b>
United Kingdom	7.1	5.1
Israel	0.0	0.2
<b>Middle East</b>	<b>0.0</b>	<b>0.2</b>
<b>Developed Markets</b>	<b>93.3</b>	<b>89.4</b>

	Total Equity Composite	MSCI AC World IMI
China	1.9	2.0
India	0.4	1.1
Indonesia	0.2	0.3
Korea	0.8	1.5
Malaysia	0.0	0.3
Pakistan	0.0	0.0
Philippines	0.0	0.1
Taiwan	0.7	1.4
Thailand	0.1	0.4
<b>EM Asia</b>	<b>4.1</b>	<b>7.0</b>
Czech Republic	0.0	0.0
Greece	0.0	0.0
Hungary	0.0	0.0
Poland	0.0	0.1
Russia	0.4	0.4
Turkey	0.1	0.1
<b>EM Europe</b>	<b>0.5</b>	<b>0.7</b>
Argentina	0.0	0.1
Brazil	0.4	0.9
Cayman Islands	0.0	0.0
Chile	0.0	0.1
Colombia	0.1	0.0
Mexico	0.2	0.3
Peru	0.0	0.0
Virgin Islands	0.0	0.0
<b>EM Latin America</b>	<b>0.7</b>	<b>1.5</b>
Egypt	0.0	0.0
Qatar	0.0	0.1
South Africa	0.2	0.7
United Arab Emirates	0.1	0.1
<b>EM Mid East+Africa</b>	<b>0.3</b>	<b>0.9</b>
<b>Emerging Markets</b>	<b>5.6</b>	<b>10.0</b>
<b>Frontier Markets</b>	<b>0.1</b>	<b>0.0</b>
Cash	0.6	0.0
Other	0.5	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

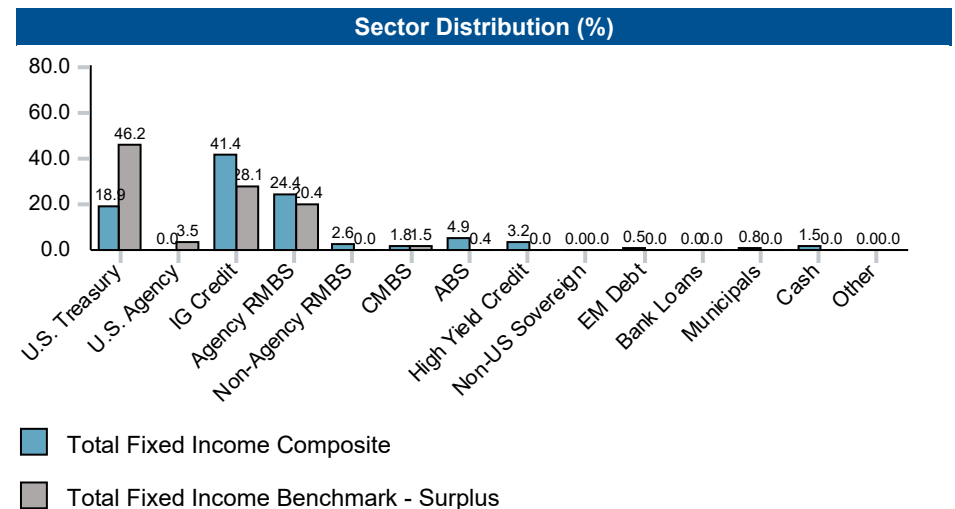
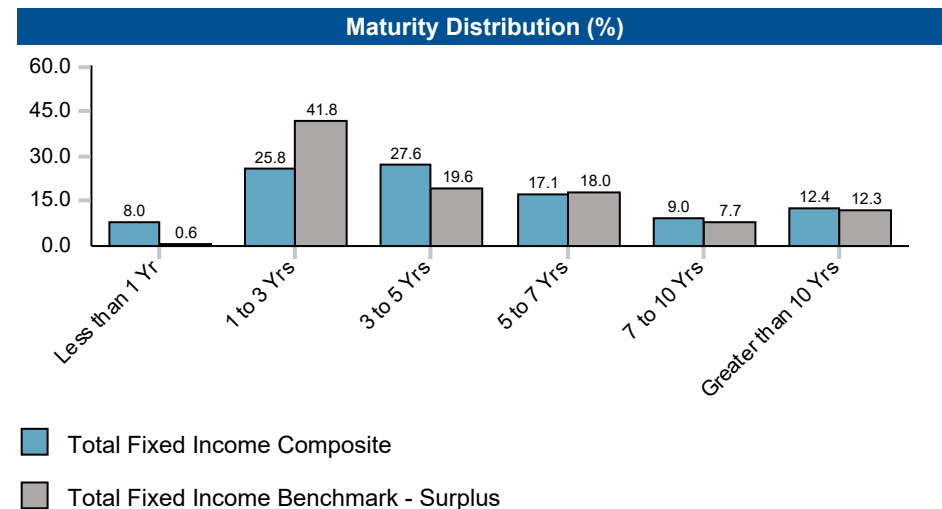
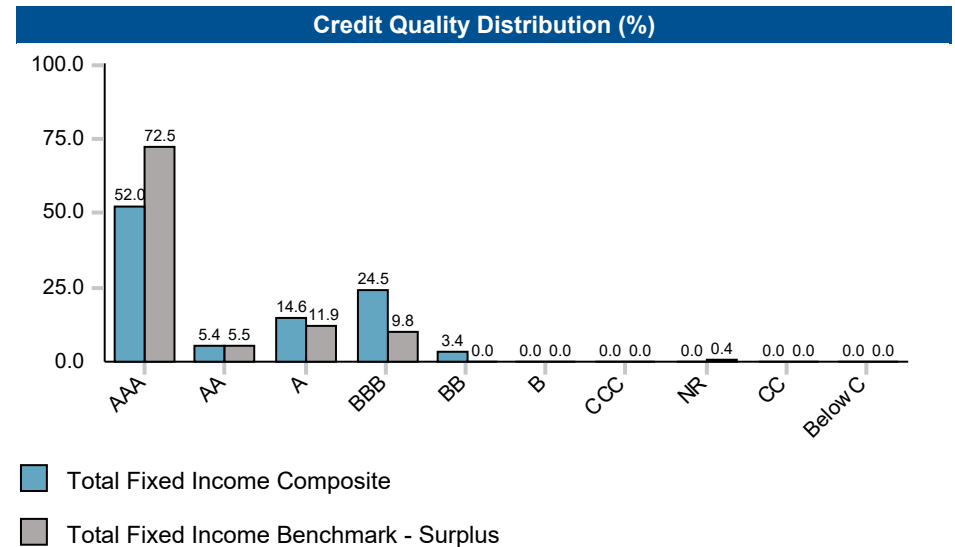
# Surplus Cash Fixed Income Portfolio Characteristics

## Surplus Cash Fixed Income Composite vs. Total Fixed Income Benchmark - Surplus

As of June 30, 2019

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	4.2	4.6
Avg. Maturity	6.3	6.4
Avg. Quality	A	AA+
Yield To Maturity (%)	2.7	2.4

Historical Statistics - 5 Years			
	Up Market Capture	Down Market Capture	Maximum Drawdown
Total Fixed Income Composite	89.5	71.3	-1.7
Total Fixed Income Benchmark - Surplus	100.0	100.0	-2.6



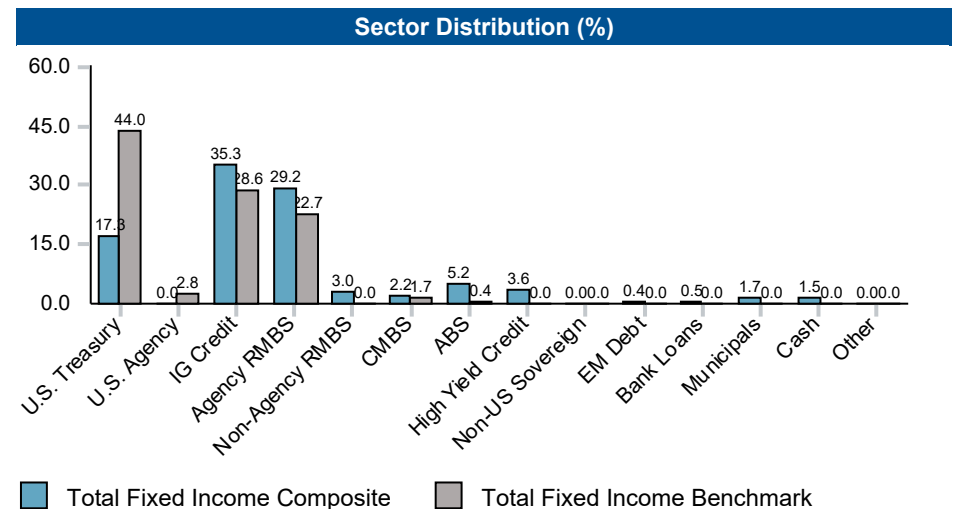
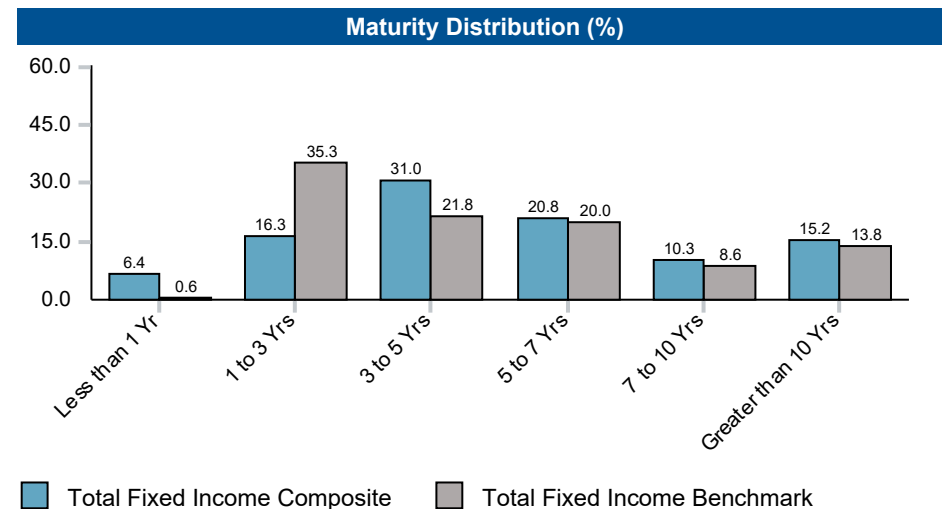
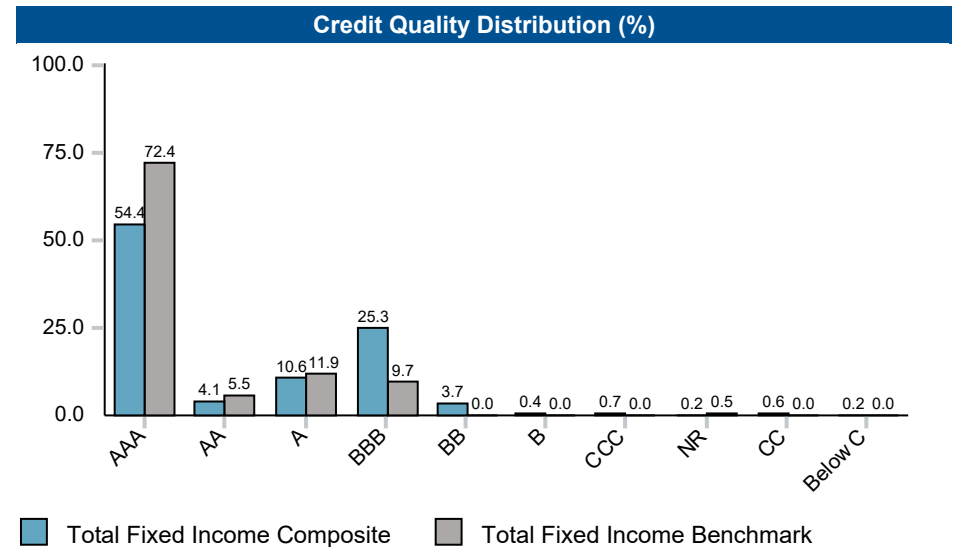
# Cash Balance Fixed Income Portfolio Characteristics

## Cash Balance Fixed Income Composite vs. Total Fixed Income Benchmark

As of June 30, 2019

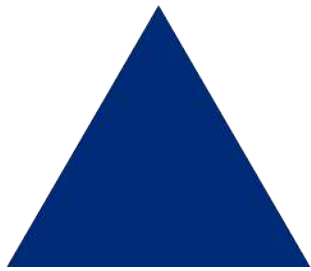
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	4.7	4.9
Avg. Maturity	7.2	6.9
Avg. Quality	AA	A
Yield To Maturity (%)	2.9	2.4

Historical Statistics - 5 Years			
	Up Market Capture	Down Market Capture	Maximum Drawdown
Total Fixed Income Composite	95.7	77.2	-2.0
Total Fixed Income Benchmark	100.0	100.0	-2.5





# Direct Hedge Fund Portfolio



# Surplus Cash Hedge Fund Portfolio Executive Summary

## Portfolio Update – Second Quarter 2019

The Surplus Cash Hedge Fund Portfolio (the “Portfolio”) returned +1.6% during the second quarter of 2019, slightly underperforming the HFRI Fund of Funds Composite Index return of +1.7%. Each of the Portfolio’s four strategies contributed positively to the Portfolio’s performance on an absolute basis. Equity Long/Short strategies (+2.9%) contributed the most, followed by Macro (+2.1%), Relative Value (+0.2%) and Credit (+0.2). On a relative basis, Equity Long/Short outperformed its respective reference index while Credit, Macro, and Relative Value underperformed.

Strategy	Q2 Absolute Performance	12-Month Absolute Performance	Strategy Commentary	Manager Highlights Q2 Contributors/Detractors		
Equity Long / Short	+	+	<i>Palestra</i> ’s core long positions performed strongly while <i>Bloom Tree</i> profited from both core long positions and the short book. <i>Marshall Wace</i> ’s Fundamental strategies contributed most of its gains with smaller profits coming from TOPS and Liquid Alpha. Indus Japan fell on the quarter as the fund’s two largest long positions detracted from performance.	+	Palestra	+6.7%
					Bloom Tree	+5.9%
					Marshall Wace	+2.7%
				-	Indus Japan	-0.5%
Credit	+	-	<i>York</i> benefited from positions in both the debt and post re-org equity of core energy and utility names. The firm is using the buoyant market environment to exit positions and raise dry powder. Credit managers were challenged by broad-based weakness in lower-quality and energy credits—this affected <i>Davidson Kempner</i> and <i>Chatham</i> to an extent, but modest losses from these managers were also driven by dispersion in idiosyncratic positioning as well as hedging.	+	York	+1.5%
				-	DK Distressed	-0.3%
					Chatham	-0.5%
Macro	+	-	Discretionary macro strategies had a strong quarter. <i>Moore</i> successfully traded the moves in developed market interest rates which rallied as central banks signaled a pivot to easier policy. <i>Stone Milliner</i> also profited from interest rates as well as from the sizeable rally in gold. <i>Emso</i> experienced gains across the portfolio with both Local and Hard currency sovereign bonds in EMEA and LatAm performing notably well.	+	Moore Macro	+3.5%
					Emso	+2.3%
					Stone Milliner	+1.7%
				-		
Relative Value	+	+	<i>Carlson</i> ’s Event/Special Situation positions drove returns with additional gains coming from trading in Merger Arbitrage. <i>Renaissance</i> posted modest losses that were in line with expectations given the fund’s volatility and low correlation. The fund’s low-volatility factor exposure helped to partially offset stock picking losses primarily from domestic signals.	+	Carlson	+1.0%
				-	Renaissance	-0.8%

## 2<sup>nd</sup> Quarter Investment Activity

The Portfolio activity during the quarter is summarized in the table below:

<b>Fund</b>	<b>Strategy</b>	<b>Activity Details</b>	<b>Status</b>
<b>Pine River Fund Ltd.</b>	Relative Value	Redemption submitted starting on December 31, 2016. Pine River is currently liquidating the fund.	<i>Received \$20k in May 2019 and \$7k in July 2019. Further distributions are expected over time as the fund's liquidation process continues.</i>
<b>Tiger Eye Fund, Ltd.</b>	Equity Long / Short	Redemption submitted as of December 31, 2018.	<i>Remaining audit holdback proceeds received in May 2019. Investment now fully liquidated.</i>
<b>The BlackRock 32 Capital Fund Ltd.</b>	Relative Value	Redemption submitted as of March 29, 2019.	<i>\$5.8 million received in April 2019. Investment now fully liquidated.</i>
<b>Chatham Asset High Yield Offshore Fund, Ltd.</b>	Credit	Redemption submitted as of June 30, 2019.	<i>\$9.4 million received in July 2019, with \$1.0 million audit holdback remaining.</i>
<b>Palestra Capital Offshore Fund, Ltd.</b>	Equity Long / Short	Subscription submitted as of April 1, 2019.	<i>Completed.</i>
<b>Man Alternative Risk Premia SP</b>	Relative Value	Subscription submitted as of June 10, 2019.	<i>Completed.</i>

## Rating Changes

During the quarter, no rating changes occurred.

