# AGENDA
## INVESTMENT COMMITTEE MEETING
## OF THE EL CAMINO HOSPITAL BOARD
**Monday, March 12th, 2018 – 5:30 pm**

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

John Zoglin will be participating via teleconference from 2700 Gracy Farms Lane, Austin, TX. 78758

**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 |
|---|---|---|---|---|
| 1. | **CALL TO ORDER / ROLL CALL** | Jeffrey Davis, MD Chair | | **5:30 – 5:32 pm** |
| 2. | **POTENTIAL CONFLICT OF INTEREST DISCLOSURES** | Jeffrey Davis, MD Chair | | **5:32 – 5:33** |
| 3. | **PUBLIC COMMUNICATION**<br>a. Oral Comments<br>*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.*<br>b. Written Correspondence | Jeffrey Davis, MD Chair | *public comment* | **information**<br>**5:33 – 5:36** |
| 4. | **CONSENT CALENDAR**<br>*Any Committee Member or member of the public may remove an item for discussion before a motion is made.*<br>***Approval***<br>a. Minutes of the Open Session of the Investment Committee Meeting - November 13, 2017<br>b. Minutes of the Open Session Joint Finance & Investment Committee – January 29, 2018<br>***Information***<br>c. CFO Report Out – Finance Committee Open Session Materials<br>d. Updated FY 18 Pacing Plan<br>e. Article of Interest | Jeffrey Davis, MD Chair<br><br>Iftikhar Hussain, CFO | *public comment* | **motion required**<br>**5:36 – 5:40** |
| 5. | **REPORT ON BOARD ACTIONS**<br>**ATTACHMENT 5** | Jeffrey Davis, MD Chair | | **information**<br>**5:40 – 5:45** |
| 6. | **INVESTMENT REPORT**<br>a. 4Q17 Executive Summary and January 2018 Performance Update<br>b. International Value Equity Search | Antonio DiCosola &<br>Chris Kuhlman,<br>Pavilion Advisory Group | | **information**<br>**5:45 – 6:15** |
| 7. | **ROTATING TOPICS**<br>a. Investment Program Performance Analysis<br>b. Asset Allocation Review & ERM Framework | Antonio DiCosola &<br>Chris Kuhlman,<br>Pavilion Advisory Group | | **information**<br>**6:15 – 6:55** |
| 8. | **REVIEW BIENNIAL COMMITTEE SELF-ASSESSMENT**<br>**ATTACHMENT 8** | Iftikhar Hussain, CFO | | **information**<br>**6:55 – 7:15** |

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| | AGENDA ITEM | PRESENTED BY | | ESTIMATED TIMES |
|---|---|---|---|---|
| 9. | **PROPOSED FY 2019**<br>a. Goals<br>b. Pacing Plan<br>c. Proposed Meeting Dates | Iftikhar Hussain, CFO | | **motion required**<br>**7:15 – 7:25** |
| | | | | |
| 10. | **DRAFT RESOLUTION 2018-04 REQUIRED BY PREMIER, INC. LISTING THE CEO AND CFO AS AUTHORIZED INDIVIDUALS TO SELL STOCKS**<br>**ATTACHMENT 10** | Iftikhar Hussain, CFO | | **motion required**<br>**7:25 – 7:30** |
| | | | | |
| 11. | **ADJOURN TO CLOSED SESSION** | Jeffrey Davis, MD Chair | | **motion required**<br>**7:30 – 7:31** |
| | | | | |
| 12. | **POTENTIAL CONFLICT OF INTEREST DISCLOSURES** | Jeffrey Davis, MD Chair | | **7:31 – 7:34** |
| | | | | |
| 13. | **CONSENT CALENDAR**<br>*Any Committee Member may remove an item for discussion before a motion is made.*<br><br>***Approval***<br>*Gov't Code Section 54957.2.*<br>a. Minutes of the Closed Session of the Investment Committee Meeting November 13, 2017<br>b. Minutes of the Closed Session of the Joint Finance & Investment Committee – January 29, 2018 | Jeffrey Davis, MD Chair | | **motion required**<br>**7:34 – 7:37** |
| | | | | |
| 14. | **ADJOURN TO OPEN SESSION** | Jeffrey Davis, MD Chair | | **motion required**<br>**7:37 – 7:38** |
| | | | | |
| 15. | **RECONVENE OPEN SESSION / REPORT OUT** | Jeffrey Davis, MD Chair | | **7:38 – 7:39** |
| | To report any required disclosures regarding permissible actions taken during Closed Session. | | | |
| | | | | |
| 16. | **ADJOURNMENT** | Jeffrey Davis, MD Chair | | **motion required**<br>**7:40pm** |

**Important Dates**:
FY 2018 Investment Committee Meetings
- May 14, 2018

Semi-Annual Board and All Committee Meetings
- April 25, 2018

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

# Minutes of the Open Session of the Investment Committee of the Board of Directors
**Monday, November 13, 2017**
**El Camino Hospital, 2500 Grant Road, Mountain View, California**
**Conference Room A**

| **Members Present** | **Members Absent** | **Members Excused** |
|---|---|---|
| Brooks Nelson<br>Jeffrey Davis, Chair<br>John Conover<br>John Zoglin<br>Nicola Boone (via teleconference) | Gary Kalbach | |

A quorum was present at the El Camino Hospital Investment Committee on Monday, November 13th 2017 meeting.

| Agenda Item | Comments/Discussion | Approvals/Action |
|---|---|---|
| **1. CALL TO ORDER/ ROLL CALL** | The meeting of the Investment Committee of El Camino Hospital (the "Committee") was called to order by Dr. Davis, Committee Chair at 5:34pm | ***None*** |
| **2. POTENTIAL CONFLICT OF INTEREST DISCLOSURES** | Chair Davis 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. | ***None*** |
| **3. PUBLIC COMMUNICATION** | Chair Davis asked if there was any public communication to present. None were noted. | ***None*** |
| **4. CONSENT CALENDAR ITEMS** | Chair Davis asked if any Committee member wished to remove any items from the consent calendar for discussion. None were noted.<br><br>After the close session, Chair Davis requested to the Committee & Pavilion Advisory Group, to change the February Investment Committee meeting date. The Committee unanimously agreed to move the meeting to March 12th 2018.<br><br>**<u>Motion:</u>** To approve the consent calendar (Open Minutes of the August 14, 2017 Investment Committee Meeting and the FY 18 Pacing Plan.<br><br>**<u>Movant:</u>** Conover<br>**<u>Second:</u>** Nelson<br>**<u>Ayes:</u>** Boone, Davis, Nelson, Conover and Zoglin.<br>**<u>Abstentions</u>:** None<br>**<u>Absent:</u>** Kalbach<br>**<u>Excused:</u>** None<br>**<u>Recused:</u>** None | *The Open Minutes of the August 14, 2017 Investment Committee Meeting and the FY 18 Pacing Plan were approved.* |
| **5. REPORT ON BOARD ACTIONS** | Chair Davis reported a majority of the ECH Board and Committee attended the Estes Park Institute Conference in San Francisco October 29 – November 1, 2017. | ***None*** |

| Agenda Item | Comments/Discussion | Approvals/Action |
|---|---|---|
| **6. INVESTMENT POLICY REPORT** | Mr. DiCosola, Pavilion Advisory Group, presented a summary on the Capital Markets. During the third quarter, geopolitical events and natural disasters dominated the headlines, although financial markets proved resilient, focusing on improving economic data. Risk assets rose. Additionally, cyclical risks remain low across developed markets, which we believe should allow existing trends to remain intact. Risk assets continue to perform well. We've strengthen in Corporate profits and strong economic debt across the globe.<br><br>The S&P 500 is up 4.5% this past quarter in our portfolio. Hedge funds posted moderate gains during a robust quarter for equity markets. Long/short equity strategies were off to a strong start in the beginning weeks of the quarter, with technology, financials, and cable/media names playing prominent roles on the long side of portfolios, while short positions skewed toward consumer retail.<br><br>Hedge funds posted moderate gains during a robust quarter for equity markets. Long/short equity strategies were off to a strong start in the beginning weeks of the quarter, with technology, financials, and cable/media names playing prominent roles on the long side of portfolios, while short positions skewed toward consumer retail. Hedge fund alpha was strong across value and growth names, with the average fund outperforming its beta to equity markets. In fixed income, distressed managers registered weaker than expected performance due to prominent exposure to Puerto Rico, as well as select coal and industrials names. Underlying volatility levels have stayed low for some time, which does not help macro.<br><br>Following its September meeting, the Federal Reserve ("Fed") announced its intention to begin balance sheet normalization in October with maturity roll-offs. The Feds have kept the interest rates at an all-time low. In the end, it is likely that the Fed will begin to slowly liquidate its balance sheet in Q4, with the next interest rate hike likely in December, and the possibility of additional rate hikes in 2018.<br><br>Mr. Kuhlman, Pavilion Advisory Group, reviewed the Investment Committee Scorecard and Portfolio Performance as further detailed in the submitted materials to include the following:<br>1. **Scorecard**:<br>Mr. Kuhlman reported that Investment performance for the third quarter the surplus cash was up 2.7% for the quarter and the benchmark is 2.8% more or less in line. The cash balance plan was 3.2% with a benchmark of 3.3% we're missing returns on a couple of the real-estate managers though once we retro actively receive them we'll be within benchmark. | |

| Agenda Item | Comments/Discussion | Approvals/Action |
|---|---|---|
| | 2. **Surplus Cash**:<br>Mr. Kuhlman noted that the Surplus Cash Portfolio returned +2.7% for the quarter, trailing its benchmark by 10 basis points (bps). Over the trailing one year period, the Portfolio returned +9.0%, outpacing the benchmark by 10 bps. Marginal relative underperformance during the quarter was driven by unfavorable manager results within the International Equity Composite (+4.9%), which trailed the MSCI AC World ex USA Index by 130 bps. Notable outperformers included Large Cap Growth manager Sands (+6.5%), which outperformed the Russell 1000 Growth Index by 60 bps, continuing its rebound from 2016, and Small Cap Growth manager Conestoga (+9.8%), which outpaced the Russell 2000 Growth Index by 360 bps. The Direct Hedge Fund portfolio (+2.6%) bested the HFRI Fund of Funds Composite Index by 30 bps.<br><br>3. **Cash Balance Plan**:<br>Mr. Kulman further reported that the Cash Balance Plan returned +3.2 for the quarter, trailing its benchmark by 10 basis points (bps). Over the trailing one year period, the Portfolio returned +11.0%, outpacing the benchmark by 40 bps. Marginal relative underperformance during the quarter was driven by unfavorable manager results within the International Equity Composite (+4.7%), which trailed the MSCI AC World ex USA Index by 150 bps. Notable outperformers included Large Cap Growth manager Sands (+6.5%), which outperformed the Russell 1000 Growth Index by 60 bps, continuing its rebound from 2016, and Small Cap Growth manager Conestoga (+9.8%), which outpaced the Russell 2000 Growth Index by 360 bps.<br>The Plan's asset allocation positioning proved beneficial (overweight Equity, underweight Fixed Income). The Hedge Fund Composite (+2.9%) outperformed the HFRI Fund of Funds Composite Index by 60 bps.<br><br>4. **Hedge Funds**:<br>The Hedge Fund Portfolio returned +2.6% during the third quarter, outperforming the HFRI Fund of Funds Composite Index by +0.3%. Each of the Portfolio's four strategies delivered positive absolute returns, with the Relative Value, Credit, and Macro strategies outperforming their respective underlying reference index (by +3.4%, +1.1% and +0.8%, respectively). The Equity Long/Short strategy performed in line with its underlying reference index (+3.6%).<br><br>The overall Executive Summary from Pavilion Advisory Group is Global growth should remain sound, although some regions will benefit more than others. Inflation will remain subdued in | |

| Agenda Item | Comments/Discussion | Approvals/Action |
|---|---|---|
| | the near-term, with tight U.S. labor markets a potential threat. Any sustained wage gains may be a leading indicator of changes in inflation dynamics. Valuations in equity and credit markets appear full on an absolute basis but reflect strong underlying fundamentals, and the likelihood that interest rates, though expected to rise slightly, will stay low for longer. Central bank policy makers have begun to refine forward guidance, but policy changes likely will continue to be very gradual with accommodation remaining in place for some time. Risks remain particularly geopolitical risks that likely could rock markets periodically. A monetary policy misstep is also a possibility.<br>• We recommend maintaining the current positioning: overweight equities, emphasis on the US and emerging markets within equities, and high quality fixed income exposure with some duration for diversification, and the use of emerging market debt either through active managers or dedicated positions.<br><br>Committee Members noted that the analysis of the passive management vs active management is on the pacing plan for the March 2018 meeting. | |
| **7. INVESTMENT POLICY REVIEW** | Antonio DiCosola and Chris Kuhlman, Pavilion Advisory Group, stated a momentary recap of the Cash Balance & Surplus Cash investments.<br>• No recommendations at this time. However, if there's an asset allocation change after the allocation study report, we can reevaluate the changes to the investment policy. | |
| **8. ADJOURN TO CLOSE SESSION** | **Motion:** To adjourn to close session at 6:44 pm.<br><br>**Movant:** Nelson<br>**Second:** Zoglin<br>**Ayes:** Boone, Conover, Davis, Nelson and Zoglin.<br>**Abstentions:** None<br>**Absent:** Kalbach<br>**Excused:** None<br>**Recused:** None | ***A motion to adjourn to the Investment Committee meeting at*** 6:44 pm ***was approved.*** |
| **9. AGENDA ITEM 12 RECONVENE OPEN SESSION** | Agenda Items 10 was conducted in closed session. Chair Davis reported that the Closed Session Minutes of the August 14, 2017 Investment Committee were approved.<br>Chair Davis requested to the Committee & Pavilion Advisory Group, to change the February Investment Committee meeting date. The Committee unanimously agreed to move the meeting to March 12th 2018. | |

| Agenda Item | Comments/Discussion | Approvals/Action |
|---|---|---|
| **10. AGENDA ITEM 13 ADJOURMENT** | **Motion:** To adjourn the Investment Committee meeting at ***6:51*** pm.<br><br>**Movant:**<br>**Second:**<br>**Ayes:** Boone, Conover, Davis, Nelson and Zoglin.<br>**Abstentions:** None<br>**Absent:** Kalbach<br>**Excused:** None<br>**Recused:** None | ***A motion to adjourn to the Investment Committee meeting at 6:51 pm was approved.*** |

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

________________________________
Jeffery Davis, MD, Chairman
ECH Investment Committee of the Board of Directors

**Minutes of the Open Session of the Joint Meeting of the Investment & Finance Committees**
**Monday, January 29, 2018**
**El Camino Hospital, 2500 Grant Road, Mountain View, California**
**Conference Room A&B**

| Investment Committee | Finance Committee |
|---|---|
| **Members Present** | **Members Present** |
| Nicola Boone | Joseph Chow |
| John Conover | Boyd Faust (By Phone) |
| Jeffrey Davis, Chair | William Hobbs |
| Gary Kalbach | Richard Juelis |
| Brooks Nelson | David Reeder |
| | John Zoglin, Chair |

A quorum was present at the El Camino Hospital Investment Committee on Monday, January 29, 2018 meeting.

| Agenda Item | Comments/Discussion | Approvals/Action |
|---|---|---|
| **1. CALL TO ORDER/ ROLL CALL** | The meeting of the Investment Committee of El Camino Hospital (the "Committee") was called to order by Dr. Davis, Committee Chair at 5:05pm | ***None*** |
| **2. POTENTIAL CONFLICT OF INTEREST DISCLOSURES** | Chair Davis 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. | ***None*** |
| **3. PUBLIC COMMUNICATION** | Chair Davis asked if there was any public communication to present. None were noted. | ***None*** |
| **4. ADJOURN TO CLOSE SESSION** | **Motion:** To adjourn to close session at 5:07 pm.<br><br>**Movant:** Nelson<br>**Second:** Davis<br>**Ayes:** Boone, Chow, Conover, Davis, Faust, Hobbs, Juelis, Kalbach, Nelson, Reeder and Zoglin.<br>**Abstentions:** None<br>**Absent:**<br>**Excused:** None<br>**Recused:** None | ***A motion to adjourn to the Investment Committee meeting at** 5:07 **was approved.*** |
| **5. AGENDA ITEM 7 RECONVENE OPEN SESSION** | Agenda Items 6 was conducted in closed session. | |
| **6. AGENDA ITEM 8 ADJOURMENT** | **Motion:** To adjourn the Investment Committee meeting at *5:55* pm.<br><br>**Movant:** Kalbach<br>**Second:** Chow<br>**Ayes:** Boone, Chow, Conover, Davis, Faust, Hobbs, Juelis, Kalbach, Nelson, Reeder and Zoglin.<br>**Abstentions:** None<br>**Absent:** None<br>**Excused:** None<br>**Recused:** None | ***A motion to adjourn to the Investment Committee meeting at 5:55 pm was approved.*** |

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

________________________________

Jeffery Davis, MD, Chairman
ECH Investment Committee of the Board of Directors

| | | |
|---|---|---|
| | **Item:** | Finance Committee Report<br>El Camino Hospital Investment Committee (IC)<br>March 12, 2018 |
| | **Responsible party:** | Iftikhar Hussain, CFO |
| | **Action requested:** | For Information |
| | **Background:** The Finance Committee meets 6 times per year. The Committee last met on January 29, 2018 and meets next on March 26, 2018 | |
| | **Summary and session objectives**:<br>To update the Investment Committee on the work of the Finance Committee.<br>1. Progress Against Goals:<br>a. Develop and monitor industry benchmarks for operations and finance – discussed Moody's rating medians<br>b. Reviewed Education topic – discussed at the September 2017 meeting<br>2. Reviewed financial results for the first six months of FY 18.<br>3. Reviewed EPIC post implementation results.<br>4. Reviewed status of major capital plans – BHS, IMOB, Garage and Central Utility Plant<br>5. Important Future Activities<br>a. Scheduled additional FC meeting in April to review and provide input for the FY 19 budget | |
| | **Proposed Board motion, if any:**<br>1. Approval of FY18 P6 Financial Statements<br>2. Approve $2.2 million capital funding request for Picture Archive Communication System (PACS).<br>3. Approve the following physician contracts:<br>a. ICU On-Site Nighttime Coverage – MV<br>b. ICU On-Site Daytime Coverage – MV<br>c. Acute Rehab Agreement – LG<br>d. ED On-Call Interventional Radiology – LG<br>e. ED On-Call Interventional Radiology – MV<br>f. ED On-Call Urology Call Coverage – MV<br>g. ED On-Call Urology Call Coverage – LG<br>h. ED On-Call Stroke & Neurology – MV & LG | |
| | **LIST OF ATTACHMENTS:**<br>The Finance Committee Open Session Materials may be accessed by clicking here. | |

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| **FY 2018: Q1** | | |
|---|---|---|
| **JULY – NO MEETING** | **AUGUST 14, 2017 Meeting** | **SEPTEMBER – NO MEETING** |
| | ▪ Discussion on Investment Committee Meeting Structure and Pacing Calendar<br>▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ Hedge Fund Education and Structure Review<br>▪ CFO Report Out – Open Session Finance Committee Materials | N/A |
| **FY 2018: Q2** | | |
| **OCTOBER – NO MEETING** | **NOVEMBER 13, 2017 Meeting** | **DECEMBER – NO MEETING** |
| *October 25, 2017 – Board and Committee Educational Session* | ▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ Investment Policy Review<br>▪ CFO Report Out – Open Session Finance Committee Materials | N/A |
| **FY 2018: Q3** | | |
| **JANUARY 29, 2018** | **FEBRUARY - NO MEETING** | **MARCH – 12, 2018 Meeting** |
| *Joint Finance Committee and Investment Committee meeting.* | *(February meeting moved to March)* | ▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ 5-Year Review of Investment Performance & Advisor (Pavilion)<br>▪ Asset Allocation Review and ERM Framework<br>▪ CFO Report Out – Open Session Finance Committee Materials<br>▪ Review Biennial Committee Self-Assessment<br>▪ Proposed FY 2020 Goals/Pacing Plan<br>▪ Proposed FY 2020 Meeting Dates |
| **FY 2018: Q4** | | |
| **APRIL – NO MEETING** | **MAY 14, 2018 Meeting** | **JUNE – NO MEETING** |
| *April 25, 2018 – Board and Committee Educational Session* | ▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ CFO Report Out – Open Session Finance Committee Materials<br>▪ ~~Review Biennial Committee Self-Assessment~~<br>▪ 403(b) Investment Performance<br>▪ Committee Goal<br>▪ Committee Charter Review (FY18, FY20) | N/A |

**Medical Futurist℠**

February 20, 2018


**Tech giants move into healthcare**

Facebook, Google, and Amazon are aiming for new horizons. The playfield must be too small for them solely on the technology markets. They certainly have the capacity to move into new fields. As The Economist writes, their huge stock market valuations suggest that investors are counting on them to double or even triple in size in the next decade.

So, where do they want to utilize their power? Recent moves show they have ambitions in healthcare. Google has made steps forward in the field with Calico. Human Longevity Inc. joined forces with Cleveland Clinic for a human genomics collaboration aimed at disease discovery and making aging a chronic condition. In September 2017, Microsoft announced the launch of its new healthcare division at its Cambridge research facility, to use its artificial intelligence software to enter the health market. Its research plans include monitoring systems that can help keep patients out of hospitals and large studies into conditions such as diabetes.

**And what about Amazon?**

According to CNBC's news in January 2018, the Seattle-based giant hired one of Amazon's most high-profile hires to date in health, Martin Levine. He has been working for Iora Health, which focuses on Medicare patients in six US markets. He could be joining Amazon's internal healthcare group known as 1492, which is testing a variety of secretive projects. Many analysts suspect that Amazon is considering selling prescription drugs online as rumor said in autumn 2017 or that it might be opening drug stores in its Whole Foods chains. Some analysts even considered Amazon's popular digital assistant, Alexa as the future's possible digital doctor. Amazon, Berkshire Hathaway, and JPMorgan Chase also announced a partnership to cut health-care costs and improve services for their US employees.

So, US consumers might one day find themselves logging in to Amazon Healthcare Prime, or asking Dr. Alexa what they should do about their cold. But what if we go even further than that? Let's do a thought experiment. What if Amazon decided to open a clinic in the future?

**Hi Ann! Your prescription drugs from Amazon Clinic just arrived!**

Your phone buzzes with the above message. As a reaction, you go to your door and notice the tiny medical drone with your package in your backyard. In the neatly wrapped box, you find all the medication the GP prescribed for your pneumonia. The order is fairly easy to make on Amazon's website with a special code that your GP gave you to allow the purchase of the drugs from Amazon Clinic's own online pharmacy.

The scene is not that far away from reality considering Amazon's recent moves in pharma. The tech giant might have been considering selling drugs online. In 2017, it received wholesale licenses in several US states and induced a lot of fear in big pharma players about disrupting the industry. Besides, drone delivery is already on the palette of services offered by Amazon. In December 2016, it delivered the first packages with popcorn and fire TV to its customers in the UK. The US' airspace watchdog, the FFA, also started to set out rules for drone delivery. Thus, selling pharmaceuticals and delivering medication by drones seem like a natural combination for the future Amazon Clinic.

Moreover, medical drones have a great potential to respond to medical emergencies or disasters. Google already patented a device that can call for a drone in emergency situations to fly in with life-saving medical equipment on board. You would push a button, and a drone would appear on the spot. How amazing would that sound? And what about drones delivering automatic external defibrillators (AEDs) directly to people who have just suffered a heart attack? Researchers from the University of Toronto are already experimenting with the idea based on their inspiration from ambulance drones in the Netherlands. It goes without saying that a future Amazon Clinic would have a swarm of medical drones for drug and blood transportation or medical emergencies.

**Artificial Intelligence-based support system in the Amazon Clinic**

There is incredible growth in computers' ability to understand images, text, and video in the form of Artificial Narrow Intelligence (ANI), a field called computer vision and natural language processing. The former is used as a primary technology for self-driving cars, Google image search, automatic photo-tagging on Facebook, and it is extensively utilized now in healthcare, for example in the field of medical imaging.

In December 2017, Amazon also announced a couple of services based on ANI. Amazon Rekognition Video uses smart algorithms to detect objects and faces in customers' video content; the tech giant's Amazon Transcribe turns audio into text; Amazon Translate (what a surprise) translates text, and last but not least, Amazon Comprehend analyses text for sentiment and key phrases. How could all these services support the work of medical professionals in a hospital?