## Recommendations or Action Items

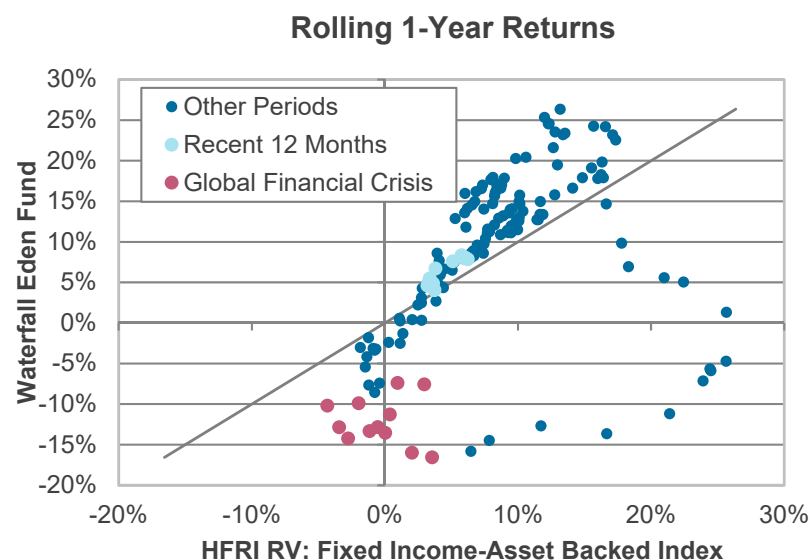
Pavilion recommends a \$10 million initial investment in Waterfall Eden Fund, Ltd. This investment would be funded using redemption proceeds from Chatham Asset High Yield Offshore Fund, Ltd.

# WATERFALL EDEN FUND

- **Category:** Structured Credit – High Yield Asset Backed Securities
- **Firm/Strategy:** Waterfall Asset Management LLC (“Waterfall”) was founded in 2004 by Thomas Capasse and Jack Ross (co-founders of the Merrill Lynch ABS group in 1987). Waterfall invests in distressed and high-yield structured finance securities, including asset-backed securities, consumer and commercial performing and non-performing loans, residential and commercial mortgage-backed securities and investment in pools of loans. The Eden Fund aims to generate consistent returns that are uncorrelated to traditional financial markets by investing in less-liquid, underfollowed parts of the asset-backed securities (ABS) market. The strategy seeks to find the most attractive relative value across the entirety of the ABS market, focusing on the “non-traditional/esoteric” segments. Waterfall is headquartered in New York with a satellite office in London.
- **Mercer Evaluation:** The Eden Fund gains exposure to off-the radar ABS investments that investors may not get exposure to in other funds and are less correlated to traditional markets. The Fund has one of the longest track records in the ABS space and is supported by a seasoned team of investment professionals, including two Principals with over 60 years of combined experience in ABS investing.

Returns (Net of Fees) As of 6/30/2019	1-yr	3-yr	5-yr	10-yr	10-yr Std. Deviation
Waterfall Eden	4.1%	8.9%	6.1%	10.5%	3.4%
HFRI RV: Fixed Income-Asset Backed	3.7%	6.7%	4.9%	9.2%	2.5%

As of 6/30/2019	Waterfall Eden
Total Firm AUM:	\$8.5 B
Total Strategy/Product AUM:	\$5.2 B
Liquidity Terms:	Series B: Quarterly with 25% Investor-Level Gate (1 year cleanup); 90 days notice*; 1-yr. soft lock (7%)
Management Fee:	Series B: 1.5%*
Performance Fee:	Series B: 18%*
Typical Exposures:	Leverage: ~125-150% Rate Duration: 0.5-0.9 Spread Duration: 2.5-5.0
Mercer Rating:	A
Auditor:	Deloitte & Touche
Administrator:	U.S. Bancorp Fund Services
Firm / Strategy Inception Date:	2004 / January 2005



Global financial Crisis: Jul 2008 – Jun 2009

\*Reflects a Mercer-negotiated reduced-fee arrangement from an original management fee and performance fee of 1.8% and 20%, respectively. The Eden Fund also offers Series A with a negotiated management fee and performance fee of 1.3% and 15%, respectively; Quarterly with 12.5% Investor-Level Gate (2 year cleanup); 90 days notice; 1-yr. soft lock (7%)

# Direct Hedge Fund Portfolio Asset Allocation & Performance

As of June 30, 2019

	Allocation		Performance(%)							
	Market Value (\$)	%	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	Since Invested	Inception Period
<b>Hedge Fund Composite</b>	<b>155,395,738</b>	<b>100.0</b>	<b>1.6</b>	<b>4.1</b>	<b>0.2</b>	<b>0.2</b>	<b>4.7</b>	<b>1.7</b>	<b>2.8</b>	<b>6y 2m</b>
HFRI Fund of Funds Composite Index			1.7	6.4	1.4	1.4	4.3	2.2	2.9	
El Camino HF Composite Benchmark			1.7	6.5	1.2	1.2	5.0	2.6	3.5	
<b>Equity HF Composite</b>	<b>51,564,646</b>	<b>33.2</b>	<b>2.9</b>	<b>6.5</b>	<b>0.0</b>	<b>0.0</b>	<b>5.4</b>	<b>1.4</b>	<b>2.5</b>	<b>6y 2m</b>
HFRI Equity Hedge (Total) Index			1.8	9.5	0.5	0.5	6.8	3.5	4.7	
<b>Credit HF Composite</b>	<b>31,687,733</b>	<b>20.4</b>	<b>0.2</b>	<b>2.4</b>	<b>-1.1</b>	<b>-1.1</b>	<b>8.3</b>	<b>2.0</b>	<b>4.9</b>	<b>6y 2m</b>
HFRI ED: Distressed/Restructuring Index			1.3	4.5	-0.1	-0.1	6.7	1.6	3.4	
<b>Macro HF Composite</b>	<b>41,310,034</b>	<b>26.6</b>	<b>2.1</b>	<b>3.6</b>	<b>-0.4</b>	<b>-0.4</b>	<b>0.9</b>	<b>2.4</b>	<b>1.5</b>	<b>6y 2m</b>
HFRI Macro (Total) Index			2.7	5.0	2.6	2.6	0.4	1.4	0.9	
<b>Relative Value HF Composite</b>	<b>30,833,325</b>	<b>19.8</b>	<b>0.2</b>	<b>2.8</b>	<b>3.4</b>	<b>3.4</b>	<b>4.9</b>	<b>1.6</b>	<b>2.8</b>	<b>6y 2m</b>
HFRI RV: Multi-Strategy Index			1.2	3.8	2.2	2.2	4.1	2.9	3.4	

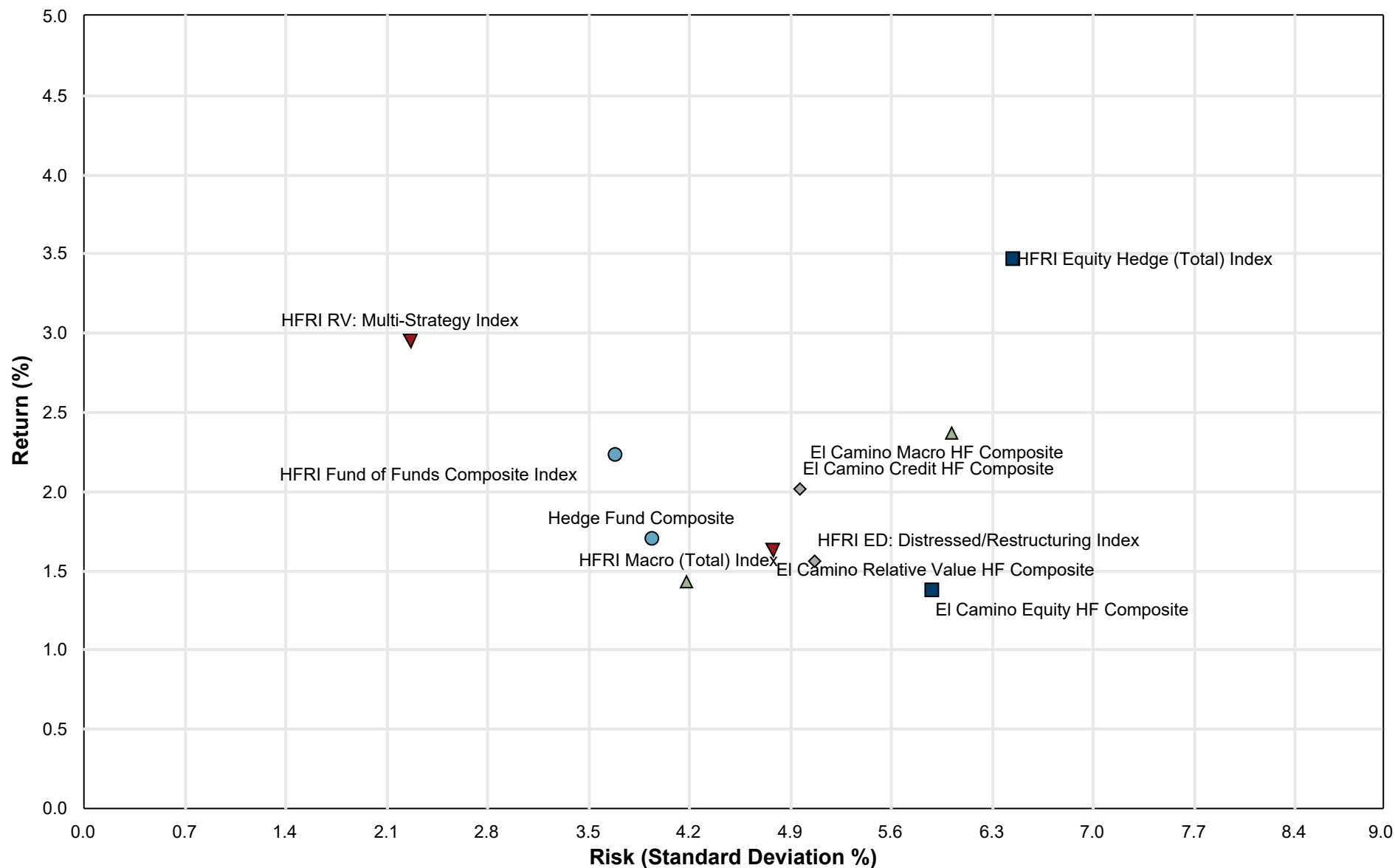
Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.

The El Camino HF Composite Benchmark consists of 40% HFRI Equity Hedge (Total) Index, 20% HFRI ED: Distressed/Restructuring Index, 20% HFRI Macro (Total) Index, and 20% HFRI RV: Multi-Strategy Index.

# Direct Hedge Fund Portfolio

## Risk and Return Summary (Net of Fees)

5 Years Ending June 30, 2019



Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.

# Direct Hedge Fund Portfolio Risk Statistics

As of June 30, 2019

	Since Inception Return	Since Inception Standard Deviation	Since Inception Maximum Drawdown	Since Inception Best Quarter	Since Inception Worst Quarter	Since Inception Sharpe Ratio	Since Inception Sortino Ratio	Inception Period
<b>Total Portfolio</b>								
Hedge Fund Composite	2.8	3.8	-9.5	4.9	-5.7	0.5	0.8	6y 2m
HFRI Fund of Funds Composite Index	2.9	3.6	-7.6	4.6	-4.9	0.6	0.9	
<b>Equity Long/Short</b>								
El Camino Equity HF Composite	2.5	5.6	-14.3	5.7	-8.2	0.3	0.5	6y 2m
HFRI Equity Hedge (Total) Index	4.7	6.2	-10.3	7.6	-8.5	0.7	1.0	
<b>Credit</b>								
El Camino Credit HF Composite	4.9	5.1	-18.5	7.0	-6.6	0.8	1.3	6y 2m
HFRI ED: Distressed/Restructuring Index	3.4	4.9	-17.5	7.4	-6.4	0.6	0.9	
<b>Macro</b>								
El Camino Macro HF Composite	1.5	5.9	-7.4	7.9	-5.0	0.2	0.2	6y 2m
HFRI Macro (Total) Index	0.9	4.0	-6.8	5.1	-4.0	0.1	0.1	
<b>Relative Value</b>								
El Camino Relative Value HF Composite	2.8	4.6	-13.8	5.3	-8.1	0.5	0.7	6y 2m
HFRI RV: Multi-Strategy Index	3.4	2.2	-4.2	2.9	-2.4	1.2	2.0	

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.

# Asset Class Diversification

## Hedge Fund Portfolio

As of June 30, 2019

Manager	Asset Class/Type	Total Assets (\$ mil.)	Percent of Total	Target Allocation	Weighting Relative to Target
<b>Equity Hedge Funds</b>		<b>\$ 51.6</b>	<b>33.2%</b>	<b>40.0%</b>	<b>- 6.8%</b>
Luxor	Event Driven Equity	\$ 0.7	0.5%		
CapeView 1x	European Equity	\$ 6.2	4.0%		
CapeView 2x	European Equity	\$ 3.6	2.3%		
Bloom Tree	Global Equity	\$ 11.2	7.2%		
Marshall Wace Eureka	Global Equity	\$ 10.4	6.7%		
Indus Japan	Japanese Equity	\$ 8.7	5.6%		
Palestra	Long/Short Equity	\$ 10.7	6.9%		
<b>Credit Hedge Funds</b>		<b>\$ 31.7</b>	<b>20.4%</b>	<b>20.0%</b>	<b>+ 0.4%</b>
Davidson Kempner	Distressed Credit	\$ 10.9	7.0%		
York	Multi-Strategy Credit	\$ 10.3	6.6%		
Chatham Asset	High Yield	\$ 10.5	6.7%		
<b>Macro Hedge Funds</b>		<b>\$ 41.3</b>	<b>26.6%</b>	<b>20.0%</b>	<b>+ 6.6%</b>
BP Transtrend	Systematic Macro	\$ 10.4	6.7%		
Moore	Discretionary Macro	\$ 10.4	6.7%		
Stone Milliner	Discretionary Macro	\$ 10.0	6.5%		
EMSO Saguaro	Discretionary Macro	\$ 10.5	6.8%		
<b>Relative Value Hedge Funds</b>		<b>\$ 30.8</b>	<b>19.8%</b>	<b>20.0%</b>	<b>- 0.2%</b>
Renaissance RIDGE	Quantitative Market Neutral	\$ 10.0	6.4%		
Fir Tree	Multi-Strategy	\$ 0.3	0.2%		
Pine River	Multi-Strategy	\$ 0.1	0.0%		
Black Diamond Arbitrage	Event/Merger Arbitrage	\$ 10.5	6.8%		
Man Alternative Risk Premia	Alternative Risk Premia	\$ 10.0	6.5%		
<b>Total Hedge Fund Portfolio</b>		<b>\$155.4</b>	<b>100.0%</b>		

\*Totals may not add due to rounding.