The Amazon Clinic might deploy smart algorithms to aid doctors' work in making decisions about treatment paths. Amazon might build its own deep learning algorithm just like IBM Watson, which is able to find the latest scientific studies and sift through millions of options in seconds to find the best solutions. Amazon Rekognition Video might not only detect objects in customers' video content, but also in medical imaging helping the work of radiology departments. Moreover, Amazon Transcribe might spare the time of making medical notes for doctors by transcribing patients' account of their conditions as well as medical professionals' recommendations. As administration puts a high burden on doctors and considerably lowers job satisfaction, tools for easing this hideous task would be more than welcome in future hospitals.

**Amazon healthcare package deals and Dr. Alexa**

No matter whether you are looking for blood glucose monitors, otoscopes or blood pressure cuffs, snoring aids or defibrillators, you can find everything on Amazon. The tech giant is already selling medical equipment, first aid kits, and non-prescription drugs online, so jumping into more serious healthcare business is truly not so far away.

Now, imagine the Amazon Clinic going some steps further. What if you could have special package deals on Amazon Healthcare Prime? The doctors prescribed you medication for high blood pressure, and you could get blood pressure cuffs or mobile apps helping you measure your medical state at a reduced price – when getting everything in a bundle.

Dr. Alexa might even help you choose from the selection based on your personal history. For example, based on your known allergies to drugs. The digital assistant might also act as the first line in primary care by answering basic medical questions and helping patients with simpler conditions. The concept is already moving into reality. UK's National Health Service (NHS) started to use a chatbot app for dispensing medical advice for a trial period in 2017, with the aim of reducing the burden on its 111 non-emergency helplines. Moreover, Dr. Alexa could also ease the administrative burden on medical staff by patient management and organizing doctors' schedules.

**3D printing drugs and medical equipment in the Amazon Clinic**

Imagine that the future Amazon Clinic would apply disruptive technologies such as surgical robots, tiny robot companions or TUG robots for carrying medication and equipment. Imagine that doctors would use 3D printers to create finger splints and other personalized plaster casts, tumor or organ models or low-cost prosthetic parts inside the Amazon Clinic. The 3D Printing Department would be responsible for all medical equipment necessary in other parts of the hospital.

And what if the Amazon pharmacy could even use 3D printing to make drugs in any color or shape you choose online? This is closer than you think. In August 2015, the FDA approved an epilepsy drug called Spritam that is made by 3D printers. It prints out the powdered drug layer by layer to make it dissolve faster than average pills. In June 2015, the UK's Daily Mail reported that scientists from University College of London are experimenting with 3D printing drugs in odd shapes; such as dinosaurs or octopuses in order to make it easier for kids to take pills.

**The possible downsides of a future Amazon Clinic – Recommendations and Black Fridays!**

Imagine that you would receive recommendations for treatments, hospitals and even doctors based on your own habits. Just as the algorithms of Amazon, Google and Facebook show you ads based on your browsing history. So, if you suffer from diabetes, every content you receive will have something to do with the condition. Or if you do your grocery shopping and Amazon saw you buy some liqueur you might get some recommendations for healthy living from Amazon Health Prime. That would be an annoying nag as well as a scary connection between parts of your personal data.

Imagine that you had a Black Friday in medicine, too! On certain days of the year, treatments and drugs would be less expensive, and even doctors would get paid less – but could get better reviews more easily. At first, it could sound like a good idea but think about it. What if patients did not buy medical equipment or drugs that they actually needed in order to wait for some discount? It could cost their health, or in extreme cases their life!

**The entire medical history of you**

It is not a coincidence that Black Mirror comes into your mind when reading the section title. The creators of the dystopic series already imagined what could happen when people would be evaluated solely based on their social media profiles and interactions. Imagine what would happen when reviews would determine the future of doctors and treatments? What if you could review doctors and treatments just as you do with books on Amazon? If many patients were dissatisfied with a treatment due to its side effects, it would go out of the window. This is not how evidence-based medicine works. Moreover, the power of the masses could sweep away great professionals with fewer charms – which should never happen.

Not only medical professionals but also patients might be reviewed and evaluated like that. Patients would have a profile on Amazon with their entire medical documentation, genetic information – and the evaluation they received from their doctors. If someone has bad reviews, treatment might become more expensive for them. Very scary prospects there!

**Should Amazon run a hospital?**

Some ideas sound funny and promising; others sound just like script lines from Black Mirror. Anyhow, healthcare would definitely look different with Amazon-run hospitals – perhaps more patient-centered and more business-oriented.

But healthcare should not be pure business. Medical evidence, empathy, and caregivers dedicated to their jobs make healthcare unique. Thus, a lot of techniques which Amazon, Google, Microsoft, Apple or Facebook apply in their businesses would not work or would have catastrophic consequences in healthcare. Especially in direct patient care.

No wonder that Apple, Google, and all the other tech giants move rather forward on the market for medical equipment, wearables or artificial intelligence solutions that indirectly affect patients. The fact that Amazon decided not yet to sell drugs online but rather concentrate on the medical equipment might also have something to do with that. So, there is no question that tech giants want to take a leap of faith in healthcare, but they still have a lot to learn to get into the industry successfully.

# ECH BOARD COMMITTEE MEETING AGENDA ITEM COVER SHEET

| | | |
|---|---|---|
| | **Item:** | Report on Board Actions<br>Investment Committee<br>Meeting Date: March 12, 2018 |
| | **Responsible party:** | Cindy Murphy, Director of Governance Services |
| | **Action requested:** | For Information |
| | **Background:**<br>In FY16 we added this item to each Board Committee agenda to keep Committee members informed about Board actions via a verbal report by the Committee Chair. This written report is intended to supplement the Chair's verbal report. | |
| | **Other Board Advisory Committees that reviewed the issue and recommendation, if any:**<br>None. | |
| | **Summary and session objectives** :<br>To inform the Committee about recent Board actions | |
| | **Suggested discussion questions:**<br>None. | |
| | **Proposed Committee motion, if any:**<br>None. This is an informational item. | |
| | **LIST OF ATTACHMENTS:**<br>Report on Board Actions | |

**November 2017 through February 2018 ECH Board Actions***

1. November 8, 2017
    a. Approved the FY18 Board, Board Chair, and Committee Self-Assessment Tools. The Biennial Committee Assessment will launch in November or early December 2017 and we expect to have results in February. The Annual Board and Board Chair Assessment will launch in the Spring of 2018.
    b. Approved the Annual Safety Report for the Environment of Care.

2. January 10, 2018
    a. Recognized the Los Gatos Operations team for increasing personalized service to physicians and patients.
    b. Approved the FY18 Period 3 and Period 4 Financials.
    c. Approved the Letters of Rebuttable Presumption of Reasonableness (related to Executive Compensation).
    d. Approved the FY18 Salary Range for the new President, SVMD position and its inclusion in the Executive Compensation and Benefits Plans.
    e. Approved physician contracts for Ophthalmology Call Coverage, Gastroenterology ED Call, and OB Hospitalist Coverage.
    f. Approved the Amended & Restated Limited Liability Company Operating Agreement of Silicon Valley Medical Development, LLC (SVMD).

3. February 14, 2018
    a. Approved Changes to Executive Compensation Philosophy, Executive Base Salary Administration Policy and Executive Incentive Plan Policy
    b. Approved FY18 CIO Base Salary – Deb Muro named CIO
    c. Approved FY 18 SVMD President Base Salary – Bruce Harrison named President of SVMD
    d. Approved the Government Investigations and Physician Financial Arrangements Policies
    e. Approved the PACS Image and Archive System Replacement ($2.2 million)
    f. Approved ED Call Panel Agreements for Interventional Radiology, Stroke &Neurology, and Urology at both campuses
    g. Approved FY18 Period 5 and 6 Financials
    h. Appointed Director Julie Kliger to the Quailty, Patient Care and Patient Experience Committee and the Executive Compensation Committee.
    i. Considered a proposal to delegate certain decision making authority to the Executive Compensation Committee, and gave direction to the Committee to develop procedures for exercising the proposed authority.
    j. Approved a revised Board and Committee Education Policy.

*This list 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.

**January 2018 ECHD Board Actions***

1. January 16, 2018
   a. Elected Gary Kalbach and Julie Kliger, RN to the El Camino Hospital Board of Directors. Their terms are effective immediately. Mr. Kalbach's term expires on June 30, 2021 and Ms. Kliger's term expires on June 30, 2020.

*This list 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.

# Executive Summary

## El Camino Hospital

**4th Quarter 2017**


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Chicago, IL 60606
Phone: 312-798-3200
Fax: 312-902-1984
www.pavilioncorp.com


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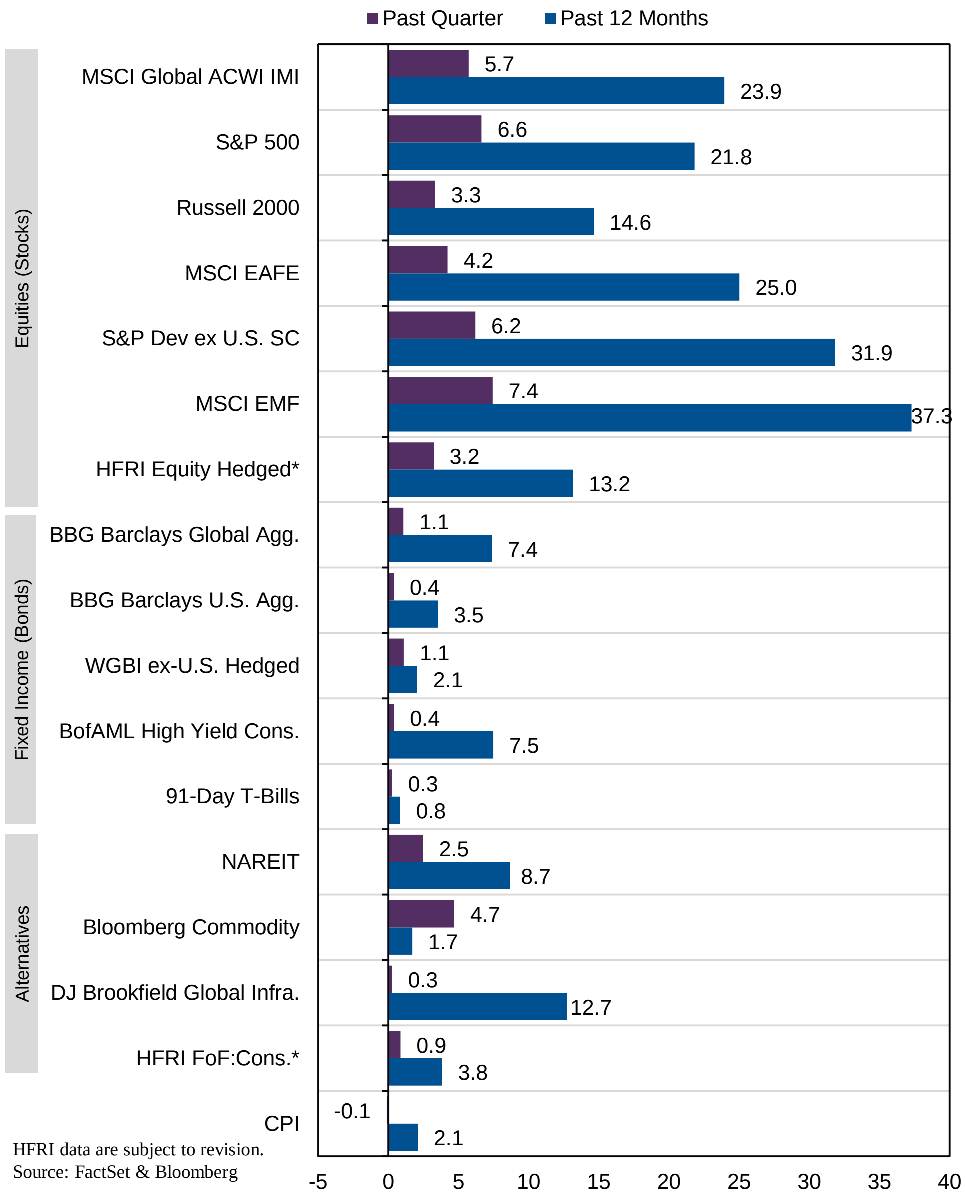
# Capital Markets Review

## Summary

As of December 31, 2017

**Performance: Past Quarter and Year (%)**




HFRI data are subject to revision.
Source: FactSet & Bloomberg

### Capping off a strong year for risk assets

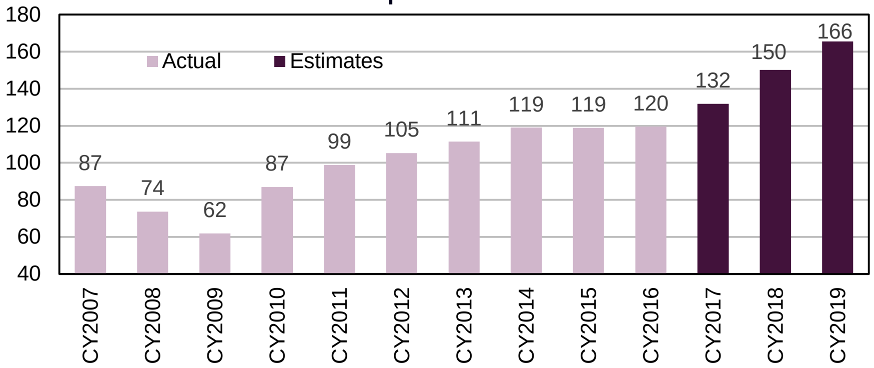
- In the fourth quarter, implied and realized volatility declined to near historic lows and risk assets flourished, supported by limited headline risks and advancements in economic data.
- While short on political events relative to the first nine months of the year, uncertainty still arose from Germany's failure to form a political coalition before year-end, Brexit negotiation stumbles, China's 19th party conference, and the U.S. tax bill formed through reconciliation.
- Consumer strength and economic data bode well for continued global growth prospects. After a sluggish start in the first half of 2017, U.S. private investment accelerated in the second half of the year, likely providing additional momentum to the economic expansion.
- Core inflation remains below target in most developed markets, but economic growth and advancing labor market conditions encouraged central bank policy makers to slow or reduce accommodation. In October, the U.S. began reducing its balance sheet while the European Central Bank ("ECB") announced a scaling back of its bond purchases to €30 billion per month starting in January. Additionally, December saw the Federal Open Market Committee's ("FOMC") third rate increase of 2017, applying upward pressure to short- and intermediate-term rates.
- The U.S. yield curve flattened further dampening intermediate duration bond performance. Within credit, economic conditions drove spread compression for most sectors, driving outperformance relative to similar duration Treasuries. Outside the U.S., emerging debt concluded the year with twelve consecutive months of excess returns.
- Emerging market equity performance dominated once again in the fourth quarter and for the year (+37.3%). Developed equity markets also surged during the quarter and year, as widespread economic growth supported company fundamentals and expectations. Outperformance of the developed international equity markets relative to the U.S., however, was driven by currency movements. Performance of these markets lagged when measured in local currencies or on a hedged basis.
- After two down quarters, commodity prices turned up second half of the year, led by industrial metals (+21.7%) and energy sub-indices (+19.6%). Income-oriented strategies, like infrastructure, continued to generate positive performance; although, a flattening yield curve likely held back performance.

# Capital Markets Review

## Asset Class Outlook

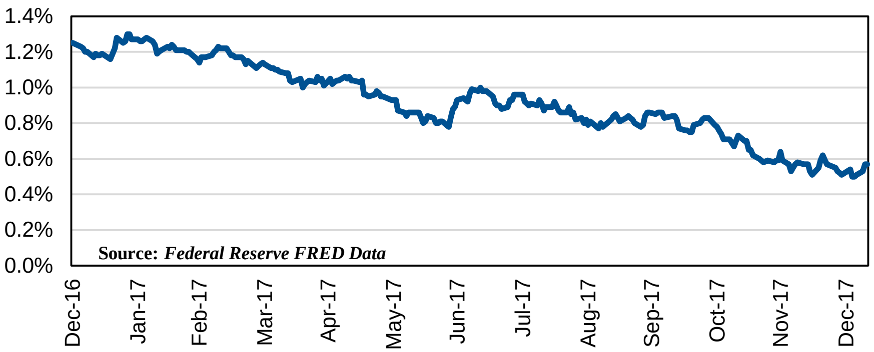
As of December 31, 2017

**S&P 500 Calendar Year Bottom-Up EPS Actuals & Estimates**

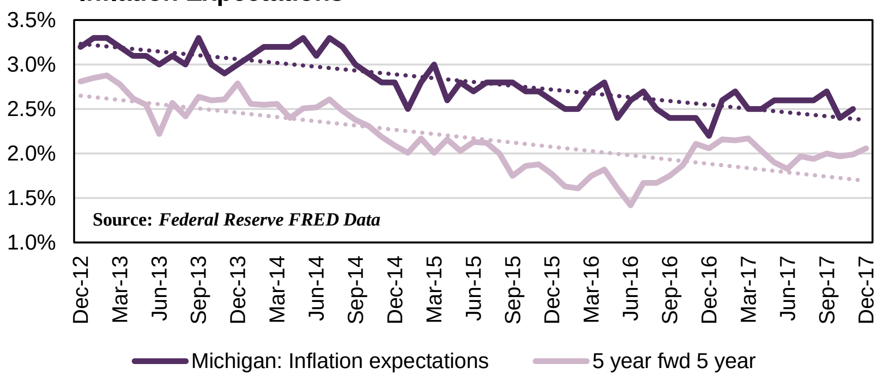



*Source: FactSet as of January 12, 2018*

**10 Year – 2 Year U.S. Yield Curve**




**Inflation Expectations**




## Equities

- Equity markets provided strong performance in the fourth quarter with the dominant force being ongoing synchronized global growth. For the first time in over a decade, the OECD reported positive growth in all of the 45 countries it monitors. This strong growth powered a recovery in corporate earnings around the world, driving global indices to double digit returns for the year. S&P 500 Index earnings appear to have grown by a little over 11% for the year, a feat that could be repeated in 2018 if consensus estimates for the year hold (currently 11%). Low inflation, low and steady interest rates, as well as lower taxes provide conditions that should be supportive for continued, though more muted, positive market returns. Market volatility was near record lows for the year, with the S&P 500 notching 14 straight months of positive returns – a first in the history of the index. Additionally, the largest peak to trough drawdown over the course of the year was only 3%. This is in stark contrast to the more typical annual drawdown of almost 10%. At some point market volatility will normalize, but it may require a more significant tightening in financial conditions, something we do not anticipate in the first few quarters of 2018.

## Fixed Income

- With few exceptions, fixed income markets posted positive returns for the quarter. This performance came despite the fact that policy makers across developed markets have either begun or have signaled the beginning of policy normalization. Additionally, this policy normalization is taking place despite the fact that in most markets, core inflation remains stubbornly below the common 2% target. Policy makers have argued that the early start will allow for an extended period of policy normalization and extremely gradual rate increases. They further argue that the early start will allow them to target a lower terminal policy rate. In the U.S., the FOMC anticipates the terminal funds rate being only 3%, a rate they could achieve in late 2019 if the current pace of increases is maintained (three rate increases are anticipated for 2018). For this reason, we do not anticipate U.S. Treasury rates spiking materially beyond that level. This view is supported by the degree of flattening in the Treasury curve despite the relatively low yield levels. Corporate credit may suffer a different fate. Spreads are trading at the lower bound of the historical range with high yield trading almost 200 basis points below its long-run average. As a result, we continue to view high quality duration as source of diversification and protection against unanticipated market sell offs, while lower quality credit provides little protection against late cycle risks.

## Real Assets

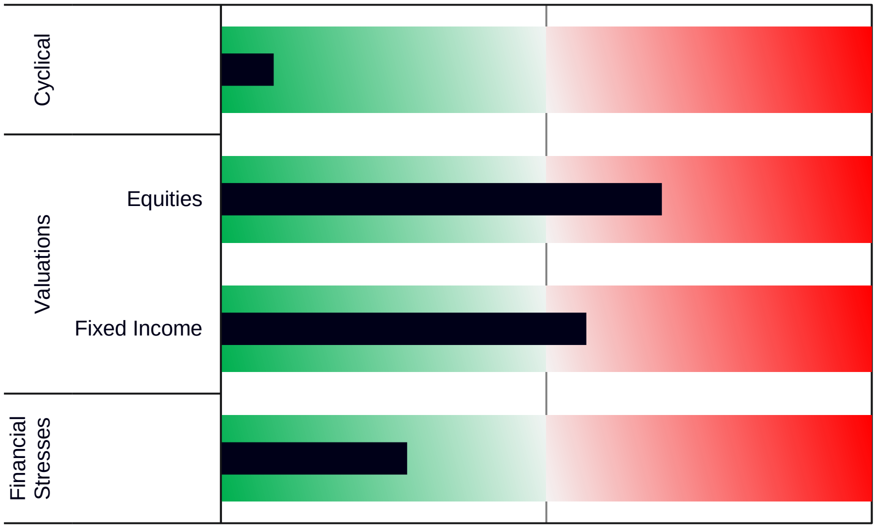
- As noted, core inflation remains constrained in most developed markets, circumstances that likely will persist for some time. One example holding back inflation is the decline in long-run inflation expectations, as reflected by Michigan consumer inflation expectation and five-year forward inflation swaps. Declining expectations put downward pressure on wages and longer-term contracts for goods and services. While we think inflation will rise modestly over the year, we believe factors such as declining expectations will continue to constrain it. In the current low yield environment, we maintain our view that global listed infrastructure likely provides a diversifying income stream with a slightly lower volatility profile than commodities. We maintain a cautious view on REITs, due to historical correlations with long duration fixed income.