# Direct Hedge Fund Performance Summary

As of June 30, 2019

	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	Since Invested	2018	2017	2016	2015	2014	2013	Inception Period
<b>Total Portfolio</b>														
Hedge Fund Composite	1.6	4.1	0.2	0.2	4.7	1.7	2.8	-1.4	7.2	1.0	-1.6	2.2	-	6y 2m
HFRI Fund of Funds Composite Index	1.5	6.2	1.2	1.2	4.3	2.2	2.9	-4.0	7.8	0.5	-0.3	3.4	9.0	
El Camino HF Composite Benchmark	1.6	6.4	1.1	1.1	5.0	2.6	3.5	-4.1	7.7	6.7	-2.1	2.2	9.9	
<b>Equity Long/Short</b>														
Equity HF Composite	2.9	6.5	0.0	0.0	5.4	1.4	2.5	-3.7	12.1	-8.0	2.0	-0.4	-	6y 2m
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	4.7	-7.1	13.3	5.5	-1.0	1.8	14.3	
Bloom Tree Offshore Fund, Ltd.	5.9	9.7	15.5	15.5	9.5	4.3	4.9	0.5	8.6	-3.8	6.3	3.0	12.8	5y 3m
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	3.7	-7.1	13.3	5.5	-1.0	1.8	14.3	
CapeView Azri Fund Limited	0.2	0.8	-3.5	-3.5	3.7	3.1	3.2	0.6	7.6	-8.3	9.8	4.6	11.4	6y
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	4.9	-7.1	13.3	5.5	-1.0	1.8	14.3	
CapeView Azri 2X Fund	0.0	0.9	-8.7	-8.7	7.1	6.0	6.5	-0.4	16.2	-15.9	21.6	9.8	24.4	6y
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	4.9	-7.1	13.3	5.5	-1.0	1.8	14.3	
Indus Japan Fund Ltd.	-0.5	4.7	-15.8	-15.8	3.3	0.8	1.0	-20.1	21.6	-7.5	1.8	6.3	45.0	5y 7m
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	3.9	-7.1	13.3	5.5	-1.0	1.8	14.3	
Marshall Wace Eureka Fund Class B2	2.7	7.3	1.5	1.5	7.8	8.1	6.4	-0.2	12.0	1.3	11.7	8.1	21.1	1y 11m
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	3.6	-7.1	13.3	5.5	-1.0	1.8	14.3	
Palestra Capital Offshore	6.7	17.0	8.2	8.2	12.9	9.6	6.7	-2.3	14.9	8.7	11.4	5.3	23.9	0y 3m
HFRI Equity Hedge (Total) Index	1.6	9.3	0.3	0.3	6.8	3.4	1.6	-7.1	13.3	5.5	-1.0	1.8	14.3	

Returns are expressed as percentages. Returns for periods greater than one year are annualized. From May 1, 2013, results shown are El Camino Hedge Fund Portfolio returns. Returns for CapeView Azri 2x Fund prior to October 2010 are those of CapeView Azri Fund Limited; returns for BP Transtrend Diversified Fund, LLC prior to April 2008 are those of the Transtrend Diversified Trend Program Enhanced Risk (USD) Fund.

# Direct Hedge Fund Performance Summary

As of June 30, 2019

	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	Since Invested	2018	2017	2016	2015	2014	2013	Inception Period
<b>Credit</b>														
Credit HF Composite	0.2	2.4	-1.1	-1.1	8.3	2.0	4.9	0.7	9.9	14.7	-8.2	2.8	-	6y 2m
HFRI ED: Distressed/Restructuring Index	1.4	4.6	0.0	0.0	6.7	1.6	3.4	-1.7	6.3	15.1	-8.1	-1.4	14.0	
Chatham Asset High Yield Offshore Fund, Ltd	-0.5	2.2	2.9	2.9	11.0	10.5	6.9	4.7	13.5	24.3	5.6	5.5	12.5	1y 11m
HFRI ED: Distressed/Restructuring Index	1.4	4.6	0.0	0.0	6.7	1.6	2.7	-1.7	6.3	15.1	-8.1	-1.4	14.0	
DK Distressed Opportunities International (Cayman) Ltd.	-0.3	3.4	0.3	0.3	9.2	4.5	7.1	2.7	9.5	21.4	-6.2	3.2	21.7	6y 2m
HFRI ED: Distressed/Restructuring Index	1.4	4.6	0.0	0.0	6.7	1.6	3.4	-1.7	6.3	15.1	-8.1	-1.4	14.0	
York Credit Opportunities Unit Trust	1.5	1.6	-6.2	-6.2	5.6	-0.9	2.5	-4.8	12.5	4.1	-7.9	3.4	15.6	6y 2m
HFRI ED: Distressed/Restructuring Index	1.4	4.6	0.0	0.0	6.7	1.6	3.4	-1.7	6.3	15.1	-8.1	-1.4	14.0	
<b>Macro</b>														
Macro HF Composite	2.1	3.6	-0.4	-0.4	0.9	2.4	1.5	-4.0	0.1	5.0	1.0	7.7	-	6y 2m
HFRI Macro (Total) Index	2.5	4.9	2.4	2.4	0.4	1.4	0.9	-4.1	2.2	1.0	-1.3	5.6	-0.4	
BP Transtrend Diversified Fund LLC	0.9	5.5	-1.3	-1.3	-0.5	3.7	3.1	-7.2	1.4	8.2	-1.1	18.9	0.6	6y 2m
HFRI Macro (Total) Index	2.5	4.9	2.4	2.4	0.4	1.4	0.9	-4.1	2.2	1.0	-1.3	5.6	-0.4	
EMSO Saguaro, Ltd.	2.3	5.1	3.0	3.0	3.9	4.4	1.5	-4.6	7.7	10.2	6.2	2.6	2.7	1y 11m
HFRI Macro (Total) Index	2.5	4.9	2.4	2.4	0.4	1.4	1.5	-4.1	2.2	1.0	-1.3	5.6	-0.4	
Moore Macro Managers Fund Ltd.	3.5	3.4	-2.5	-2.5	1.7	1.4	1.5	-3.3	0.6	0.0	3.1	5.4	13.4	5y 3m
HFRI Macro (Total) Index	2.5	4.9	2.4	2.4	0.4	1.4	1.6	-4.1	2.2	1.0	-1.3	5.6	-0.4	
Stone Milliner Macro Fund Inc.	1.7	0.4	-0.4	-0.4	0.5	4.0	0.7	1.2	-5.5	4.9	5.7	14.3	11.2	4y 4m
HFRI Macro (Total) Index	2.5	4.9	2.4	2.4	0.4	1.4	0.0	-4.1	2.2	1.0	-1.3	5.6	-0.4	

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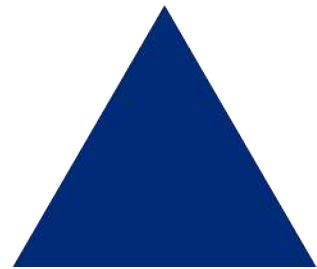
# Direct Hedge Fund Performance Summary

As of June 30, 2019

	Quarter	Year To Date	Fiscal YTD	1 Year	3 Years	5 Years	Since Invested	2018	2017	2016	2015	2014	2013	Inception Period
<b>Relative Value</b>														
Relative Value HF Composite	0.2	2.8	3.4	3.4	4.9	1.6	2.8	5.3	4.4	-0.4	-4.0	1.6	-	6y 2m
HFRI RV: Multi-Strategy Index	1.1	3.9	2.3	2.3	4.1	3.0	3.4	-0.2	4.1	6.4	0.7	3.4	7.9	
(Carlson) Black Diamond Arbitrage Ltd.	1.0	2.7	4.6	4.6	7.4	7.6	5.0	6.4	6.8	10.8	10.5	3.9	7.5	0y 10m
HFRI ED: Merger Arbitrage Index	0.6	3.2	3.8	3.8	4.8	3.5	3.5	3.3	4.3	3.6	3.3	1.7	4.7	
HFRI RV: Multi-Strategy Index	1.1	3.9	2.3	2.3	4.1	3.0	2.0	-0.2	4.1	6.4	0.7	3.4	7.9	
Renaissance RIDGE	-0.8	1.4	8.2	8.2	8.0	16.1	6.3	10.4	12.4	13.3	25.6	17.0	7.7	1y 8m
HFRI EH: Equity Market Neutral Index	-0.1	1.3	-0.6	-0.6	2.4	2.6	0.7	-1.0	4.9	2.2	4.3	3.1	6.5	
HFRI RV: Multi-Strategy Index	1.1	3.9	2.3	2.3	4.1	3.0	2.6	-0.2	4.1	6.4	0.7	3.4	7.9	
Man Alternative Risk Premia SP Fund	2.2	4.1	1.7	1.7	4.8	8.1	-	-3.5	10.2	6.8	7.8	28.0	14.9	0y
HFRI RV: Multi-Strategy Index	1.1	3.9	2.3	2.3	4.1	3.0	-	-0.2	4.1	6.4	0.7	3.4	7.9	

Returns are expressed as percentages. Returns for periods greater than one year are annualized. From May 1, 2013, results shown are El Camino Hedge Fund Portfolio returns. Returns for CapeView Azri 2x Fund prior to October 2010 are those of CapeView Azri Fund Limited; returns for BP Transtrend Diversified Fund, LLC prior to April 2008 are those of the Transtrend Diversified Trend Program Enhanced Risk (USD) Fund.

# Appendix



# Appendix

## Benchmark Descriptions

As of June 30, 2019

### Surplus Cash

#### Surplus Cash Total Benchmark

Beginning March 2015, the Surplus Cash Total Benchmark consists of 40% Total Equity Benchmark - Surplus, 30% Barclays Capital Aggregate, 10% Short Duration Fixed Income Benchmark - Surplus, and 20% Total Alternatives Benchmark - Surplus. From April 2014 to February 2015, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 10% Short Duration Fixed Income Benchmark - Surplus, and 20% Total Alternatives Benchmark - Surplus. From August 2013 to March 2014, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 20% Short Duration Fixed Income Benchmark - Surplus, and 10% Total Alternatives Benchmark - Surplus. During July 2013, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus. From May 2013 to June 2013, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 22% Short Duration Fixed Income Benchmark - Surplus, and 8% HFRI Fund of Funds Composite Index. From November 2012 to April 2013, the Surplus Cash Total Benchmark consists of 30% Total Equity Benchmark - Surplus and 70% Total Fixed Income Benchmark - Surplus. From January 2007 to October 2012, the Surplus Cash Total Benchmark consisted of 15% Total Equity Benchmark - Surplus and 85% Total Fixed Income Benchmark - Surplus. From August 2000 to December 2006, the Surplus Cash Total Benchmark consisted of 2% Total Equity Benchmark - Surplus and 98% Total Fixed Income Benchmark - Surplus. From April 1991 to July 2000, the Surplus Cash Total Benchmark consisted of 100% Total Fixed Income Benchmark - Surplus.

#### Surplus Cash Total Benchmark X Privates

Beginning March 2015 the Surplus Cash Total Benchmark consists of 42.1% Total Equity Benchmark - Surplus, 31.6% Barclays Capital Aggregate, 10.5% Short Duration Fixed Income Benchmark - Surplus, and 15.8% Total Alternatives Benchmark - Surplus. From April 2014 to February 2015 the Surplus Cash Total Benchmark consisted of 31.6% Total Equity Benchmark - Surplus, 42.1% Barclays Capital Aggregate, 10.5% Short Duration Fixed Income Benchmark - Surplus, and 15.8% Total Alternatives Benchmark - Surplus. From August 2013 to March 2014, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 20% Short Duration Fixed Income Benchmark - Surplus, and 10% Total Alternatives Benchmark - Surplus. During July 2013, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus. From May 2013 to June 2013, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 22% Short Duration Fixed Income Benchmark - Surplus, and 8% HFRI Fund of Funds Composite Index. From November 2012 to April 2013, the Surplus Cash Total Benchmark consists of 30% Total Equity Benchmark - Surplus and 70% Total Fixed Income Benchmark - Surplus. From January 2007 to October 2012, the Surplus Cash Total Benchmark consisted of 15% Total Equity Benchmark - Surplus and 85% Total Fixed Income Benchmark - Surplus. From August 2000 to December 2006, the Surplus Cash Total Benchmark consisted of 2% Total Equity Benchmark - Surplus and 98% Total Fixed Income Benchmark - Surplus. From April 1991 to July 2000, the Surplus Cash Total Benchmark consisted of 100% Total Fixed Income Benchmark - Surplus.

#### Pre-Pavilion Surplus Cash Total Benchmark

Beginning January 2007, the Pre-Pavilion Surplus Cash Total Benchmark consists of 15% Total Equity Benchmark - Surplus and 85% Total Fixed Income Benchmark - Surplus. From August 2000 to December 2006, the Pre-Pavilion Surplus Cash Total Benchmark consisted of 2% Total Equity Benchmark - Surplus and 98% Total Fixed Income Benchmark - Surplus. From April 1991 to July 2000, the Pre-Pavilion Surplus Cash Total Benchmark consisted of 100% Total Fixed Income Benchmark - Surplus.

#### Total Equity Benchmark - Surplus

Beginning March 2015, the Total Equity Benchmark - Surplus consists of 50% Large Cap Equity Benchmark, 12.5% Small Cap Equity Benchmark, and 37.5% MSCI AC World ex USA (Net). From November 2012 to February 2015, the Total Equity Benchmark - Surplus consisted of 50% Large Cap Equity Benchmark, 16.67% Small Cap Equity Benchmark, and 33.33% MSCI AC World ex USA (Net). From April 1991 to October 2012, the Total Equity Benchmark - Surplus consisted of 100% Large Cap Equity Benchmark.

#### Domestic Equity Benchmark - Surplus

Beginning March 2015, the Domestic Equity Benchmark - Surplus consists of 80% Large Cap Equity Benchmark and 20% Small Cap Equity Benchmark. From November 2012 to February 2015, the Domestic Equity Benchmark - Surplus consisted of 75% Large Cap Equity Benchmark and 25% Small Cap Equity Benchmark. From April 1991 to October 2012, the Domestic Equity Benchmark - Surplus consisted of 100% Large Cap Equity Benchmark.

# Appendix

## Benchmark Descriptions

As of June 30, 2019

### **Large Cap Equity Benchmark**

Beginning November 2012, the Large Cap Equity Benchmark consists of 25% Russell 1000 Value Index, 25% Russell 1000 Growth Index, and 50% S&P 500 Index. From April 1991 to October 2012, the Large Cap Equity Benchmark consisted of 100% Russell 1000 Value Index.

### **Small Cap Equity Benchmark**

Beginning November 2012, the Small Cap Equity Benchmark consists of 50% Russell 2000 Growth Index and 50% Russell 2000 Value Index.

### **Total Fixed Income Benchmark - Surplus**

Beginning March 2015, the Total Fixed Income Benchmark - Surplus consists of 75% Barclays Capital Aggregate and 25% Short Duration Fixed Income Benchmark - Surplus. From April 2014 to February 2015, the Total Fixed Income Benchmark - Surplus consisted of 80% Barclays Capital Aggregate and 20% Short Duration Fixed Income Benchmark - Surplus. From August 2013 to March 2014, the Total Fixed Income Benchmark - Surplus consisted of 66.67% Barclays Capital Aggregate and 33.33% Short Duration Fixed Income Benchmark - Surplus. During July 2013, the Total Fixed Income Benchmark - Surplus consisted of 65.57% Barclays Capital Aggregate and 34.43% Short Duration Fixed Income Benchmark - Surplus. From May 2013 to June 2013, the Total Fixed Income Benchmark - Surplus consisted of 64.52% Barclays Capital Aggregate and 35.48% Short Duration Fixed Income Benchmark - Surplus. From November 2012 to April 2013, the Total Fixed Income Benchmark - Surplus consisted of 57.14% Barclays Capital Aggregate and 42.86% Short Duration Fixed Income Benchmark - Surplus. From January 2007 to October 2012, the Total Fixed Income Benchmark - Surplus consisted of 40% Barclays Capital Aggregate and 60% Short Duration Fixed Income Benchmark - Surplus. From April 1991 to December 2006, the Total Fixed Income Benchmark - Surplus consisted of 100% Short Duration Fixed Income Benchmark - Surplus.

### **Short Duration Fixed Income Benchmark - Surplus**

Beginning in November 2012, the Short Duration Fixed Income Benchmark - Surplus consists of 100% Barclays Capital 1-3 Year Gov't/Credit. From January 2007 to October 2012, the Short Duration Fixed Income Benchmark - Surplus consisted of 66.67% Barclays Capital Intermediate Aggregate and 33.33% Barclays Capital Gov't 1-3 Year. From May 2001 to December 2006, the Short Duration Fixed Income Benchmark - Surplus consisted of 84.69% Barclays Capital Intermediate Aggregate and 15.31% Barclays Capital Gov't 1-3 Year. From April 1991 to April 2001, the Short Duration Fixed Income Benchmark - Surplus consisted of 100% Barclays Capital Gov't 1-3 Year.