# Capital Markets Review

## Key Market Risks

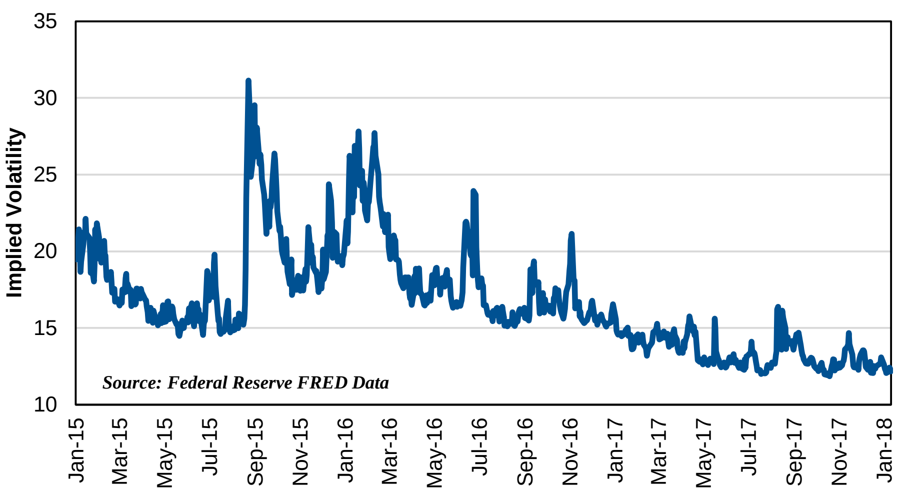
As of December 31, 2017

### Current Risk Levels

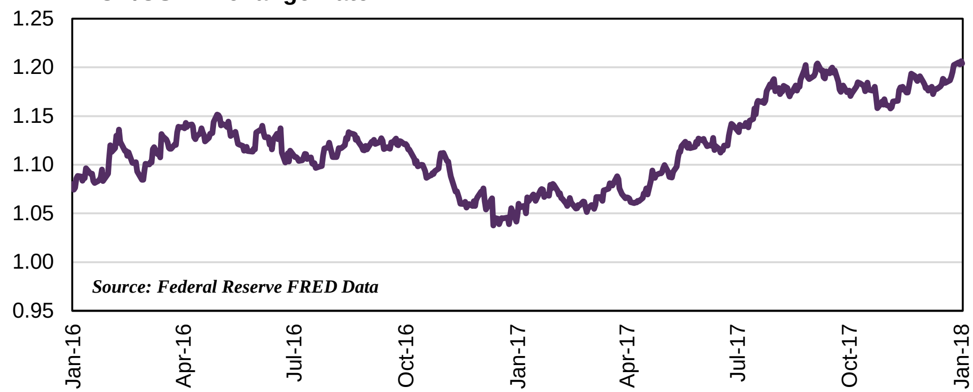



*Source: Bloomberg, FactSet, Recession Alert, & Pavilion Analysis*

### CBOE S&P 500 3-Month Volatility Index




### EUR/USD Exchange Rate




### Cyclical risks remain low while policy and geopolitical risks persist

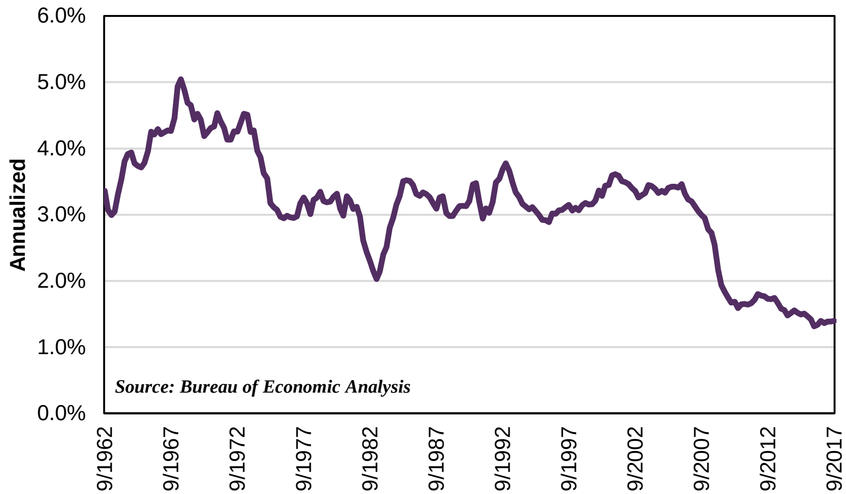
- **E.C.B. Policy Shift:** At some point, the E.C.B. will need to begin the process of policy normalization. This process is expected to begin with a change in forward guidance and the path of policy normalization. While we do not anticipate a policy shift prior to mid-year and expect policy makers seek a smooth transition, we view this transition as one of the most significant risks in the market. Currently, long rates have been held down in part because of the significant level of global accommodation with a significant amount being provided by the E.C.B. The transition sets the stage for a possible spike in the Euro, as well as a rise in longer dated rates across developed markets. Such a spike would likely cause a tightening in financial conditions and a downturn in risk assets, as market participants repriced the prospects for a future slowdown.
- **Transition to Higher Volatility Regime:** Over the past 18 months, implied and realized volatilities have been in steady decline. The decline has largely been the result of the improved fundamentals, but as volatility declines a number of quantitative strategies can develop outsized risk positions. In the event of a shift to a higher volatility regime, these risk assets are sold, catalyzing a potential market decline (e.g. August 2007). Normally, volatility regimes shift in response to a turn in the economic cycle; however, policy missteps or geopolitical risks may also serve as catalysts.
- **Path of Rate Normalization:** One seemingly anomalous feature of the current recovery has been the stubborn nature of inflation relative to the level of accommodation and recovery in growth. Across developed markets, core inflation has largely remained subdued and below the common 2% target of most central banks. Despite this fact, policy makers have seen fit to begin the process of normalizing policy, appearing to treat the 2% level as a ceiling rather than a target. Such a policy runs the risk of removing accommodation more quickly than justified by fundamentals, creating a premature slowdown and return of deflation risks.

# Capital Markets Review

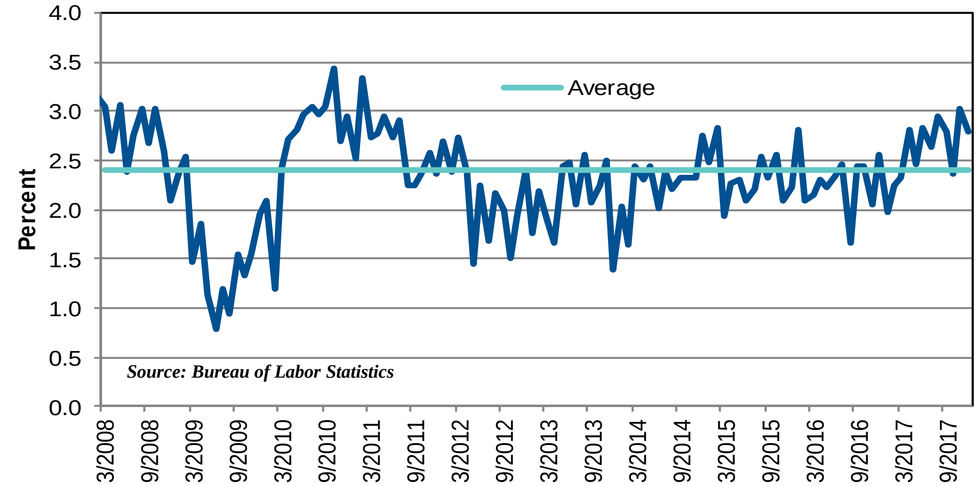
## Economy

As of December 31, 2017

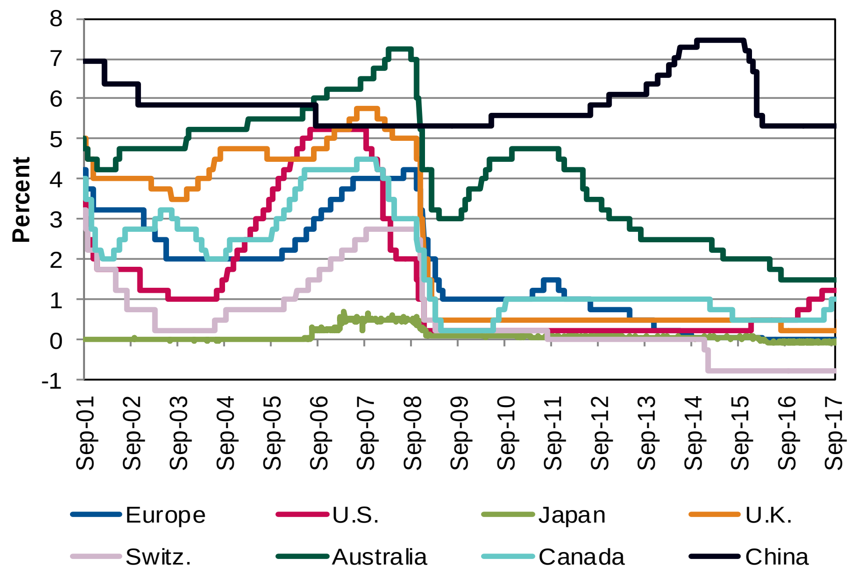
**Rolling 10 Year GDP Growth**




**Private Sector Pay Growth**




**Central Bank Interest Rates**




*Source: Bloomberg*

### Growth forecasts trend higher, along with caution

- A major reduction in tax rates for corporations was passed in the closing days of December, bringing the statutory U.S. corporate tax rate down from 35% to 21%. Tax rates on repatriated earnings were lowered to 8% and 15.5% on hard assets and cash, respectively. Individuals' tax bracket rates were lowered, while allowable deductions were substantially altered. The eased tax burdens are expected to contribute to expanded economic activity and lay the groundwork for higher equity prices, based upon post-tax profits and capital returns to shareholders. GDP is expected to be around 3% in the fourth quarter, the first time since 2005 that three consecutive quarters topped 3% growth.
- As the economy's expansion reaches more broadly, personal earnings (wages) are heading upward. Earnings have long held the key to the missing inflation during the current recovery. With growth strengthening around the globe, investors have a key thought in mind: nearly all of the past century's recessions have coincided rising interest rates. With the Federal Reserve on a tightening trajectory and other central banks approaching the same course, many investors are wary of a Fed overshoot on rates snuffing out a strengthening recovery. The average growth during the current recovery remains the weakest of all post-WWII cycles.
- Manufacturing and construction contributed significantly to fourth quarter growth. Global GDP growth forecasts reached their highest levels, post-recession. Commodity prices rose amidst expected demand growth in 2018, with oil breaching $60/barrel.

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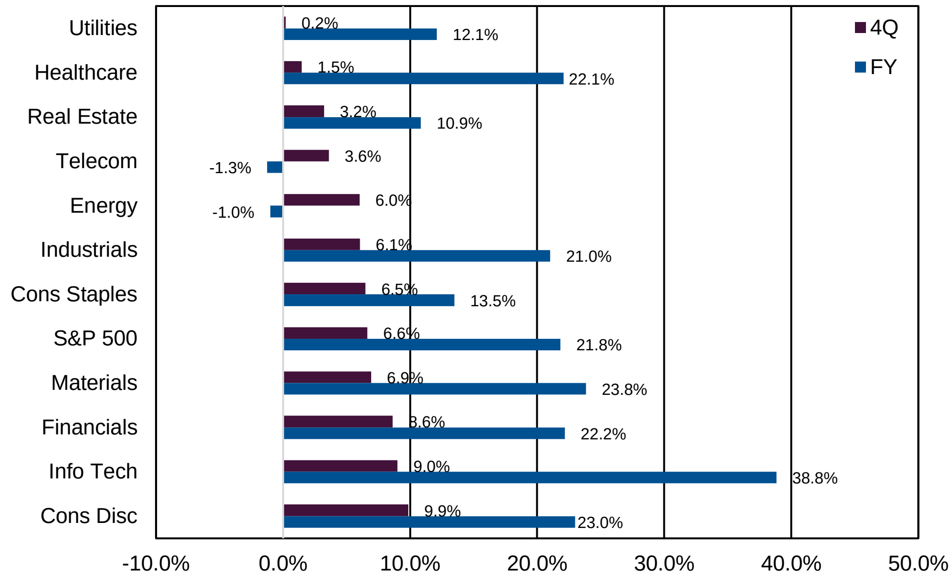
# Capital Markets Review