### **Total Alternatives Benchmark - Surplus**

Beginning April 2014 the Total Alternatives Benchmark - Surplus consists of 75% HFRI Fund of Funds Composite Index and 25% NCREIF Property Index. From May 2013 to March 2014, the Total Alternatives Benchmark - Surplus consisted of 100% HFRI Fund of Funds Composite Index.

# Appendix

## Benchmark Descriptions

As of June 30, 2019

### Cash Balance Plan

#### Cash Balance Plan Total Benchmark

Beginning July 2017, the Cash Balance Plan Total Benchmark consists of 50% Total Equity Benchmark, 30% Total Fixed Income Benchmark, and 20% Alternatives Benchmark. From January 2013 to June 2017, the Cash Balance Plan Total Benchmark consisted of 50% Total Equity Benchmark, 35% Total Fixed Income Benchmark, and 15% Alternatives Benchmark. From November 2012 to December 2012, the Cash Balance Plan Total Benchmark consisted of 50% Total Equity Benchmark, 45% Total Fixed Income Benchmark, and 5% Alternatives Benchmark. From October 1990 to October 2012, the Cash Balance Plan Total Benchmark consisted of 60% Russell 1000 Value Index and 40% Barclays Capital Aggregate.

#### Cash Balance Plan Total X Privates Benchmark

Beginning July 2017, the Cash Balance Plan Total Benchmark X Privates consists of 33.68% Domestic Equity Benchmark, 18.95% MSCI AC World ex USA Net, 26.31% Barclays Capital Aggregate, 5.27% Short Duration Fixed Income Benchmark, and 15.79% HFRI FOF Composite. From January 2013 to June 2017, the Cash Balance Plan Total Benchmark X Privates consisted of 33.68% Domestic Equity Benchmark, 18.95% MSCI AC World ex USA Net, 26.31% Barclays Capital Aggregate, 10.53% Short Duration Fixed Income Benchmark, and 10.53% HFRI FOF Composite. From November 2012 to December 2012, the Cash Balance Plan Total Benchmark X Privates consisted of 50% Total Equity Benchmark, 45% Total Fixed Income Benchmark, and 5% HFRI FOF Composite. From October 1990 to October 2012, the Cash Balance Plan Total Benchmark X Privates consisted of 60% Russell 1000 Value Index and 40% Barclays Capital Aggregate.

#### Pre-Pavilion Cash Balance Plan Total Benchmark

Beginning October 1990, the Cash Balance Plan Total Benchmark consists of 60% Russell 1000 Value Index and 40% Barclays Capital Aggregate.

#### Total Equity Benchmark

Beginning November 2012, the Total Equity Benchmark consists of 54% Large Cap Equity Benchmark, 10% Small Cap Equity Benchmark, and 36% MSCI AC World ex USA (Net). From October 1990 to October 2012, the Total Equity Benchmark consisted of 100% Large Cap Equity Benchmark.

#### Domestic Equity Benchmark

Beginning November 2012, the Domestic Equity Benchmark consists of 84.38% Large Cap Equity Benchmark and 15.62% Small Cap Equity Benchmark. From October 1990 to October 2012, the Domestic Equity Benchmark consisted of 100% Large Cap Equity Benchmark.

#### Large Cap Equity Benchmark

Beginning November 2012, the Large Cap Equity Benchmark consists of 25% Russell 1000 Value Index, 25% Russell 1000 Growth Index, and 50% S&P 500 Index. From October 1990 to October 2012, the Large Cap Equity Benchmark consisted of 100% Russell 1000 Value Index.

#### Small Cap Equity Benchmark

Beginning November 2012, the Small Cap Equity Benchmark consists of 50% Russell 2000 Growth Index and 50% Russell 2000 Value Index.

#### Total Fixed Income Benchmark

Beginning July 2017, the Total Fixed Income Benchmark consists of 83.3333% Barclays Capital Aggregate and 16.6667% Short Duration Fixed Income Benchmark. From January 2013 to June 2017, the Total Fixed Income Benchmark consisted of 71.43% Barclays Capital Aggregate and 28.57% Short Duration Fixed Income Benchmark. From November 2012 to December 2012, the Total Fixed Income Benchmark consists of 55.56% Barclays Capital Aggregate and 44.44% Short Duration Fixed Income Benchmark. From October 1990 to October 2012, the Total Fixed Income Benchmark consisted of 100% Barclays Aggregate.

#### Short Duration Fixed Income Benchmark

Beginning November 2012, the Short Duration Fixed Income Benchmark consists of 100% Barclays Capital 1-3 Year Gov't/Credit. From October 1990 to October 2012, the Short Duration Fixed Income Benchmark

# Appendix

## Benchmark Descriptions

As of June 30, 2019

consisted of 100% 90 Day U.S. Treasury Bills.

### **Total Alternatives Benchmark**

Beginning January 2013, the Alternatives Benchmark consists of 66.67% HFRI Fund of Funds Composite Index and 33.33% NCREIF Property Index. From November 2012 to December 2012, the Alternatives Benchmark consisted of 100% HFRI Fund of Funds Composite Index.



# Glossary of Terms for Scorecard

Key Performance Indicator	Definition / Explanation
Investment Performance	
Surplus cash balance (millions)	
Surplus cash return	The Surplus Cash portfolio outperformed the benchmark for the quarter with a +2.9% return. The portfolio has outgained its benchmark by 10 bps per annum since inception (Nov. 1, 2012) with a return of +5.6% annualized. The assets within the Surplus Cash account excluding debt reserves, balance sheet cash and District assets, but including Foundation and Concern assets ended the quarter at \$1,028.7 million, significantly higher than the beginning of the quarter. The adjusted fiscal year 2019 Surplus Cash projected balance at fiscal year end 2019 was \$892.9 million.
Cash balance plan balance (millions)	The Cash Balance Plan's performance outpaced its benchmark by 10 bps for the quarter with a return of +3.1%, and has outperformed its benchmark since inception. The since inception annualized return stands at +7.8%, 80 basis points ahead of its benchmark per year. The assets within the Cash Balance Plan ended the quarter at \$277.6 million. The estimated expected amount for fiscal year 2019 is \$276.9 million.
Cash balance plan return	
403(b) plan balance (millions)	The 403(b) balance grew significantly during the quarter and now stands at \$514.1 million, an increase of \$17.3 million or 3.5% from the March 31, 2019 value.
Risk vs. Return	
Surplus cash 3-year Sharpe ratio	The Sharpe ratio is the excess return of an investment over the risk free rate (US Treasuries) generated per unit of risk (standard deviation) taken to obtain that return. The higher the value, the better the risk-adjusted return. It is important to view returns in this context because it takes into account the risk associated with a particular return rather than simply focusing on the absolute level of return.
3-year return	
3-year standard deviation	
Cash balance 3-year Sharpe ratio	Sharpe ratio = (actual return - risk free rate) / standard deviation
3-year return	The Surplus Cash portfolio's 3-year Sharpe ratio was above that of its benchmark and significantly higher than the expected Sharpe ratio modeled. This was due primarily to muted volatility over the period in comparison to what was modeled. The Cash Balance Plan's 3-year Sharpe ratio significantly exceeded modeling expectations and was above its benchmark as well. Both accounts have demonstrated strong risk-adjusted returns since inception.
3-year standard deviation	
Asset Allocation	
Surplus cash absolute variances to target	This represents the sum of the absolute differences between the portfolio's allocations to various asset classes and the target benchmark's allocations to those asset classes. The higher the number, the greater the portfolio's allocations deviate from the target benchmark's allocations, indicating a higher possibility for the portfolio's risk and return characteristics to differ from the Board's expectations.
Cash balance absolute variances to target	The threshold for an alert "yellow" status is set at 10% and the threshold for more severe "red" status is set at 20%. Both portfolios are below the 10% threshold.
Manager Compliance	
Surplus cash manager flags	This section represents how individual investment managers have fared and draws attention to elevated concerns regarding performance and risk-adjusted performance all at the individual manager level. The number of flags are aggregated and a percentage of the total is used to highlight an alert "yellow" status (40% of the flags) and a more severe "red" status (50%). In total there are 60 potential flags for the Surplus Cash account and 68 for the Cash Balance Plan.
Cash balance plan manager flags	Currently, both the Surplus Cash Portfolio and the Cash Balance Plan are in the "green" status.

# Hedge Fund Strategy Definitions

The **Equity Strategy** is comprised of Equity Long/Short strategies. Equity hedge strategies typically have a directional bias (long or short) and trade in equities and equity-related derivatives. Managers seek to buy undervalued equities with improving fundamentals and short overvalued equities with deteriorating fundamentals.

*Trade Example: Long a basket of energy stocks and short a basket of consumer electronics stocks.*

The **Credit Strategy** is comprised of Distressed Securities, Credit Long/Short, Emerging Market Debt and Credit Event Driven. Credit strategies typically have a directional bias and involve the purchase of various types of debt, equity, trade claims and fixed income securities. Hedging using various instruments such as Credit Default swaps is frequently employed.

*Trade Example: Buying the distressed bonds of a company which has defaulted and participating in the corporate restructuring.*

The **Macro Strategy** consists of Global Macro, Managed Futures, Commodities and Currencies. Macro strategies usually have a directional bias (which can be either long or short) and involve the purchase of a variety of securities and/or derivatives related to major markets. Managed futures strategies trade similar instruments but are typically implemented by computerized systems.

*Trade Example: Long the US Dollar and short the Japanese Yen.*

The **Relative Value Strategy** typically does not display a distinct directional bias. Relative Value encompasses a range of strategies covering different asset classes. Arbitrage strategies focus on capturing movements or anomalies in the price spreads between related or similar instruments. The rationale for Arbitrage trades is the ultimate convergence of the market price relationship to a known, theoretical or equilibrium relationship.

*Trade Example: Long the stock of a merger bid target and short the stock of the acquirer.*

# Statistical Definitions

## Risk Statistics

As of June 30, 2019

Statistics	Definition
Alpha	- A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. is a measure of the portfolio's historical performance not explained by movements of the market, or a portfolio's non-systematic return.
Best Quarter	- The best of rolling 3 months(or 1 quarter) cumulative return.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
Downside Risk	- A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative set of returns. The higher the factor, the riskier the product.
Excess Return	- Arithmetic difference between the managers return and the risk-free return over a specified time period.
Information Ratio	- Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.
Maximum Drawdown	- The drawdown is defined as the percent retrenchment from a fund's peak value to the fund's valley value. It is in effect from the time the fund's retrenchment begins until a new fund high is reached. The maximum drawdown encompasses both the period from the fund's peak to the fund's valley (length), and the time from the fund's valley to a new fund high (recovery). It measures the largest percentage drawdown that has occurred in any fund's data record.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.
Sortino Ratio	- A ratio developed by Frank A. Sortino to differentiate between good and bad volatility in the Sharpe ratio. This differentiation of upwards and downwards volatility allows the calculation to provide a risk-adjusted measure of a security or fund's performance without penalizing it for upward price changes.
Standard Deviation	- A statistical measure of the range of a portfolio's performance, the variability of a return around its average return over a specified time period.
Tracking Error	- A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.
Worst Quarter	- The worst of rolling 3 months(or 1 quarter) cumulative return.

# Performance Report Update



## UPCOMING PERFORMANCE REPORT ENHANCEMENTS

As we unify reporting across the combined Mercer-Pavilion-Summit entity, we have created a “best ideas” performance report—including key data points and performance drivers in a clear and concise format—that we expect to roll out with the Q3 reporting cycle. Key benefits of the new design include:

- Consistent layout and informational content across plan types and asset classes
- Thoughtful design, leveraging the capabilities of the performance platform
- A more powerful and targeted presentation that emphasizes key metrics, including:
  - Total plan components consolidated into a one-page summary
  - Comprehensive one-page, performance and risk report, providing current and historical perspective
  - Characteristic pages redesigned to provide a thorough yet succinct review of holdings data

We believe these changes enhance the usability and content of your performance report. We look forward to hearing your feedback as we continue to work towards providing the highest quality deliverables to support your performance reporting requirements.

Thank You!



# Custom Peer Group Universe

## Description

As of June 30, 2019

- **Custom Non US Diversified All:** The Custom Non US Diversified All universe is a custom universe that includes the eVestment Alliance Non-US Diversified Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Equity universe is made up of all Non-US Diversified (EAFE and ACWI ex-US) Equity products inclusive of all style, capitalization, and strategy approaches. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.
- **Custom Non US Diversified Core:** The Custom Non US Diversified Core universe is a custom universe that includes the eVestment Alliance Non-US Diversified Core Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Core Equity universe is made up of all actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in a mixture of growth and value stocks. This universe is inclusive of Non-US Diversified Equity strategies regardless of market capitalization. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.
- **Custom Non US Diversified Growth:** The Custom Non US Diversified Growth universe is a custom universe that includes the eVestment Alliance Non-US Diversified Growth Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Growth Equity universe is made up of all actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in stocks that are expected to have an above-average capital appreciation rate relative to the market. This universe is inclusive of Non-US Diversified Equity strategies regardless of market capitalization. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.
- **Custom Non US Diversified Value:** The Custom Non US Diversified Value universe is a custom universe that includes the eVestment Alliance Non-US Diversified Value Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Value Equity universe is made up of all actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in stocks that may be trading at lower prices lower than their fundamental or intrinsic value. This universe is inclusive of Non-US Diversified Equity strategies regardless of market capitalization. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.

# Disclosures

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# Disclosures

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HEALTH WEALTH CAREER

# ESG OVERVIEW

## EL CAMINO HOSPITAL

August 12, 2019





# AGENDA



## Why is interest in ESG increasing?

- How will the future be different from the past
- The case for ESG integration

## How are investors approaching ESG?

- Implementation approaches
- Mercer ESG Ratings

## Developing a Sustainable Investment Policy

- Mercer RI Pathway

## Appendix

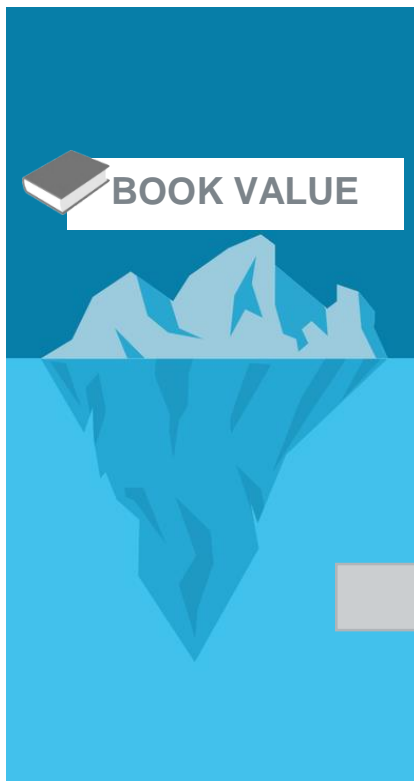
- Principles for Responsible Investment (PRI)
- FSB TCFD Recommendations
- Responsible Investment at Mercer

# WHY



# A BROADER PERSPECTIVE – AN ABILITY TO SUSTAIN

What is missing from current finance / investment processes?  
How might the future be different to the past?