## Equities

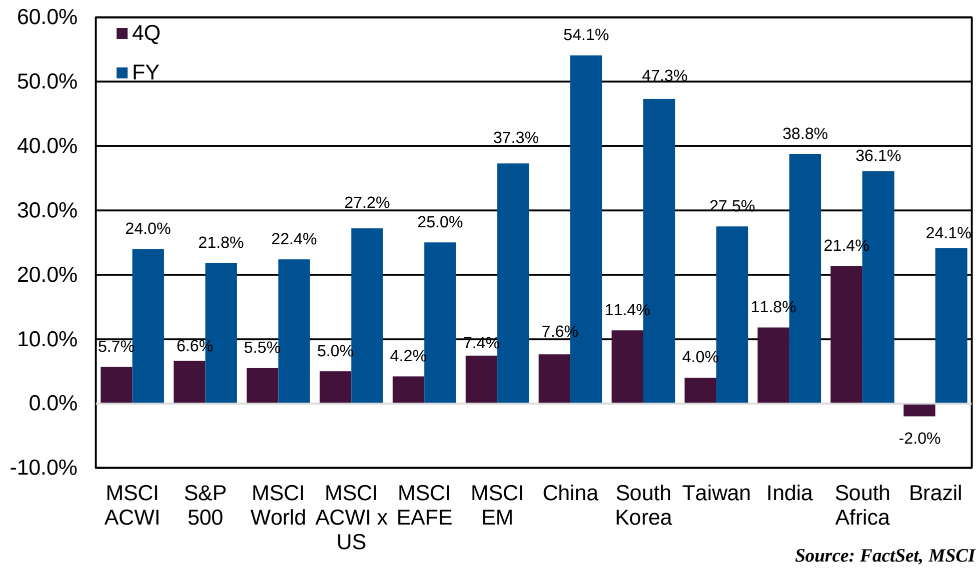
As of December 31, 2017

### Fourth Quarter and Full Year S&P 500 Sector Returns



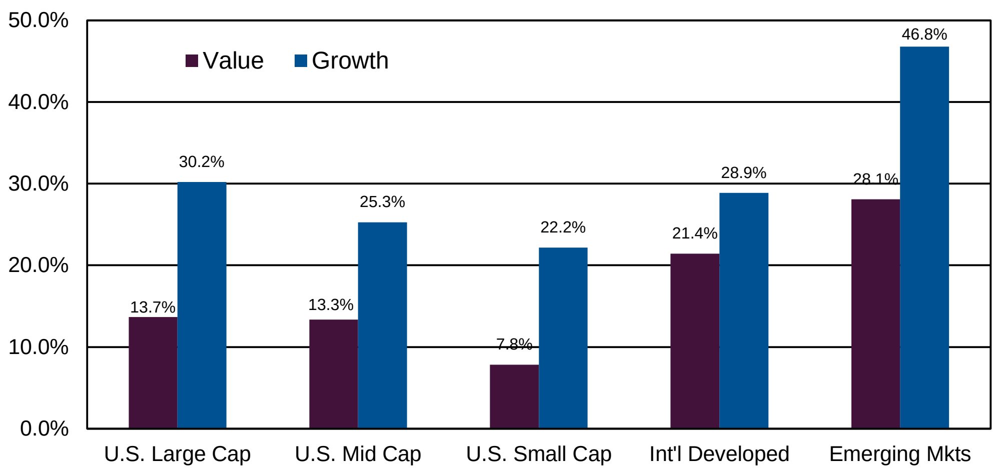

*Source: FactSet, S&P*

### Fourth Quarter and Full Year World and Emerging Market Equity Returns




*Source: FactSet, MSCI*

### Growth Significantly Outperformed Value During the Year




*Source: FactSet, MSCI, Russell*

### Growth and emerging markets continue to outperform

- The S&P 500 Index returned +6.6% during the fourth quarter, bringing the full year return to +21.8%. Consumer Discretionary was the strongest performing sector for the fourth quarter but Information Technology stands out as having the strongest performance for the year. Energy and Telecom were the only sectors to end the year with negative returns.
- Developed market equity indices provided returns in the +4% to +7% range during the fourth quarter, with the S&P 500 among the strongest at +6.6%. Emerging Market equity returns were slightly higher, at +7.4%, led by South Africa, India, and South Korea. For the full year, the key regional indices all provided 20% plus returns, with the foreign markets benefitting from strong local market returns as well as currency appreciation vs. the U.S. dollar.
- Growth continued to outperform Value in the fourth quarter, capping a very strong year for Growth. Within the U.S. and Emerging Markets were driven by the technology sector and in particular the FAANG and BAT stocks. Emerging Markets experienced the highest absolute return for both Growth and Value stocks during the year. Size was in favor for the fourth quarter and full year, with U.S. Large Cap out earning U.S. Small and Mid Cap stocks.

# Capital Markets Review

## Fixed Income

As of December 31, 2017

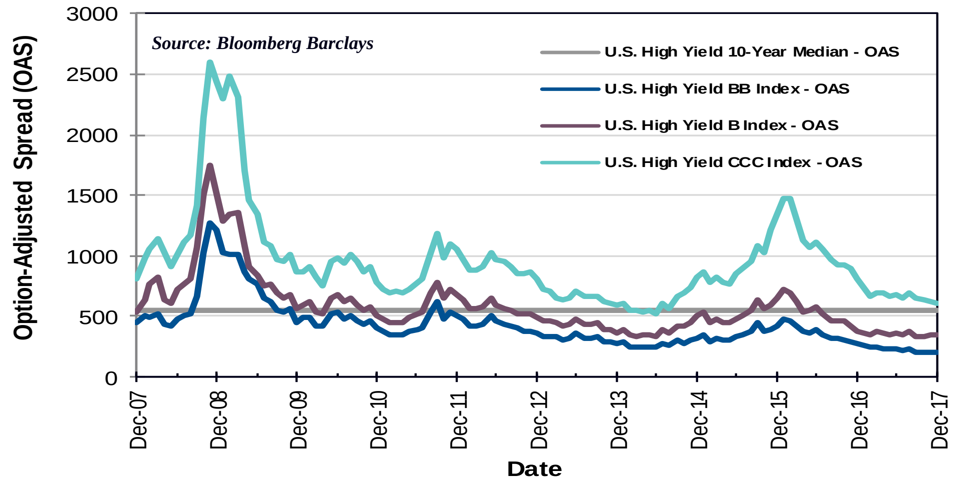
### Duration – Adjusted Excess Returns to Treasuries (bps)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 1Q17 | 2Q17 | 3Q17 | 4Q17 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aggregate | -114 | 226 | 93 | 10 | -53 | 138 | 121 | 11 | 30 | 41 | 36 |
| Agency | -25 | 166 | 1 | 10 | -133 | 121 | 148 | 60 | 20 | 45 | 21 |
| MBS | -106 | 91 | 98 | 40 | -5 | -11 | 52 | -17 | -4 | 47 | 24 |
| ABS | 52 | 246 | 24 | 53 | 44 | 95 | 92 | 22 | 32 | 14 | 24 |
| CMBS | 47 | 841 | 97 | 108 | -28 | 236 | 158 | 8 | 34 | 34 | 78 |
| Credit | -322 | 693 | 226 | -18 | -169 | 442 | 335 | 47 | 99 | 89 | 89 |
| High Yield | -240 | 1394 | 923 | -112 | -577 | 1573 | 610 | 214 | 146 | 160 | 72 |
| EMD (USD) | -537 | 1503 | -32 | -120 | 3 | 880 | 627 | 259 | 72 | 186 | 77 |

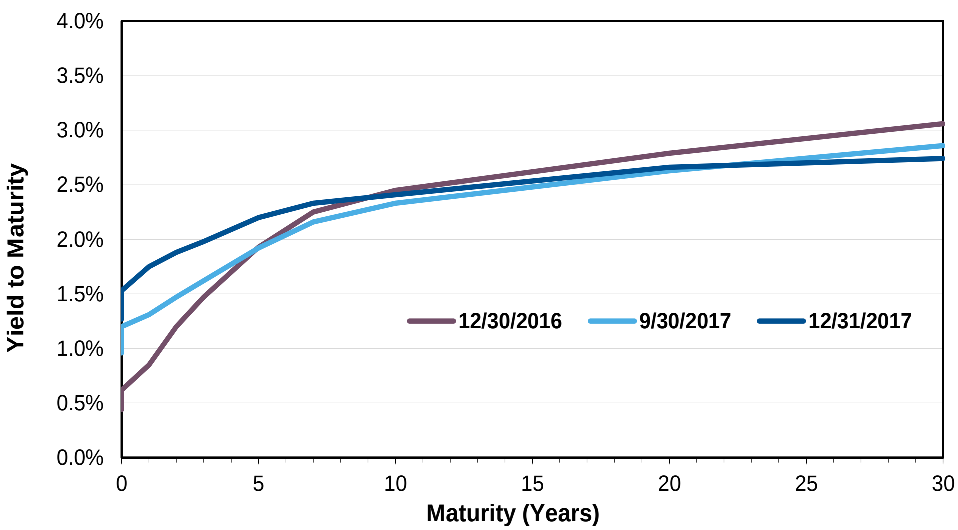
Best Period | Second Best Period | Worst Period | Second Worst Period

*Source: Bloomberg Barclays*

### U.S. High Yield Credit Valuations by Rating




### U.S. Treasury Yield Curve Change



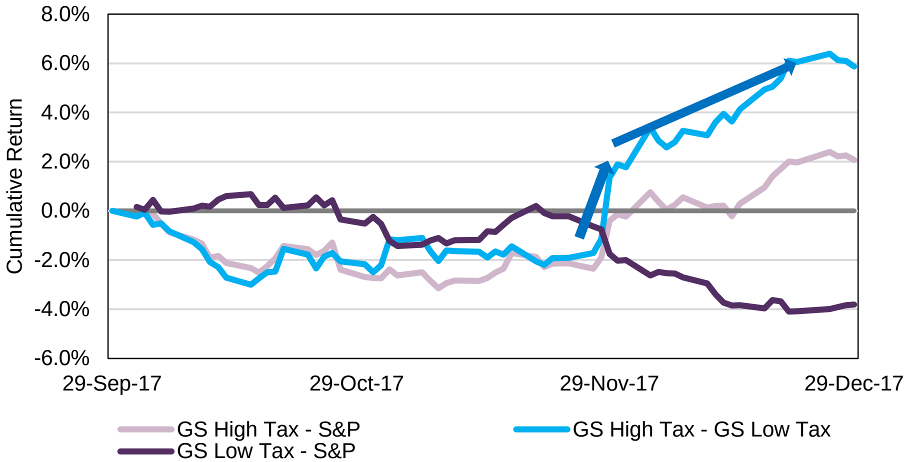

*Source: U.S. Dept. of The Treasury*

### Credit risk rewarded as global growth surprises

- The Federal Reserve ("Fed") raised rates 0.25% in December, setting the Federal Funds Rate target at 1.25% to 1.50%. In spite of a modest rise in interest rates, all spread sectors posted positive returns for the quarter and exceeded Treasuries on a duration-adjusted basis. The FOMC's median policymaker "dot" suggests three rate increases are in store for 2018.
- For the fourth consecutive quarter, U.S. Treasuries generated positive absolute returns (+0.05%). The yield curve flattened during the quarter with interest rates rising more for shorter maturities and actually falling 12 bps for 30-year maturities. TIPS improved, returning +1.3% on rising inflation expectations led by recent global growth data.
- A backdrop of improving growth in the U.S. and abroad helped investment grade credit spreads to tighten 8 bps and return +1.17% on the quarter, outperforming other higher quality sectors. Within investment grade, lower credit quality outperformed higher credit quality for the ninth consecutive quarter. High Yield corporate returns were modestly positive (+0.47%) during the quarter as uncertainty around tax reform offset momentum from rising equity markets and oil prices.
- ABS and Non-Agency CMBS tightened by 8 bps and 9 bps, respectively, thanks to solid fundamentals for consumers and commercial real estate. Agency MBS was one of the few sectors that saw spread widening during the quarter (+3 bps) as strong issuance combined with the Fed's gradual wind-down of its balance sheet led to an increase in net supply.
- Emerging Markets ("EM") continued to benefit from the global economy's improving fundamentals such as narrower current account deficits, falling inflation and growing central bank reserves. EM Hard Currency generated a +1.2% return on the quarter.

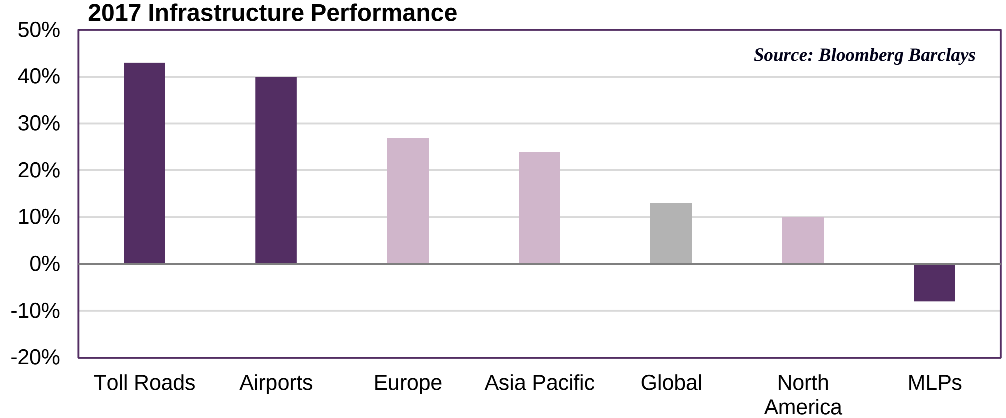
# Capital Markets Review
## Alternative Investments
As of December 31, 2017

**Goldman Sachs High/Low Tax Baskets vs. S&P 500L 2017 Q4)**

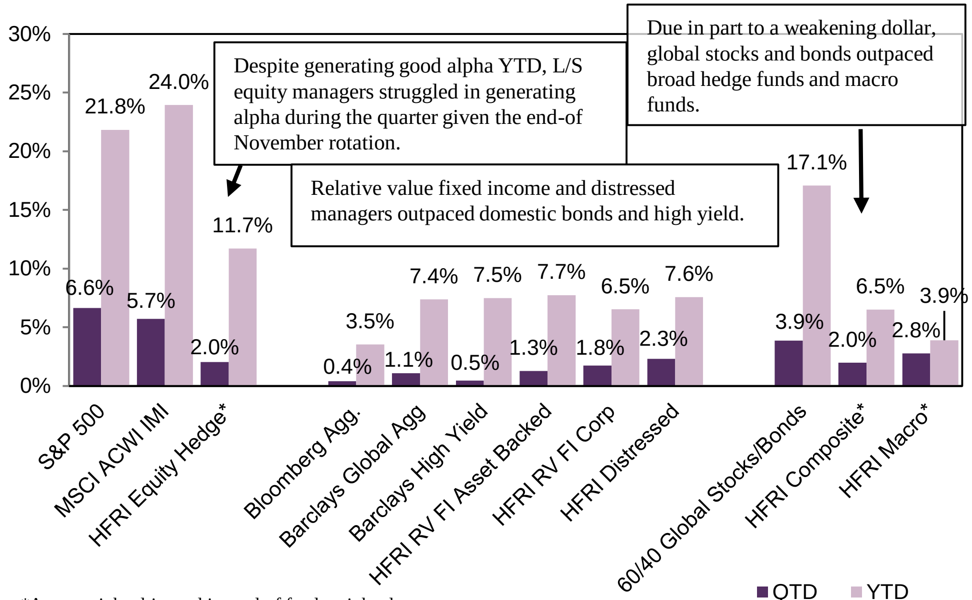



*Sources: Bloomberg, Goldman Sachs*

**2017 Infrastructure Performance**




**Hedge Funds vs Long-Only: Total Returns 2017 Q4 and YTD**




*Asset-weighted is used instead of fund-weighted, as it is available and more indicative of the universe.