# CONCERNS ABOUT ENVIRONMENTAL RISKS HAVE INCREASED

Top 5 Global Risks in terms of likelihood

■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	Asset price collapse	Asset price collapse	Storms and cyclones	Income disparity	Income disparity	Income disparity	Interstate conflict	Involuntary migration	Extreme weather	Extreme weather	Extreme weather
2	Slowing Chinese economy	Slowing Chinese economy	Flooding	Fiscal imbalances	Fiscal imbalances	Extreme weather	Extreme weather	Extreme weather	Involuntary migration	Natural catastrophes	Climate change mitigation and adaption failure
3	Chronic disease	Chronic disease	Corruption	Greenhouse gas emissions	Greenhouse gas emissions	Unemployment/ under-employment	National governance failures	Weak climate change response	Natural catastrophe	Cyberattacks	Natural catastrophes
4	Global governance gaps	Fiscal crises	Biodiversity loss	Cyber attacks	Water supply crises	Climate change	State collapse	Interstate conflict	Terrorist attack	Data fraud	Data fraud
5	Retrenchment from globalisation	Global governance gaps	Climate change	Water supply crises	Aging population	Cyberattacks	High unemployment	Natural catastrophes	Data fraud	Climate change adaption failure	Cyberattacks

Top 5 Global Risks in terms of impact

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	Asset price collapse	Asset price collapse	Fiscal crises	Systematic financial failure	Systematic financial failure	Fiscal crises	Water crises	Weak climate change response	WMDs	WMDs	WMDs
2	Retrenchment from globalisation	Retrenchment from globalisation	Climate change	Water supply crises	Water supply crises	Climate change	Infectious diseases	WMDs	Extreme weather	Extreme weather	Climate change mitigation and adaption failure
3	Oil and gas price spike	Oil price spike	Geopolitical conflict	Food crises	Fiscal imbalances	Water crises	WMDs	Water crises	Natural catastrophes	Natural catastrophes	Extreme weather
4	Chronic disease	Chronic disease	Asset price collapse	Fiscal imbalances	WMDs	Unemployment/ under-employment	Interstate conflict	Involuntary migration	Water crises	Climate change adaption failure	Water crises
5	Fiscal crises	Fiscal crises	Extreme energy price volatility	Volatility in energy and agricultural prices	Weak climate change response	Critical ICT systems breakdown	Weak climate change response	Energy price shock	Weak climate change response	Water crises	Natural catastrophes

For each of the 30 global risks covered in the survey, respondents were asked to assess (1) the likelihood of the risk occurring globally within the next 10 years, and (2) its negative impact for several countries or industries over the same timeframe.

# THE GREAT ACCELERATION

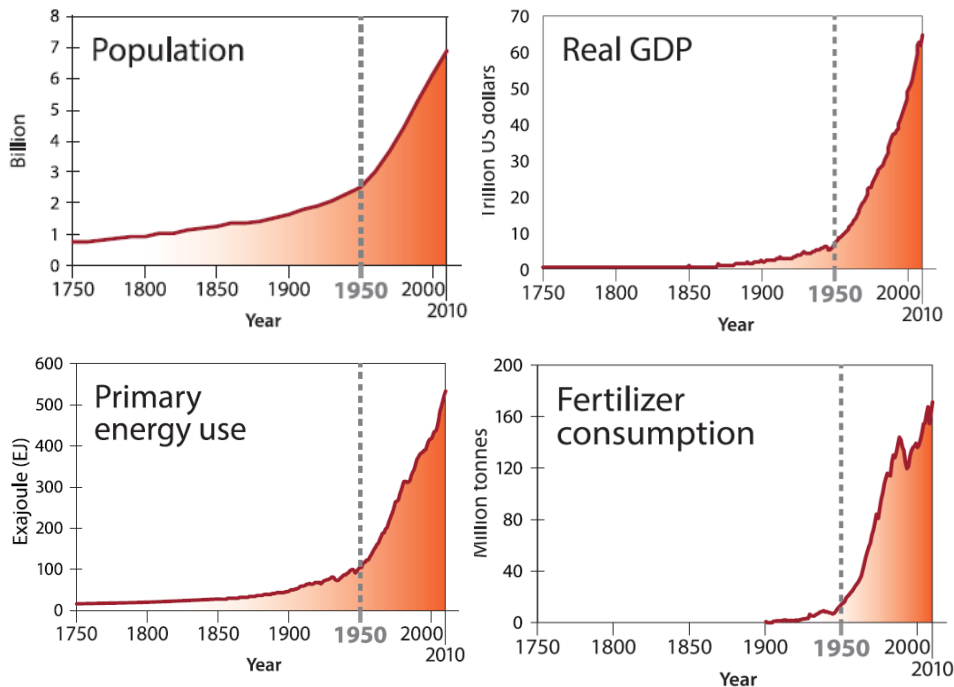
## UNDERSTANDING HOW THE WORLD IS CHANGING

Population + Consumption

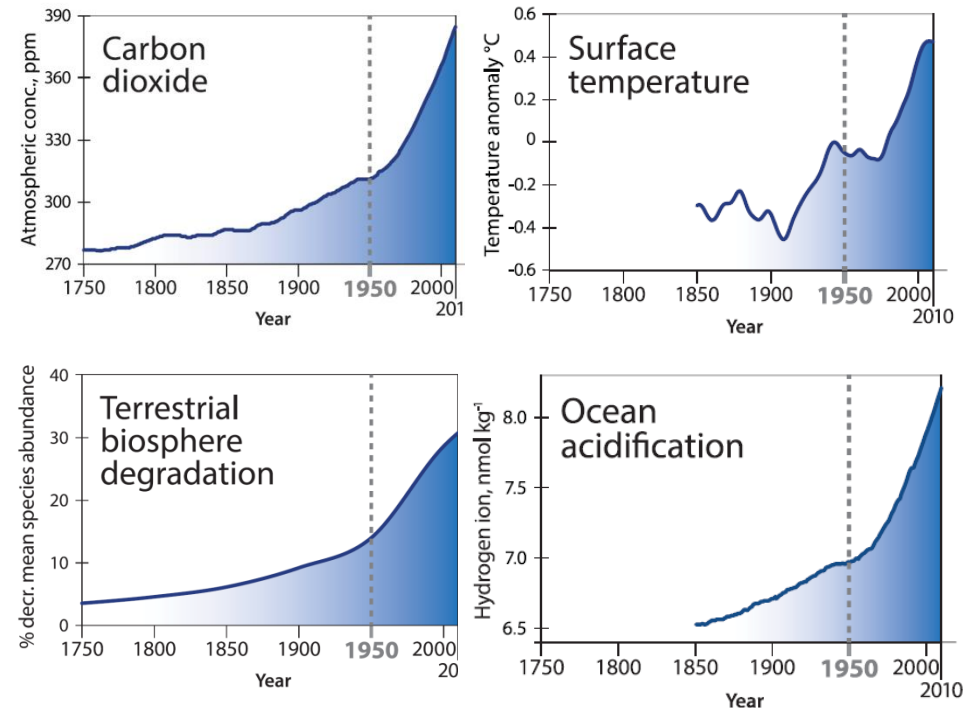
Fossil Fuel Energy - Industrialisation - Deforestation – Agriculture - Construction



### Socio-Economic trends (1750 – 2010)



### Earth system trends (1750 – 2010)



Source: Steffen et al (2015)

# 2015 – A TIPPING POINT

## GOVERNMENTS ADOPT SDGS & PARIS ACCORD

*“The challenges currently posed by climate change pale in significance compared with what might come..... The more we invest with foresight; the less we will regret in hindsight.”*

Mark Carney, Governor of the Bank of England

The UN-backed ‘Sustainable Development Goals’ (SDGs) are:

*“A set of goals to end poverty, protect the planet, and ensure prosperity for all”*

The UN’s Paris Climate Accord – ‘the Paris Agreement’ is a landmark commitment to:

*“Keep a global temperature rise to well below 2°C this century”*

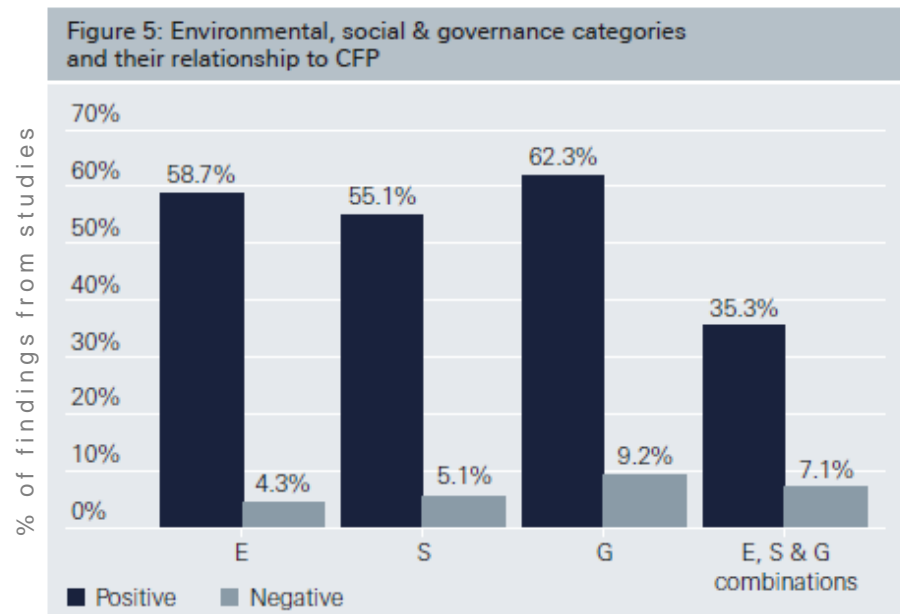


# THE CASE FOR ESG INTEGRATION

## POTENTIAL TO IMPROVE FINANCIAL RETURNS



### Consensus Building

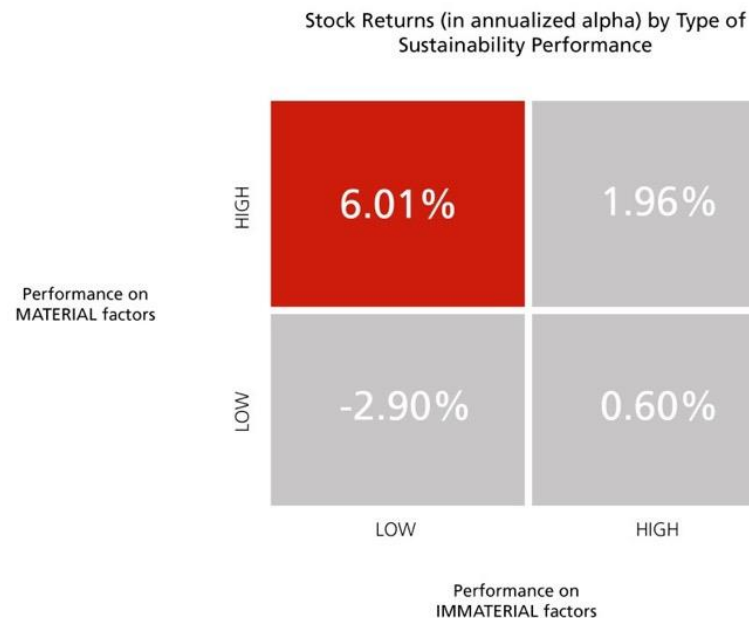


Source: Friede, Busch, Bassen (December 2015)

### Research base favors a positive connection between ESG and corporate financial performance

Source: Deutsche Asset Management/University of Hamburg; ESG & Corporate Financial Performance: Mapping the Global Landscape; 2015. Since the early 1970s, around 2,250 academic studies have been published on the link between ESG and CFP 70%. This study examines the entire universe of ESG-CFP academic review studies that have been published since 1970. The analysis is based on the aggregation of the findings and data of 60 review studies.

### Materiality Matters



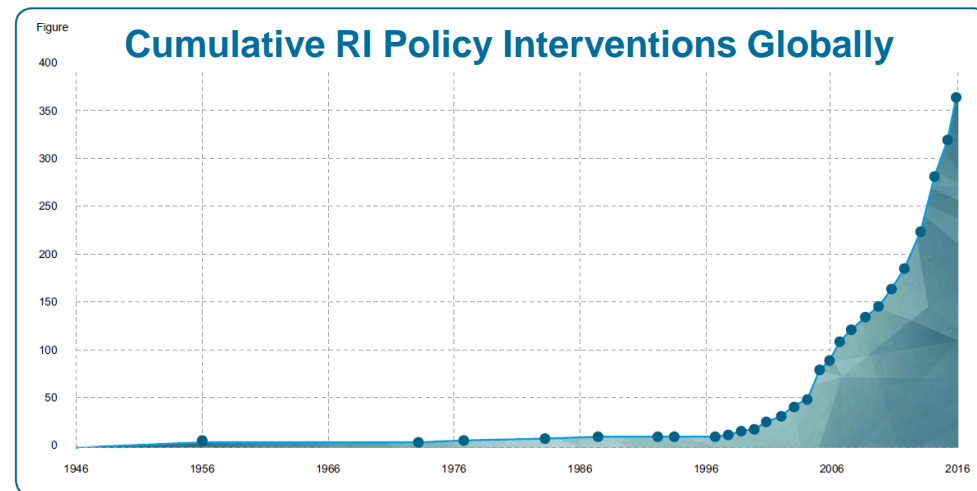
### Firms with good performance on *material* sustainability issues enjoy the strongest financial returns.

Source: Working Paper by Mozaffar Khan, George Serafeim, and Aaron Yoon, Harvard Business School (2015). The table reports alphas, factor loadings, and t-statistics from monthly calendar-time Fama-French regressions for value-weighted portfolios. The regressions are estimated over the 249 months from April 1993 to December 2013. Universe of U.S. stocks derived from MSCI KLD data.



# DISCLOSURE STANDARDS / REQUIREMENTS

## Voluntary Disclosure Initiatives



**“In the largest 50 economies in the world...almost 300 policy instruments support investors to consider long-term value drivers, including ESG factors. Over half...were created between 2013 and 2016.”**

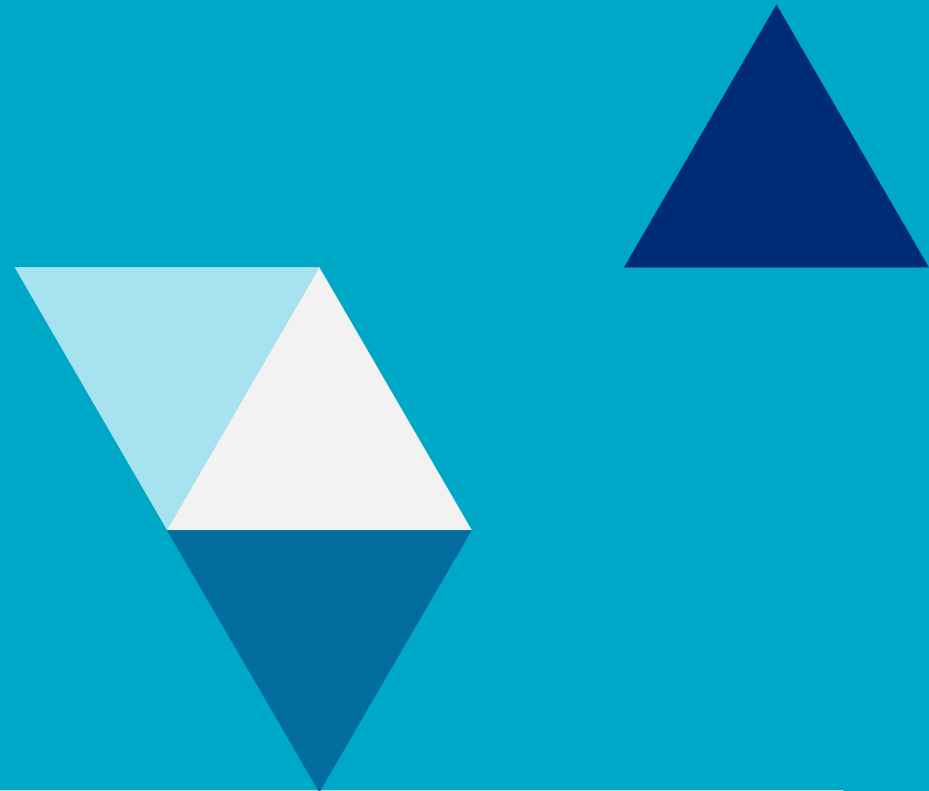
**Growing Emphasis on ESG Transparency and Disclosure**