*Sources: Hedge Fund Research, FactSet*

### Global alternatives rise with risk assets

- **Hedge Funds:** Hedge funds generated gains across strategy types during the quarter and year benefitting from the rally in risk assets. For the quarter, changes to tax legislation created winners and losers across hedge funds. Long/short funds with longs in technology- and healthcare-focused stocks were hurt, while those with long exposures to energy, industrial, and financial stocks performed best. A DOJ lawsuit against the proposed AT&T/Time Warner merger caused widening of arbitrage spreads during the quarter, dampening manager returns, while distressed-oriented event-driven strategies were buoyed by continued investor optimism in credit assets (particularly in energy). A weakening dollar and very low volatility levels were headwinds for discretionary macro-oriented strategies, but other diversified relative-value strategies posted positive returns.
- **Real Assets:** Global infrastructure posted modest gains of +0.3% for the fourth quarter, which brings performance for the year to +12.7%. Infrastructure had a healthy 2017, but the asset class exhibited wide dispersion across sub-sectors and geographic regions. The resurgence of economic growth in the European, and Asia Pacific regions directly benefited publicly listed toll roads and the airport sector, which reported strong passenger traffic growth throughout much of the year. In North America, oil & gas pipelines, specifically, MLPs, were a significant drag on infrastructure performance. Technical factors, balance sheet restructuring, and negative sentiment hurt MLPs, despite the broader energy industry and equity markets registering healthy gains.
- **Private Capital Markets**: Fundraising remained strong through the third quarter of 2017, as 267 funds closed with commitments totaling $150 billion. Aggregate private equity capital raised year-to-date 2017 has increased to $338 billion compared to $286 billion raised in same period of 2016. If fundraising momentum continues, 2017 may well be within reach of the all-time annual private equity fundraising record of $415 billion set in 2007. In terms of multiples, the median EV/EBITDA multiple jumped from 9.7x in the first quarter to 10.4x in the second quarter, but has stayed at more-or-less 10x earnings for the past 18 months.

# Capital Markets Review

## Index Returns

As of December 31, 2017

(Percentage Return)

| | Quarter | Year To Date | 1 Year | 2 Years | 3 Years | 5 Years | 7 Years | 10 Years |
|---|---|---|---|---|---|---|---|---|
| **Domestic Equity Indices** | | | | | | | | |
| Dow Jones Wilshire 5000 | 6.4 | 21.0 | 21.0 | 17.1 | 11.4 | 15.7 | 13.5 | 8.6 |
| S&P 500 | 6.6 | 21.8 | 21.8 | 16.8 | 11.4 | 15.8 | 13.8 | 8.5 |
| Russell 1000 Index | 6.6 | 21.7 | 21.7 | 16.8 | 11.2 | 15.7 | 13.7 | 8.6 |
| Russell 1000 Growth Index | 7.9 | 30.2 | 30.2 | 18.1 | 13.8 | 17.3 | 14.8 | 10.0 |
| Russell 1000 Value Index | 5.3 | 13.7 | 13.7 | 15.5 | 8.7 | 14.0 | 12.5 | 7.1 |
| Russell Midcap Index | 6.1 | 18.5 | 18.5 | 16.1 | 9.6 | 15.0 | 12.8 | 9.1 |
| Russell Midcap Growth Index | 6.8 | 25.3 | 25.3 | 16.0 | 10.3 | 15.3 | 12.8 | 9.1 |
| Russell Midcap Value Index | 5.5 | 13.3 | 13.3 | 16.6 | 9.0 | 14.7 | 12.8 | 9.1 |
| Russell 2000 Index | 3.3 | 14.6 | 14.6 | 17.9 | 10.0 | 14.1 | 11.6 | 8.7 |
| Russell 2000 Growth Index | 4.6 | 22.2 | 22.2 | 16.6 | 10.3 | 15.2 | 12.3 | 9.2 |
| Russell 2000 Value Index | 2.0 | 7.8 | 7.8 | 19.2 | 9.5 | 13.0 | 10.8 | 8.2 |
| **International Equity Indices** | | | | | | | | |
| MSCI EAFE | 4.2 | 25.0 | 25.0 | 12.4 | 7.8 | 7.9 | 6.0 | 1.9 |
| MSCI EAFE Growth Index | 5.2 | 28.9 | 28.9 | 11.8 | 9.2 | 8.8 | 6.6 | 2.7 |
| MSCI EAFE Value Index | 3.2 | 21.4 | 21.4 | 12.9 | 6.4 | 6.9 | 5.4 | 1.1 |
| MSCI EAFE Small Cap | 6.1 | 33.0 | 33.0 | 16.6 | 14.2 | 12.9 | 9.2 | 5.8 |
| MSCI AC World Index | 5.7 | 24.0 | 24.0 | 15.6 | 9.3 | 10.8 | 8.7 | 4.7 |
| MSCI AC World ex US | 5.0 | 27.2 | 27.2 | 15.3 | 7.8 | 6.8 | 4.9 | 1.8 |
| MSCI Emerging Markets Index | 7.4 | 37.3 | 37.3 | 23.5 | 9.1 | 4.3 | 2.6 | 1.7 |
| **Fixed Income Indices** | | | | | | | | |
| Blmbg. Barc. U.S. Aggregate | 0.4 | 3.5 | 3.5 | 3.1 | 2.2 | 2.1 | 3.2 | 4.0 |
| Blmbg. Barc. Intermed. U.S. Government/Credit | -0.2 | 2.1 | 2.1 | 2.1 | 1.8 | 1.5 | 2.4 | 3.3 |
| Blmbg. Barc. U.S. Long Government/Credit | 2.8 | 10.7 | 10.7 | 8.7 | 4.5 | 4.4 | 7.5 | 7.3 |
| Blmbg. Barc. U.S. Corp: High Yield | 0.5 | 7.5 | 7.5 | 12.2 | 6.4 | 5.8 | 7.0 | 8.0 |
| BofA Merrill Lynch 3 Month U.S. T-Bill | 0.3 | 0.9 | 0.9 | 0.6 | 0.4 | 0.3 | 0.2 | 0.4 |
| Blmbg. Barc. U.S. TIPS | 1.3 | 3.0 | 3.0 | 3.8 | 2.1 | 0.1 | 2.9 | 3.5 |
| Citigroup Non-U.S. World Government Bond | 1.6 | 10.3 | 10.3 | 6.0 | 2.0 | -0.3 | 0.7 | 2.4 |
| JPM EMBI Global Diversified (external currency) | 1.2 | 10.3 | 10.3 | 10.2 | 7.1 | 4.6 | 6.7 | 7.3 |
| JPM GBI-EM Global Diversified (local currency) | 0.8 | 15.2 | 15.2 | 12.5 | 2.5 | -1.5 | 0.8 | 3.6 |
| **Real Asset Indices** | | | | | | | | |
| Bloomberg Commodity Index Total Return | 4.7 | 1.7 | 1.7 | 6.6 | -5.0 | -8.5 | -8.1 | -6.8 |
| Dow Jones Wilshire REIT | 1.7 | 4.2 | 4.2 | 5.7 | 5.2 | 9.3 | 10.5 | 7.3 |

Returns for periods greater than one year are annualized.

# Portfolio Review

# Investment Committee Scorecard

## As of December 31, 2017

| Key Performance Indicator | Status | El Camino | Benchmark | El Camino | Benchmark | El Camino | Benchmark | FY18 Year-end Budget | Expectation Per Asset Allocation |
|---|---|---|---|---|---|---|---|---|---|
| **Investment Performance** | | 4Q 2017 | | Fiscal Year-to-date | | 5y 2m Since Inception (annualized) | | | 2017 |
| Surplus cash balance* | | $871.9 | -- | -- | -- | -- | -- | $926.1 | -- |
| Surplus cash return | | 2.6% | 2.7% | 5.4% | 5.6% | 6.0% | 5.9% | 1.9% | 5.7% |
| Cash balance plan balance (millions) | | $259.1 | -- | -- | -- | -- | -- | $257.1 | -- |
| Cash balance plan return | | 3.0% | 3.3% | 6.3% | 6.7% | 8.4% | 7.9% | 6.0% | 6.1% |
| 403(b) plan balance (millions) | | $441.7 | -- | -- | -- | -- | -- | -- | -- |
| **Risk vs. Return** | | 3-year | | | | 5y 2m Since Inception (annualized) | | | 2017 |
| Surplus cash Sharpe ratio | | 1.16 | 1.19 | -- | -- | 1.44 | 1.42 | -- | 0.46 |
| Net of fee return | | 5.5% | 5.6% | -- | -- | 6.0% | 5.9% | -- | 5.7% |
| Standard deviation | | 4.4% | 4.4% | -- | -- | 3.9% | 4.0% | -- | 7.2% |
| Cash balance Sharpe ratio | | 1.13 | 1.16 | -- | -- | 1.51 | 1.47 | -- | 0.43 |
| Net of fee return | | 6.7% | 6.5% | -- | -- | 8.4% | 7.9% | -- | 6.1% |
| Standard deviation | | 5.6% | 5.3% | -- | -- | 5.3% | 5.1% | -- | 8.7% |
| **Asset Allocation** | | 4Q 2017 | | | | | | | |
| Surplus cash absolute variances to target | | 5.9% | < 10% | -- | -- | -- | -- | -- | -- |
| Cash balance absolute variances to target | | 7.5% | < 10% | -- | -- | -- | -- | -- | -- |
| **Manager Compliance** | | 4Q 2017 | | | | | | | |
| Surplus cash manager flags | | 27 | < 24 Green<br>< 30 Yellow | -- | -- | -- | -- | -- | -- |
| Cash balance plan manager flags | | 31 | < 27 Green<br>< 34 Yellow | -- | -- | -- | -- | -- | -- |

*Excludes debt reserve funds (~$245 mm), District assets (~$31 mm), and balance sheet cash not in investable portfolio (~$124 mm). Includes Foundation (~$26 mm) and Concern (~$13 mm) assets. Budget adds back in current Foundation and Concern assets and backs out current debt reserve funds.