**Increasing Regulatory Focus**

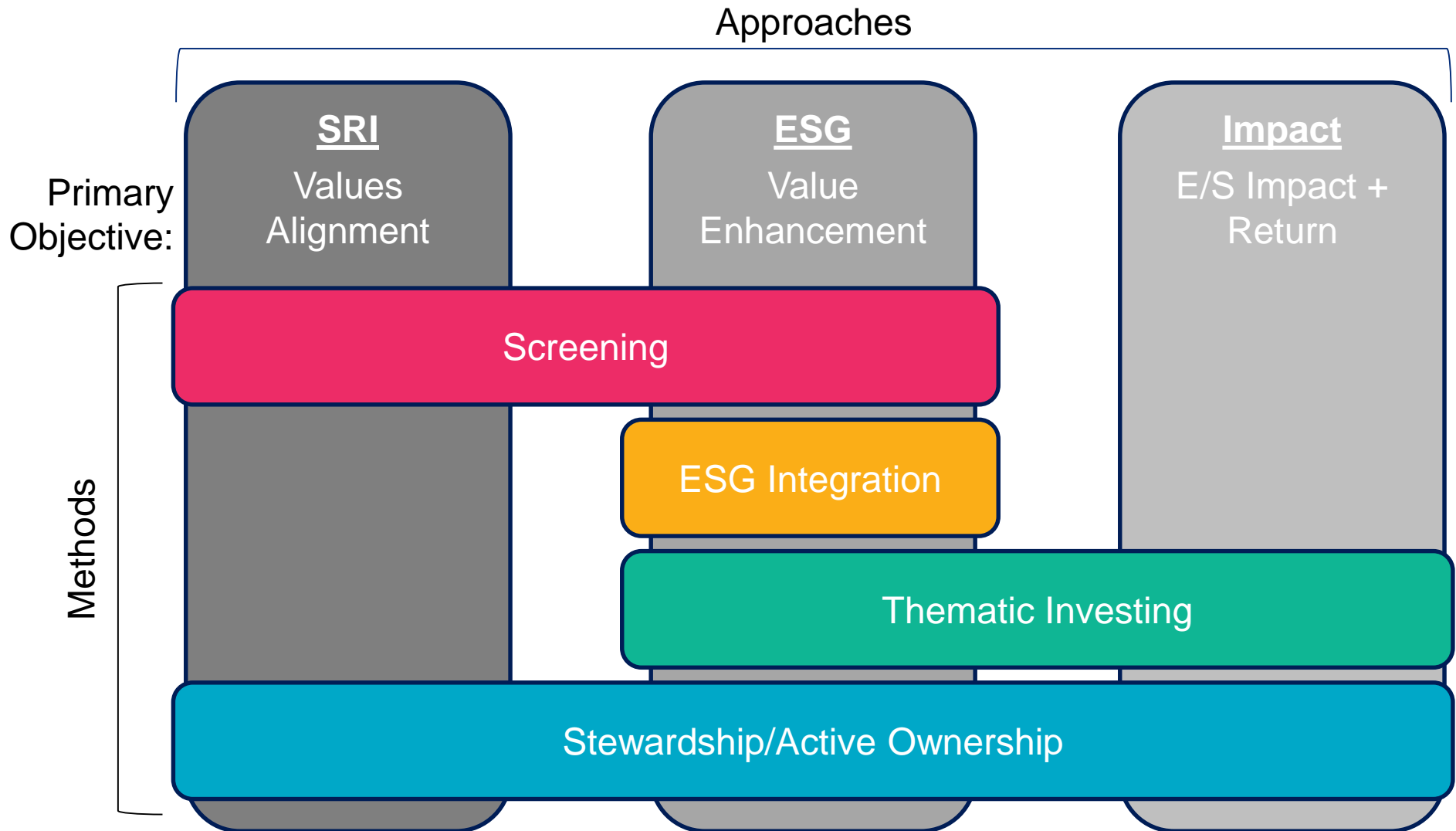
Source: UNPRI; Global guide to responsible investment regulation; 2016;  
<http://bit.ly/2gY8tBw>



# HOW



# RESPONSIBLE INVESTMENT APPROACHES AND METHODS



# DIMENSIONS OF A SUSTAINABLE PORTFOLIO

## FOUR STRATEGIES FOR IMPLEMENTATION

### Integration

Include ESG factors in investment analysis/decisions to assess materiality



#### AIM:

Financial objectives  
+ risk management  
improvement

### Stewardship

Actively engage with companies failing to address ESG risks through voting and engagement



#### AIM:

Financial objectives  
+ financial system  
improvement

### Investment

Allocate to sustain. themes/impact investments, e.g. renewable energy, water, social housing



#### AIM:

Financial objectives  
+ positive social and  
environmental impact

### Screening

Screen out controversial companies based on investment evidence / risk criteria



#### AIM:

Align with values/  
reputation/risk  
management or longer  
term financial expectations

For more detail see: <https://www.mercer.ca/content/dam/mercer/attachments/north-america/canada/ca-2019-the-abc-of-esg-environmental-social-governance.pdf>

# EL CAMINO HOSPITAL CURRENT POLICY SCREENING

- The Surplus Cash and Cash Balance Plan Investment Policy Statements include the following investment restrictions for separate account investment managers:
  - The purchase of the securities of companies described below is prohibited:
    1. Companies whose major product is tobacco (greater than 50% of company revenues).
    2. Companies who engage in the manufacture of firearms that are illegal for sale to or possession by civilians in the state of California.
  - In instances where companies that engage in the activities above are inadvertently purchased or held by an Investment Manager, the Investment Manager should divest of the security within 90 days of being made aware of the violation unless the Investment Manager receives a written exception from the Investment Committee.

# MERCER'S ESG RATING SCALE

ESG ratings are presented on a scale from 1 (highest) to 4 (lowest) and assess how well managers integrate ESG factors into investment processes.

## ACTIVE

### ESG 1

Leading approach to integration, where ESG is embedded in investment philosophy; strong on stewardship which is a core part of process.

### ESG 2

Consistent and repeatable process to ESG integration (focus on risk management); well-developed evidence of active ownership.

### ESG 3

Well-developed G integration; less consistency in E&S; stewardship process is ad hoc, but indications of progress.

### ESG 4

Little or no integration of ESG factors or stewardship into core processes and no indication of future change.

Ratings for passive strategies differentiate how well firms undertake their stewardship activities such as voting, engagement, industry collaboration and reporting.

## PASSIVE

### ESG p 1

Leaders in V&E across ESG; stewardship activities and ESG initiatives undertaken consistently at a global level; clear link between engagement & voting actions

### ESG p 2

Strong approach to V&E across ESG topics, and initiatives at a regional level, with progress made at a global level; working towards clearer links between V & E

### ESG p 3

Focus of V&E tends to be on governance topics only, or more regionally focused with less evidence E&S (in voting & engagement, as well as other internal ESG initiatives)

### ESG p 4

Little or no initiatives taken on developing a global V&E capability, reactive engagements; and little progress made on other ESG initiatives

# MERCER'S ESG RATING CRITERIA

## ACTIVE (all asset classes)

### IDEA GENERATION

- ESG factors integrated into active fund positions as a source of value added.
- Identification of material ESG factors - skill of team members, data sourcing

### PORTFOLIO CONSTRUCTION

- Efforts to integrate ESG driven views into the portfolio's construction.

### IMPLEMENTATION

- Engagement and proxy voting activities (if applicable).
- Investment horizon align with ability to effectively implement ESG views?

### BUSINESS MANAGEMENT

- Firm-level support for ESG integration, engagement activities and transparency.



## PASSIVE (equities)

### VOTING & ENGAGEMENT

- Policy, process and prioritisation.
- Quality of engagements.

### RESOURCES & IMPLEMENTATION

- Data analysis to enhance active ownership.

### ESG INTEGRATION

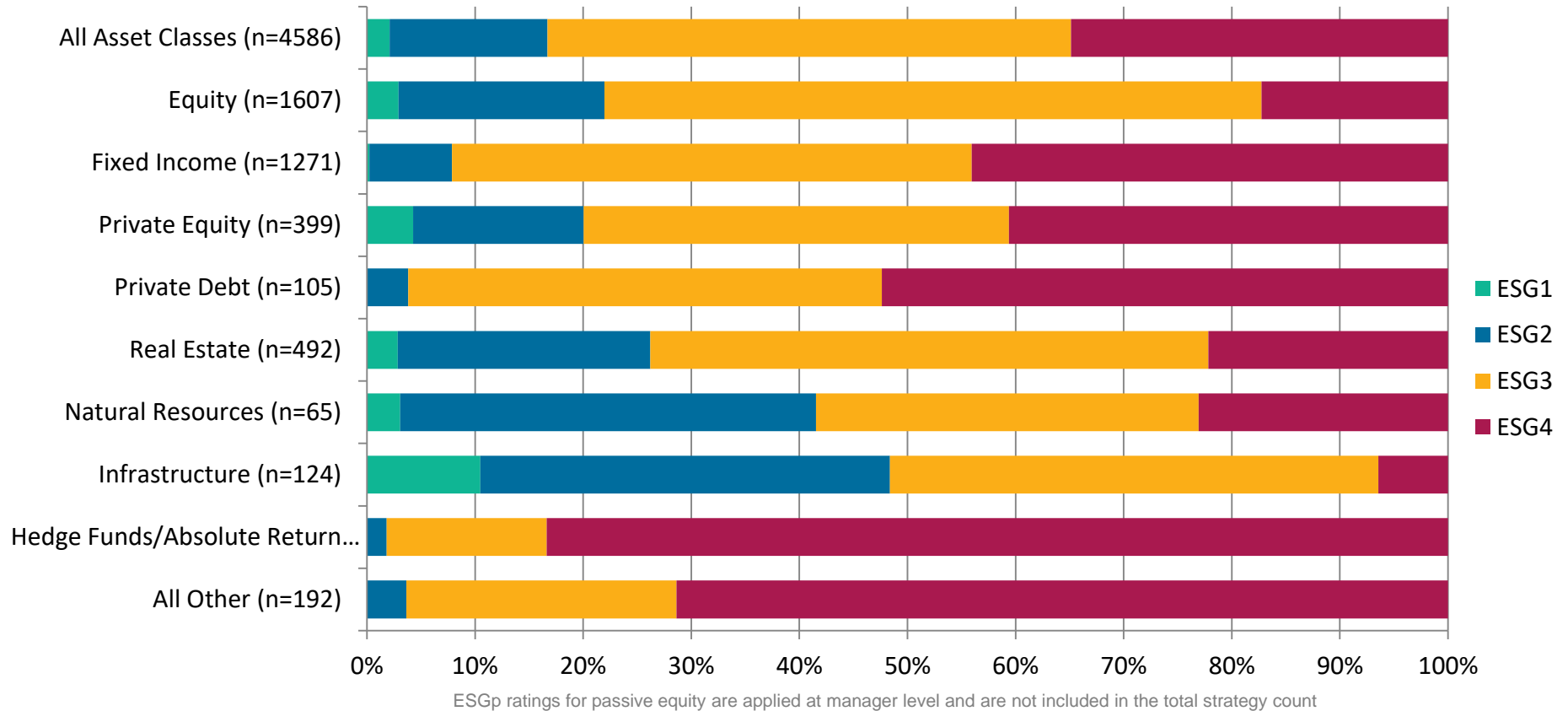
- Skill set of resources.
- Effectiveness of engagement outcomes.

### FIRMWIDE COMMITMENT

- Collaborative initiatives and engagement with regulators and policymakers.

# MERCER ESG RATINGS

## RATINGS DISTRIBUTION BY ASSET CLASS



Over **4,500** strategies  
rated currently –  
ratings began in **2008**



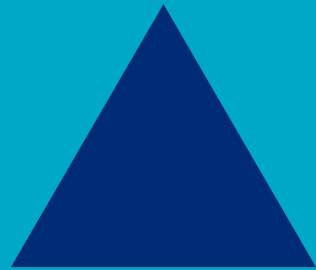
Less than **17%** achieve  
an **ESG1** or **ESG2**



**ESG** ratings for  
passive equity  
introduced in **2014**

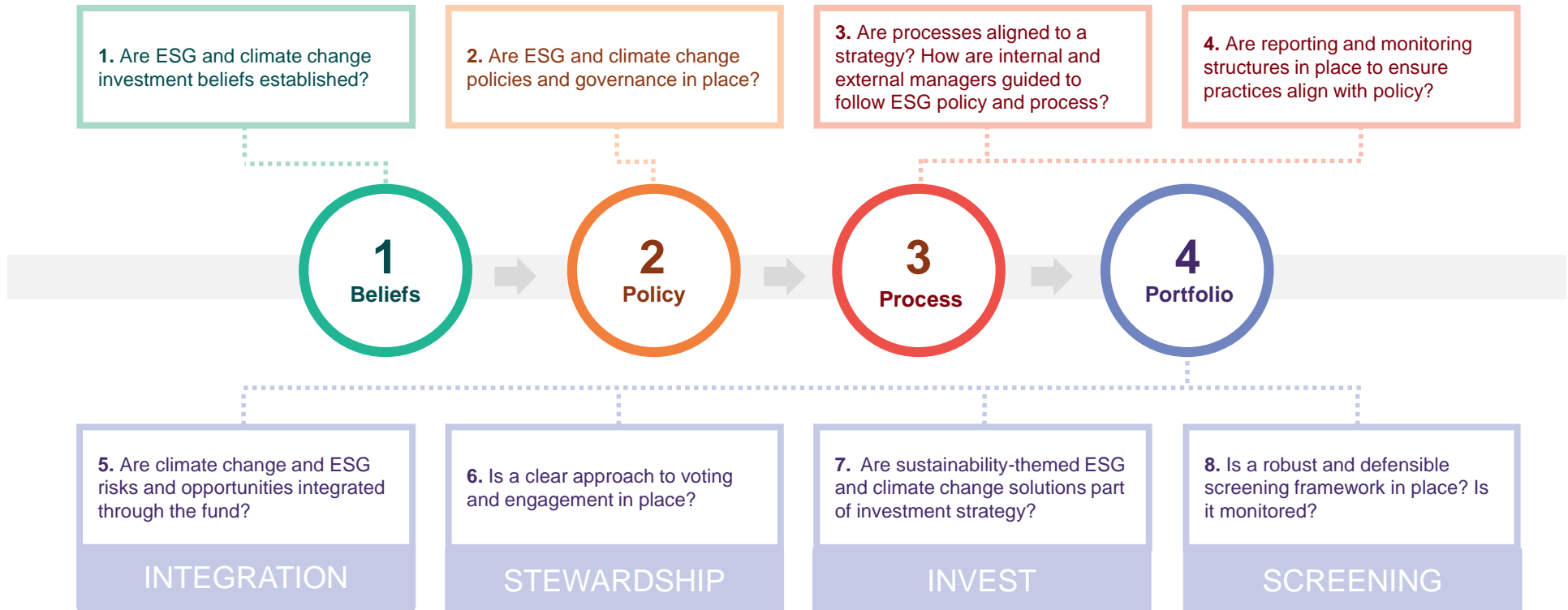


# DEVELOPING A SUSTAINABLE INVESTMENT POLICY





# THE RESPONSIBLE INVESTMENT PATHWAY



# MERCER'S PATHWAY TO RESPONSIBLE INVESTMENT

## THE MENU FOR ESG AND CLIMATE CHANGE INTEGRATION

1

### Beliefs

- Board beliefs workshop and survey on ESG and climate change
- Trustee education on fiduciary duty, ESG and climate change, and implementation approaches

2

### Policy

- Policy, position statements and governance frameworks on ESG and climate change
- Peer comparison of peer policy, public commitments and disclosures

3

### Process

- ESG strategy, implementation and asset class guidelines
- Portfolio monitoring framework, benchmark reports and policy compliance
- ESG reporting to stakeholders
- Processes to implement ESG integration, stewardship, thematic investing and screening, as required
- Collaborative engagement with industry associations

4

### Portfolio

#### ESG Integration

- Manager selection and monitoring with ESG ratings
- Climate change analytics, including scenario analysis and carbon footprinting

#### Stewardship

- Stewardship review
- Voting and engagement and reporting

#### Thematic Investing

- Sustainability allocation, SDG\* and TCFD\* alignment, impact investing

#### Screening

- Exposure analysis, including both ESG highly rated and sensitive investments
- Exclusion decision-making, governance and compliance monitoring

\* **SDG** — Sustainable Development Goals

\* **TCFD** — Taskforce on Climate-related Financial Disclosures

# STATEMENT OF INVESTMENT POLICIES AND PROCEDURES

## SAMPLE WORDING

### ESG, Stewardship, and Climate Change

The Company believes that environmental, social and governance (“ESG”) issues may have a material impact on investment risk and return outcomes, and that effective stewardship (exercised through voting and engagement) can create and preserve value for companies and markets as a whole. The Company also recognizes that long-term sustainability issues, particularly climate change, present risks and opportunities that increasingly may require explicit consideration.

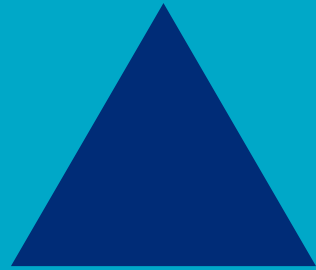
The Company has given appointed Investment Managers full discretion in evaluating ESG factors, including climate change considerations, and exercising voting rights and stewardship obligations attached to the investments, in accordance with their own policies and procedures.

The Company considers how ESG, stewardship and climate change is integrated within investment processes in appointing new Investment Managers and monitors the existing Investment Managers at least annually.

# BELIEFS TO IMPLEMENTATION MONITORING SUGGESTIONS

Belief statement	Implication for investment monitoring and strategy
<b>Environmental, social and governance ("ESG") issues may have a material impact on investment risk and return outcomes.</b>	<p>The Company will for example:</p> <ul style="list-style-type: none"> <li>• Arrange education sessions on ESG for committee members / staff.</li> <li>• Assess the appointed manager strategies for their approach to ESG integration, using Mercer's ESG ratings, on an annual basis and review the ESG rating against the MercerInsight universe when appointing new manager strategies (could commit to guidelines such as aiming for ESG3 or above).</li> </ul>
<b>Effective stewardship (exercised through voting and engagement) can create and preserve value for companies and markets as a whole.</b>	<p>The Company will for example:</p> <ul style="list-style-type: none"> <li>• Assess the appointed listed equity manager strategies for their approach to stewardship principles and seek reporting from managers on voting and engagement activity on an annual basis.</li> </ul>
<b>Long-term sustainability issues, particularly climate change, present risks and opportunities that increasingly may require explicit consideration.</b>	<p>The Company will for example:</p> <ul style="list-style-type: none"> <li>• Consider climate change in manager selection and strategy decisions.</li> <li>• Undertake scenario analysis at a portfolio level at least every 3 years to test potential return impacts under different climate scenarios.</li> <li>• Undertake carbon footprinting for equities annually.</li> </ul>

# POTENTIAL NEXT STEPS



# POTENTIAL NEXT STEPS

## IDENTIFY

## ASSESS

## MANAGE

## MONITOR

- Develop **investment beliefs** related to ESG and long-term sustainability issues
- **Assess current managers** on:
  - ESG approaches and practices (e.g. Mercer ESG ratings assessment)
  - Stewardship policies, approaches and voting practices (i.e. stewardship review)
- Conduct top-down and bottom-up **risk / exposure assessments** (e.g. climate change scenario analysis, fund level ESG assessment)
- Develop **sustainable investment strategy** (ESG policy); e.g.
  - Identify priority focus areas (e.g. climate change, corporate governance, diversity)
  - Establish objectives or targets
  - Assess implementation options
  - Implementation and monitoring

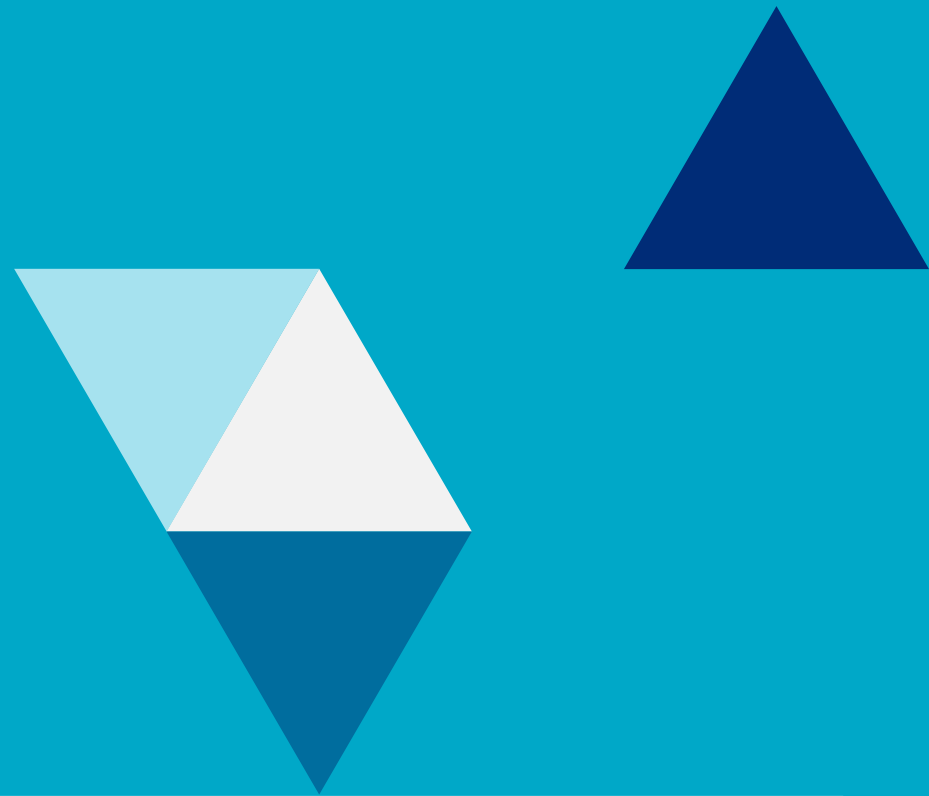
## INTEGRATION

## STEWARDSHIP

## INVESTMENT

## SCREENING

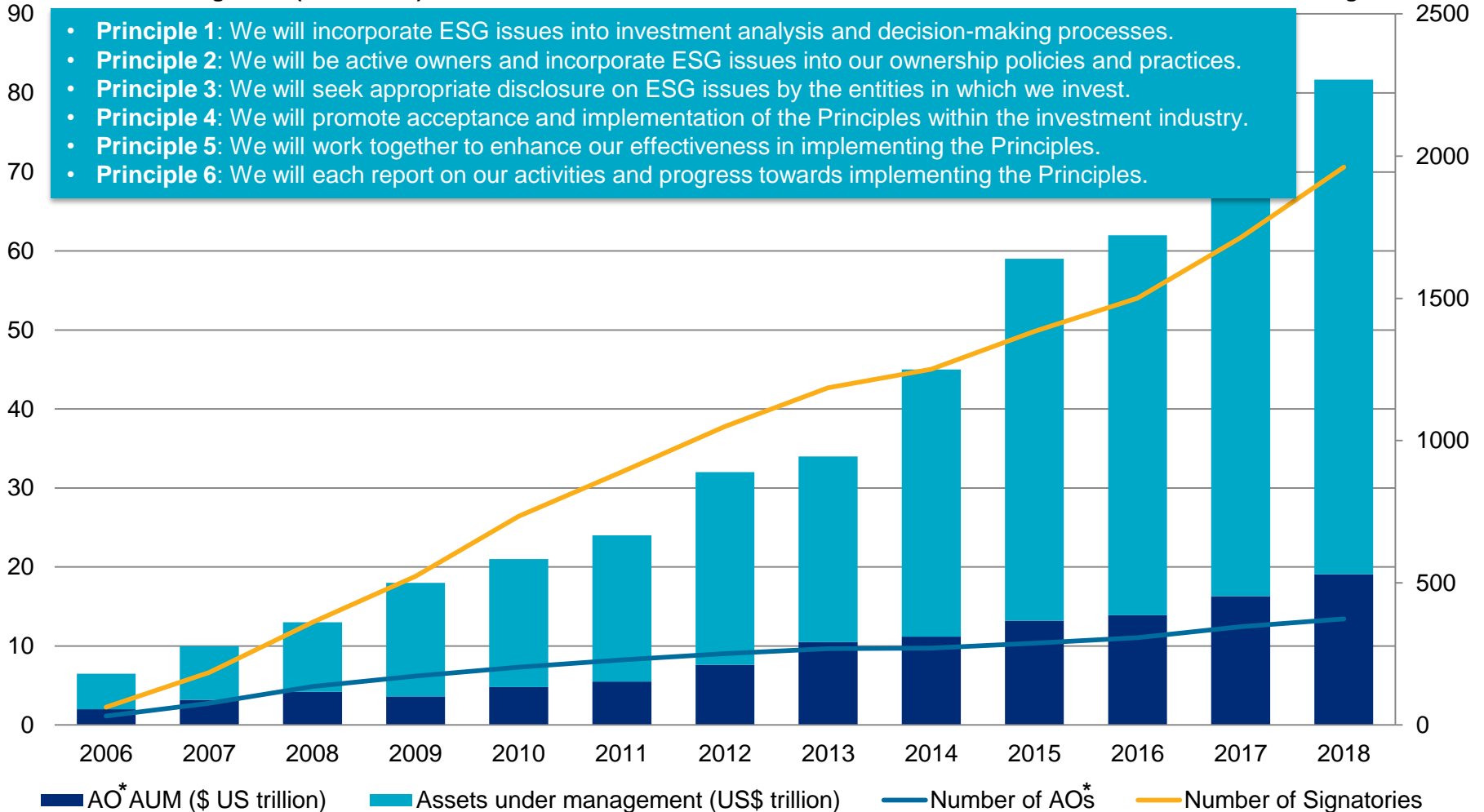
# APPENDIX



# UN PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI) SIGNATORIES

Assets under management (US\$ trillion)

N° Signatories

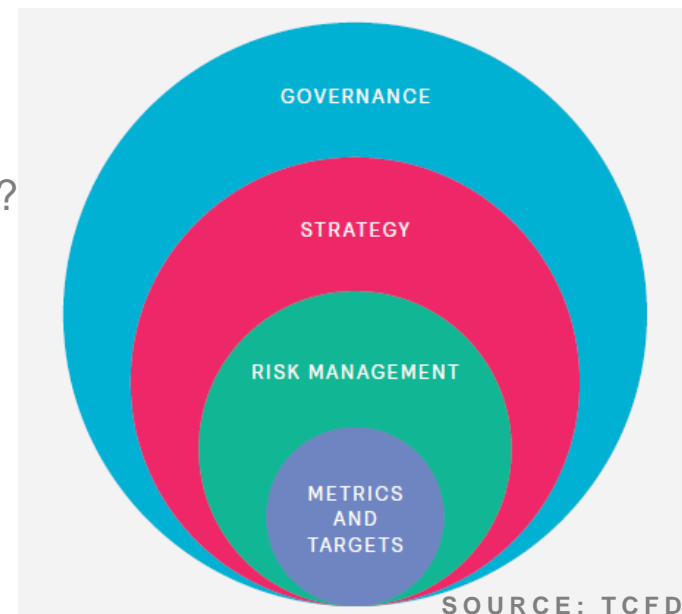


\*AO = Asset Owner



# CLIMATE-RELATED DISCLOSURE ASSET OWNER RECOMMENDATIONS

- Recommendations apply to **companies, asset managers** and **asset owners** and are focused on **managing risks and identifying opportunities**.
  - Asset owner disclosures should be included in **annual beneficiary reporting**.
- We encourage our asset owner clients to consider the following questions in order to prepare:
  - **Governance:** Who has oversight of climate-related risks and disclosures (board / management)? Is this documented?
  - **Strategy:** Have you considered climate related risks and opportunities for inv. strategy? Different climate scenarios?
  - **Risk Management:** Have you established risk assessment and reduction processes, including engagement with managers and low-carbon allocations?
  - **Metrics & Targets:** Have you assessed your portfolio carbon emissions (carbon footprinting) and considered targets for improvements?



➤ **Note, for Principles of Responsible Investment (PRI) signatories, TCFD disclosure is now incorporated into reporting framework.**

# RESPONSIBLE INVESTMENT AT MERCER



## 2004-2006

- RI consulting practices developed and new team formed
- Mercer advises UN on PRI development



## 2007-2010

- Launches ESG ratings platform for investment strategies
- Publishes many ESG materiality and education papers

## 2011-2013

- Climate Change and Strategic Asset Allocation report
- MMC launches Climate Change Task Force managed by Mercer
- Sustainable Opportunities private markets solution launched



## 2014-2015

- Investment beliefs formalized
- Sustainable Growth Framework
- Investing in a Time of Climate Change report released 2015
- ESG ratings for passive equity managers and ratings reach over 4,000 strategies
- Sustainable Investment Policies established for Mercer's Delegated Solutions



## 2016-2019

- Sustainable Global Equity Fund launched and second Sustainable Opportunities closes
- Mercer represented on FSB Task Force on Climate-related Financial Disclosures (TCFD)
- Investment beliefs updated - strengthened
- Investing in a Time of Climate Change – The Sequel 2019
- Mercer RI PATHWAY 2019



**#1 SUSTAINABILITY CONSULTANT GLOBALLY 2019**

# MERCER'S INVESTMENT BELIEFS

At Mercer we have classified our beliefs according to the five areas shown in the diagram since 2014. The sustainability beliefs were recently, formally updated in 2017 as follows:

**We believe a sustainable investment approach is more likely to create and preserve long-term investment capital and more specifically that:**

1. **Environmental, Social and Corporate Governance (ESG)** issues can have a material impact on long-term risk and return outcomes and these issues should be integrated into the investment process.
2. **Taking a broader longer-term perspective on risk**, including identifying sustainability themes and trends, is likely to lead to improved risk management and new investment opportunities.
3. **Climate change** poses a systemic risk and investors should consider the potential financial impacts of both the associated transition to a low-carbon economy and the physical impacts of different climate outcomes.
4. **Stewardship** helps the realisation of long-term shareholder value by providing investors with an opportunity to enhance the value of companies and markets.

A full copy of Mercer's Investment Beliefs is available online or can be provided.



# IMPORTANT NOTICES

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# IMPORTANT NOTICES (CONT'D)

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**EL CAMINO HOSPITAL**

INVESTMENT PROGRAM  
PERFORMANCE ANALYSIS

AUGUST 12, 2019

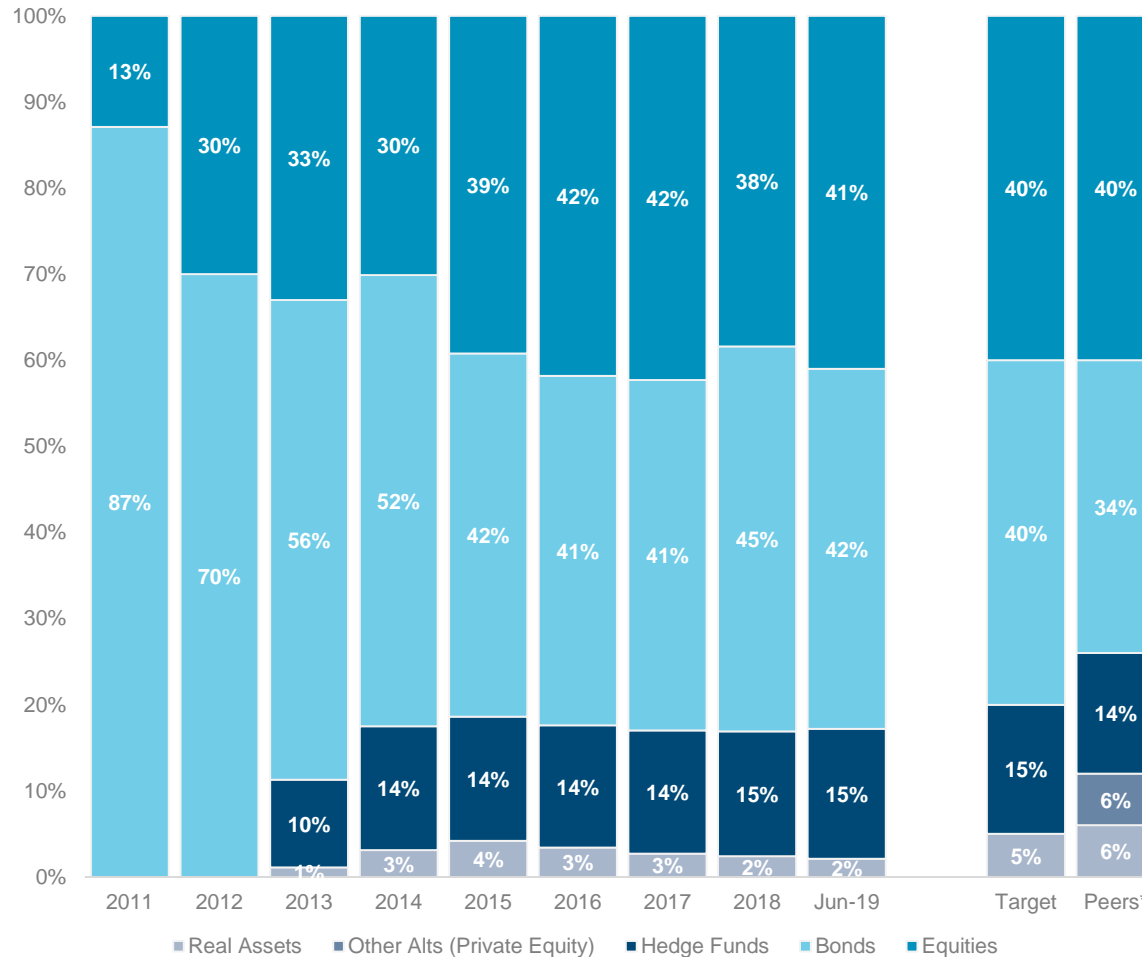


# INVESTMENT PROGRAM BACKGROUND

- Surplus Cash Investment Policy summary: “be prudently invested with a focus on preserving the liquidity and principal necessary to meet known and reasonably unforeseen operational and capital needs. Funds will be invested in a diversified portfolio that balances the need for liquidity with a long-term investment focus in order to improve investment returns and the organization’s financial strength.”
- Surplus Cash primary objectives: “(1) preservation of capital, (2) capital growth, (3), maintenance of liquidity, and (4) avoidance of inappropriate concentration of investments.”
  - Starting in mid-October 2012, Pavilion introduced new asset classes and sub-categories to help manage total program risk, diversify equity exposures, and manage fixed income interest rate sensitivities.
  - Prior to these changes the portfolio consisted of two managers (Barrow Hanley and Wells Capital) that managed four separate strategies; U.S. Large-Cap Value Equity (~13%), Short-Duration Fixed Income (~25%), Intermediate-Duration Fixed Income (~42%), and Core Fixed Income (~20%).
- Cash Balance Plan Investment Policy summary: “to achieve the highest possible investment return, and the resulting positive impact on asset values, funded status, contributions and benefits, without exceeding a prudent level of risk.”
- Cash Balance Plan primary objectives: “(1) the preservation of capital in real terms with a focus on meeting future benefit payments, (2) obtaining the maximum return within reasonable and acceptable level of risk.”
  - Starting in mid-October 2012, Pavilion introduced new asset classes and sub-categories to help manage total program risk, diversify equity exposures, and manage fixed income interest rate sensitivities.
  - Prior to these changes the portfolio consisted of one manager (Dodge & Cox) that managed two separate strategies; U.S. Large-Cap Value Equity (~62%) and Core Fixed Income (~33%). The remainder of the portfolio was invested in cash (~5%).

# HISTORICAL ASSET ALLOCATION SURPLUS CASH EX DISTRICT

Actual Asset Allocation (as of 12/31) by Major Asset Class



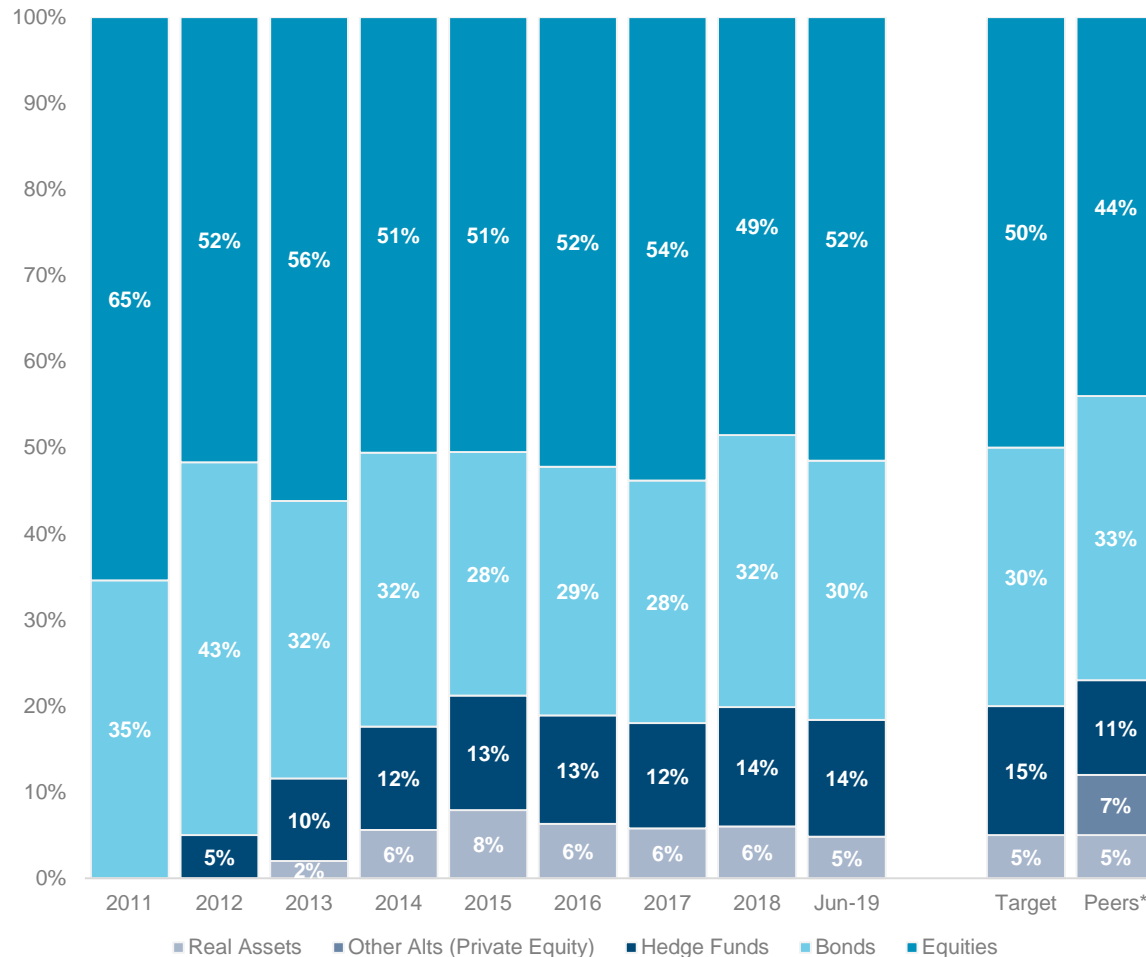
- El Camino Hospital began implementing Pavilion's recommended portfolio towards the end of October 2012.
- In 2013, Alternatives in the form of Hedge Funds and Private Real Estate Funds were introduced into the portfolio with a 15% target allocation. The target allocation was increased to 20% in 2014.
- The target allocation to Equities was increased from 30% to 40% in 2015.
- Asset allocation studies conducted in early 2018 and 2019 confirmed the current target allocation.
- All major asset classes remain broadly diversified across various strategies and sub-sectors.
- Compared to similar healthcare organizations, the target allocation is slightly more conservative, with a greater allocation to fixed income and lack of exposure to private equity.

\* Source: 2016-2017 Commonfund Benchmark Study of Healthcare Organizations. Peers with assets over \$1 Billion (34 respondents). Allocation reflects weighted average.



# HISTORICAL ASSET ALLOCATION CASH BALANCE

Actual Asset Allocation (as of 12/31) by Major Asset Class



- El Camino Hospital began implementing Pavilion's recommended portfolio towards the end of October 2012.
- The Alternatives target allocation has been 20% since November 1, 2012; however, the private real estate exposure was implemented through a drawdown structure, which takes time to fully implement..
- All major asset classes remain broadly diversified across various strategies and sub-sectors.
- Compared to similar healthcare organization defined benefit portfolios, the target allocation has more public equity exposure, but does not have exposure to private equity. Combined the equity exposure, both public and private, is very similar as is the overall asset allocation.

\* Source: 2016-2017 Commonfund Benchmark Study of Healthcare Organizations. Defined Benefit Plan peers (32 respondents). Allocation reflects weighted average.

# SURPLUS CASH EX DISTRICT PERFORMANCE RETURNS ENDED JUNE 30, 2019

Composite	1 Year	3 Years	5 Years	Since Inception	Inception Period
<b>Surplus Cash ex District</b>	<b>5.4</b>	<b>7.2</b>	<b>4.8</b>	<b>5.6</b>	<b>6y 8m</b>
Policy Benchmark	5.7	6.8	4.8	5.5	
Pre-Pavilion Benchmark	7.1	3.3	3.3	3.6	
<b>Total Equity</b>	<b>6.1</b>	<b>12.7</b>	<b>7.7</b>	<b>11.0</b>	<b>6y 8m</b>
Equity Benchmark	5.2	12.2	7.1	10.7	
<b>Total Fixed Income</b>	<b>6.8</b>	<b>2.7</b>	<b>2.7</b>	<b>2.5</b>	<b>6y 8m</b>
Fixed Income Benchmark	7.0	2.1	2.6	2.2	
<b>Total Alternatives</b>	<b>0.5</b>	<b>4.7</b>	<b>3.0</b>	<b>3.9</b>	<b>6y 8m</b>
Alternatives Benchmark	2.3	4.8	3.8	4.2	

- The Surplus Cash ex District portfolio has returned 5.6% annualized since Pavilion's inception (Nov. 1, 2012), exceeding the Policy Benchmark by 0.1% and Pre-Pavilion Benchmark by over 2.0%.
- Outperformance versus the Pre-Pavilion Benchmark is a result of asset allocation decisions (more equity, less short duration fixed income) and manager decisions (shift from value bias to balanced/core within Equity as growth has significantly outperformed).
- Each composite has generated a positive absolute return since inception, with Equity and Fixed Income relatively outperforming their respective benchmarks, while Alternatives has underperformed. The Alternatives composite has yet to be updated with 2Q19 results for the Walton VII and VIII private real estate funds.

# CASH BALANCE PLAN PERFORMANCE RETURNS ENDED JUNE 30, 2019

Composite	1 Year	3 Years	5 Years	Since Inception	Inception Period
<b>Cash Balance Plan</b>	<b>6.0</b>	<b>8.8</b>	<b>6.0</b>	<b>7.8</b>	<b>6y 8m</b>
Policy Benchmark	5.9	7.8	5.3	7.0	
Pre-Pavilion Benchmark	8.7	7.2	5.8	8.1	
<b>Total Equity</b>	<b>6.3</b>	<b>13.0</b>	<b>7.7</b>	<b>11.0</b>	<b>6y 8m</b>
Equity Benchmark	5.6	12.3	7.2	10.7	
<b>Total Fixed Income</b>	<b>7.4</b>	<b>3.0</b>	<b>2.9</b>	<b>2.8</b>	<b>6y 8m</b>
Fixed Income Benchmark	7.3	2.2	2.6	2.2	
<b>Total Alternatives</b>	<b>2.3</b>	<b>5.8</b>	<b>5.8</b>	<b>7.4</b>	<b>6y 8m</b>
Alternatives Benchmark	2.6	5.0	4.3	5.4	

- The Cash Balance portfolio has returned 7.8% annualized since Pavilion's inception (Nov. 1, 2012), exceeding the Policy Benchmark by 0.8%, but trailing the Pre-Pavilion Benchmark by 0.3%.
- Each composite has generated a positive absolute return and outperformed its respective benchmark since inception, which has led to the portfolio's overall outperformance versus the Policy Benchmark.
- Underperformance versus the Pre-Pavilion Benchmark is a result of the shift to a more global, balanced equity portfolio, whereas the previous equity exposure was 100% U.S. large-cap value. The inclusion of U.S. small-cap, developed international and emerging markets equities has negatively impacted performance to-date as U.S. large-cap has been the top performing asset class. However, the shift to a more diversified approach has reduced volatility, while the shift away from 100% value has benefited performance.

# RISK STATISTICS

## NET OF FEE RETURNS ENDED JUNE 30, 2019

	Since Inception Return	Since Inception Standard Deviation	Since Inception Down Market Capture	Since Inception Up Market Capture	Since Inception Worst Quarter	Since Inception Best Quarter	Since Inception Sharpe Ratio	Since Inception Sortino Ratio	Inception Period
<b>Total Surplus Cash ex District</b>	<b>5.6</b>	<b>4.9</b>	<b>97.8</b>	<b>100.8</b>	<b>-6.2</b>	<b>6.7</b>	<b>1.0</b>	<b>1.6</b>	<b>6y 8m</b>
Surplus Cash Total Benchmark	5.5	4.8	100.0	100.0	-5.6	6.8	1.0	1.6	
<b>Total Surplus Cash ex District</b>	<b>5.6</b>	<b>4.9</b>	<b>134.7</b>	<b>151.4</b>	<b>-6.2</b>	<b>6.7</b>	<b>1.0</b>	<b>1.6</b>	<b>6y 8m</b>
Pre-Pavilion Surplus Cash Total Benchmark	3.6	2.3	100.0	100.0	-1.5	3.7	1.3	2.3	
<b>Total Surplus Cash ex District</b>	<b>5.6</b>	<b>4.9</b>	<b>72.9</b>	<b>82.8</b>	<b>-6.2</b>	<b>6.7</b>	<b>1.0</b>	<b>1.6</b>	<b>6y 8m</b>
50% Vanguard Total World Stock / 50% Vanguard Total Bond <sup>1</sup>	6.2	5.7	100.0	100.0	-5.9	7.5	1.0	1.6	
<b>Total Cash Balance Plan</b>	<b>7.8</b>	<b>6.3</b>	<b>100.7</b>	<b>106.2</b>	<b>-7.8</b>	<b>8.4</b>	<b>1.1</b>	<b>1.8</b>	<b>6y 8m</b>
Cash Balance Plan Total Benchmark	7.0	6.0	100.0	100.0	-7.0	7.8	1.1	1.7	
<b>Total Cash Balance Plan</b>	<b>7.8</b>	<b>6.3</b>	<b>81.1</b>	<b>89.5</b>	<b>-7.8</b>	<b>8.4</b>	<b>1.1</b>	<b>1.8</b>	<b>6y 8m</b>
Pre-Pavilion Cash Balance Plan Total Benchmark	8.1	6.7	100.0	100.0	-6.4	8.3	1.1	1.9	
<b>Total Cash Balance Plan</b>	<b>7.8</b>	<b>6.3</b>	<b>77.5</b>	<b>95.6</b>	<b>-7.8</b>	<b>8.4</b>	<b>1.1</b>	<b>1.8</b>	<b>6y 8m</b>
60% Vanguard Total World Stock / 40% Vanguard Total Bond <sup>2</sup>	6.9	6.7	100.0	100.0	-7.3	8.4	0.9	1.5	

- The Surplus Cash ex District portfolio has trailed the 50% Vanguard Total World Stock / 50% Vanguard Total Bond portfolio (an investable passive portfolio) by 0.6% since Pavilion's inception. However, the portfolio has experienced less volatility, with a favorable spread between down market and up market capture.
- The Cash Balance portfolio has outpaced the 60% Vanguard Total World Stock / 40% Vanguard Total Bond portfolio by 0.9% since Pavilion's inception, all while exhibiting less volatility and a favorable spread between down market and up market capture.

<sup>1</sup> 50% Vanguard Total World Stock Index Fund Institutional (VTWIX) / 50% Vanguard Total Bond Market Index Fund Institutional (VBTIX). Rebalanced Quarterly.

<sup>2</sup> 60% Vanguard Total World Stock Index Fund Institutional (VTWIX) / 40% Vanguard Total Bond Market Index Fund Institutional (VBTIX). Rebalanced Quarterly.

# PAVILION, A MERCER PRACTICE

## CLIENT FOCUS AREAS ACROSS MERCER WEALTH



Defined  
Benefit



Defined  
Contribution



Not For  
Profit



Insurance



Wealth  
Management



# PAVILION

a Mercer Practice

### Pavilion Team



**250+**  
Clients\*

**100+**  
Staff\*

- **Specialist not-for-profit team within Mercer** helps clients implement best practices
- **Collaborative service philosophy** provides advice and resources tailored to each client

### Mercer Resources



**200+**  
Mercer Global Researchers\*\*

- **Scale of Mercer manager research** provides Pavilion clients with global resources
- **Dedicated Mercer Alternatives team** delivers specialized research services in private capital strategies

# PAVILION, A MERCER PRACTICE



PAVILION, A MERCER PRACTICE Not-for-Profit	CLIENTS & ASSETS	
	\$ Billions AUA	# of Clients
Healthcare	\$ 250	125+
Endowments	\$ 105	70+
Foundations	\$ 30	125+
<b>Total</b>	<b>\$ 390+</b>	<b>325+</b>

Preliminary client and assets data as of December 31, 2018, and subject to change. Assets in the table above represent approximately \$375 billion in assets under advisement and \$14 billion in assets under management. **See Important Notices for additional information regarding Assets Under Advisement and Assets Under Management.**

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# PAVILION

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