# Total Surplus Cash Assets

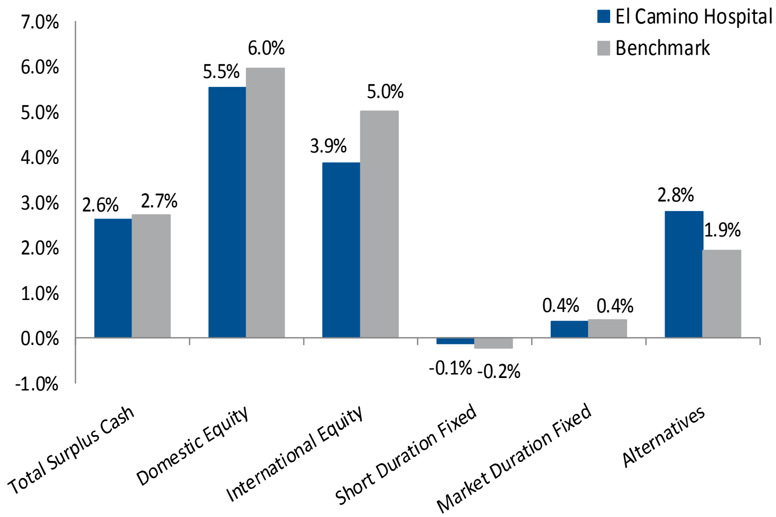
## As of December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Total Surplus Cash (1)** | **1,147,905,015** | **100.0** | **2.0** | **4.1** | **9.4** | **9.4** | **4.7** | **5.3** | **5.5** | **5.4** | **5y 2m** |
| **Total Surplus Cash ex District / Debt Reserves (1)** | **871,939,635** | **76.0** | **2.6** | **5.4** | **11.8** | **11.8** | **5.5** | **5.9** | **5.7** | **6.0** | **5y 2m** |
| Surplus Cash Total Benchmark | | | 2.7 | 5.6 | 11.5 | 11.5 | 5.6 | 5.9 | 5.3 | 5.9 | |
| **Total Surplus Cash ex District / CONCERN / Debt Reserves (1)** | **858,697,183** | **74.8** | **2.7** | **5.5** | **12.0** | **12.0** | **5.6** | **6.0** | **5.6** | **6.0** | **5y 2m** |
| Surplus Cash Total Benchmark | | | 2.7 | 5.6 | 11.5 | 11.5 | 5.6 | 5.9 | 5.3 | 5.9 | |
| **Total CONCERN** | **13,242,452** | **1.2** | **0.4** | **1.1** | **3.5** | **3.5** | **-** | **-** | **-** | **2.5** | **1y 11m** |
| CONCERN Total Benchmark | | | 0.4 | 1.2 | 3.5 | 3.5 | - | - | - | 2.5 | |
| Met West Total Return Bond Plan - CONCERN | 13,156,391 | 1.1 | 0.4 | 1.1 | 3.5 | 3.5 | 2.1 | 2.6 | - | 2.5 | 1y 11m |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 | 1.2 | 3.5 | 3.5 | 2.2 | 2.1 | 4.0 | 2.5 | |
| Cash Account - CONCERN | 86,061 | 0.0 | 0.2 | 0.4 | 0.6 | 0.6 | - | - | - | 0.4 | 1y 11m |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.6 | |
| **District - Barrow Hanley** | **31,399,439** | **2.7** | **-0.2** | **0.1** | **0.6** | **0.6** | **0.7** | **0.6** | **1.6** | **0.5** | **5y 2m** |
| Blmbg. Barc. 1-3 Govt | | | -0.3 | 0.0 | 0.4 | 0.4 | 0.6 | 0.6 | 1.5 | 0.6 | |
| **Total Debt Reserves** | **244,565,941** | **21.3** | **0.3** | **0.7** | **1.1** | **1.1** | **-** | **-** | **-** | **0.7** | **2y 8m** |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.4 | |
| Ponder Debt Reserves - 2015 | 17,880,711 | 1.6 | 0.3 | 0.5 | 1.0 | 1.0 | - | - | - | 0.7 | 2y 8m |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.4 | |
| Ponder Debt Reserves - 2017 | 211,000,038 | 18.4 | 0.4 | 0.7 | - | - | - | - | - | 0.9 | 0y 10m |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.8 | |
| Capitalized Interest 2017 | 15,685,192 | 1.4 | 0.3 | 0.7 | - | - | - | - | - | 0.8 | 0y 10m |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.8 | |

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 December 31, 2017

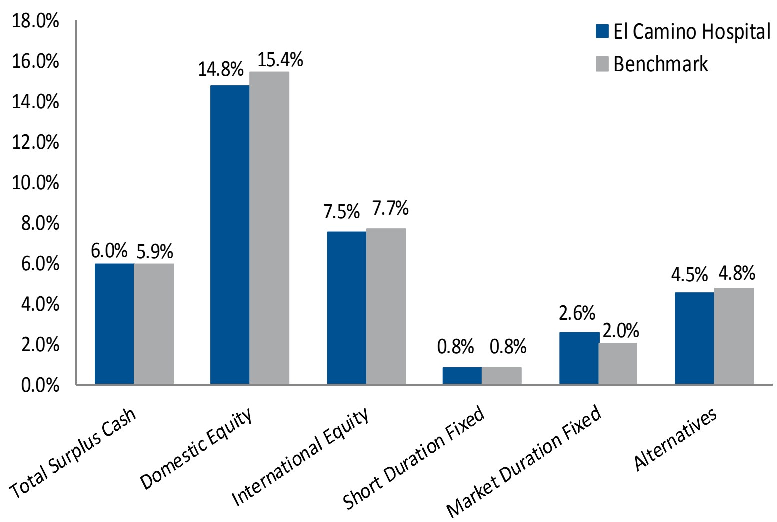
### Performance: Most Recent Quarter




### Asset Allocation

| Manager | Total Assets ($, mil.) | Percent of Total | Target Allocation | Variance to Target | Target Range | Within Policy Range |
|---|---|---|---|---|---|---|
| Domestic Equity | $231.5 | 26.5% | 25.0% | + 1.5% | 20-30% | Yes |
| International Equity | $137.0 | 15.7% | 15.0% | + 0.7% | 10-20% | Yes |
| Short-Duration Fixed | $ 91.5 | 10.5% | 10.0% | + 0.5% | 8-12% | Yes |
| Market-Duration Fixed | $263.6 | 30.2% | 30.0% | + 0.2% | 25-35% | Yes |
| Alternatives | $148.4 | 17.0% | 20.0% | - 3.0% | 17-23% | Yes |
| **Total (X District)** | **$871.9** | **100.0%** | | | | |

### Performance: Since Inception[1]




### Portfolio Updates

**Manager News/Issues**

- The Surplus Cash Portfolio returned +2.6% for the quarter, modestly underperforming its benchmark by 10 bps. Over the trailing one year period, the Portfolio returned +11.8%, outpacing the benchmark by approximately 30 bps.
- Manager results, particularly within Domestic and International equities dragged down positive results from asset allocation positioning.
- Notable outperformers during the quarter include Barrow Hanley Large Cap Value (+6.3%) and Wellington Small Cap Value (+3.0%), which both outperformed their indices by 100 bps, and the Direct Hedge Fund Program (+3.3%), which outperformed the HFRI Fund of Funds Composite Index by 130 bps.

**Fourth Quarter Funding News/Issues**

- $15.0 million was transferred into the portfolio, $7.5 million to Dodge & Cox and $7.5 million to MetWest
- $9.0 million was invested in Renaissance RIDGE Fund (new Relative Value hedge fund), and $2.0 million was added to each of the Indus Japan, BloomTree, and Tiger Eye funds (Equity hedge funds).
- $1.6 million was distributed from Brevan Howard (Macro hedge fund).
- $1.2 million was distributed from Fir Tree (Relative Value hedge fund).
- $65,000 was distributed from Luxor Capital Partners (Equity hedge fund).
- $500,907 was distributed from Pine River (Relative Value hedge fund).
- Oaktree Real Estate Opportunities Fund VI made a distribution payment of $1.9 million.
- Walton Street Real Estate Fund VII made a distribution payment of $1.9 million.
- Walton Street Real Estate Fund VIII called $1.0 million of capital.

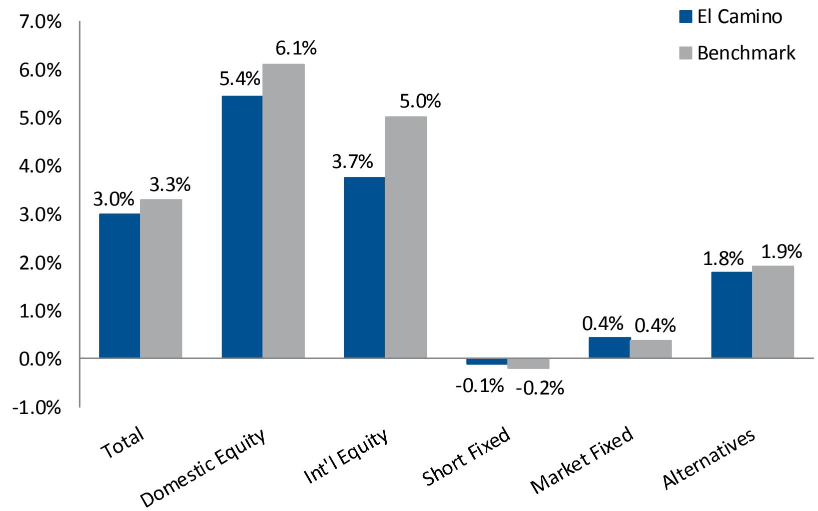
[1] Reflects the date Pavilion's recommended portfolio was implemented (November 1, 2012).

# Cash Balance Plan Executive Summary

## Dashboard

As of December 31, 2017

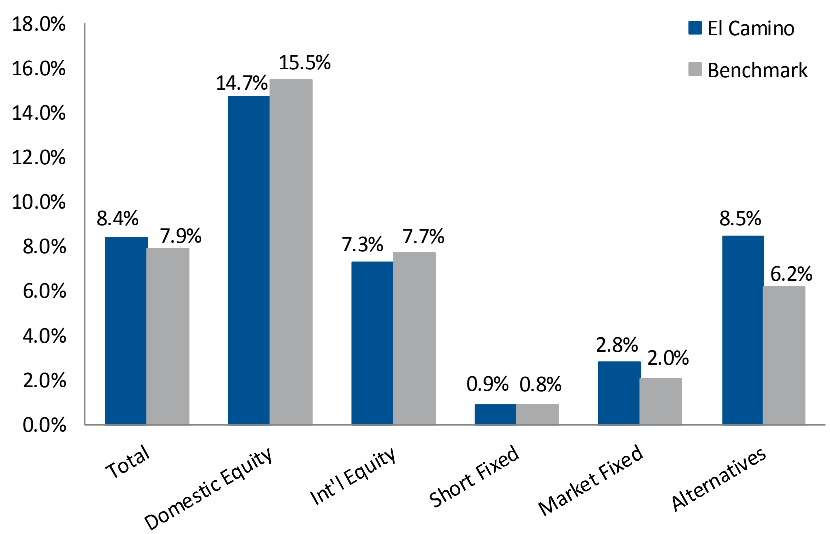
### Performance: Most Recent Quarter




### Asset Allocation

| Manager | Total Assets ($, mil.) | Percent of Total | Target Allocation | Variance to Target | Target Range | Within Policy Range |
|---|---|---|---|---|---|---|
| Domestic Equity | $ 90.4 | 34.9% | 32.0% | + 2.9% | 27-37% | Yes |
| International Equity | $ 49.0 | 18.9% | 18.0% | + 0.9% | 15-21% | Yes |
| Short-Duration Fixed | $ 10.8 | 4.2% | 5.0% | - 0.8% | 0-8% | Yes |
| Market-Duration Fixed | $ 62.4 | 24.1% | 25.0% | - 0.9% | 20-30% | Yes |
| Alternatives | $ 46.6 | 18.0% | 20.0% | - 2.0% | 17-23% | Yes |
| **Total** | **$259.1** | **100.0%** | | | | |

### Performance: Since Inception[1]




### Portfolio Updates

**Manager News/Issues**

- The Cash Balance Plan returned +3.0% for the quarter, underperforming its benchmark by 30 bps. Over the trailing one year period, the Plan returned +14.5%, outpacing the benchmark by approximately 100 bps.
- Relative underperformance during the quarter was driven by unfavorable manager results, particularly within the Domestic and International Equity Composites, which underperformed their benchmarks by 70 and 130 bps, respectively.
- Notable outperformers during the quarter include Barrow Hanley Large Cap Value (+6.3%) and Wellington Small Cap Value (+3.0%), which both outperformed their indices by 100 bps, and hedge fund of fund manager Pointer Offshore, which outpaced the HFRI Fund of Funds Composite Index by 110 bps.
- During 2017, the Fixed Income and Alternatives Composites were the best performers on a relative basis, outpacing their benchmarks by 60 and 140 bps, respectively.

**Fourth Quarter Funding News/Issues**

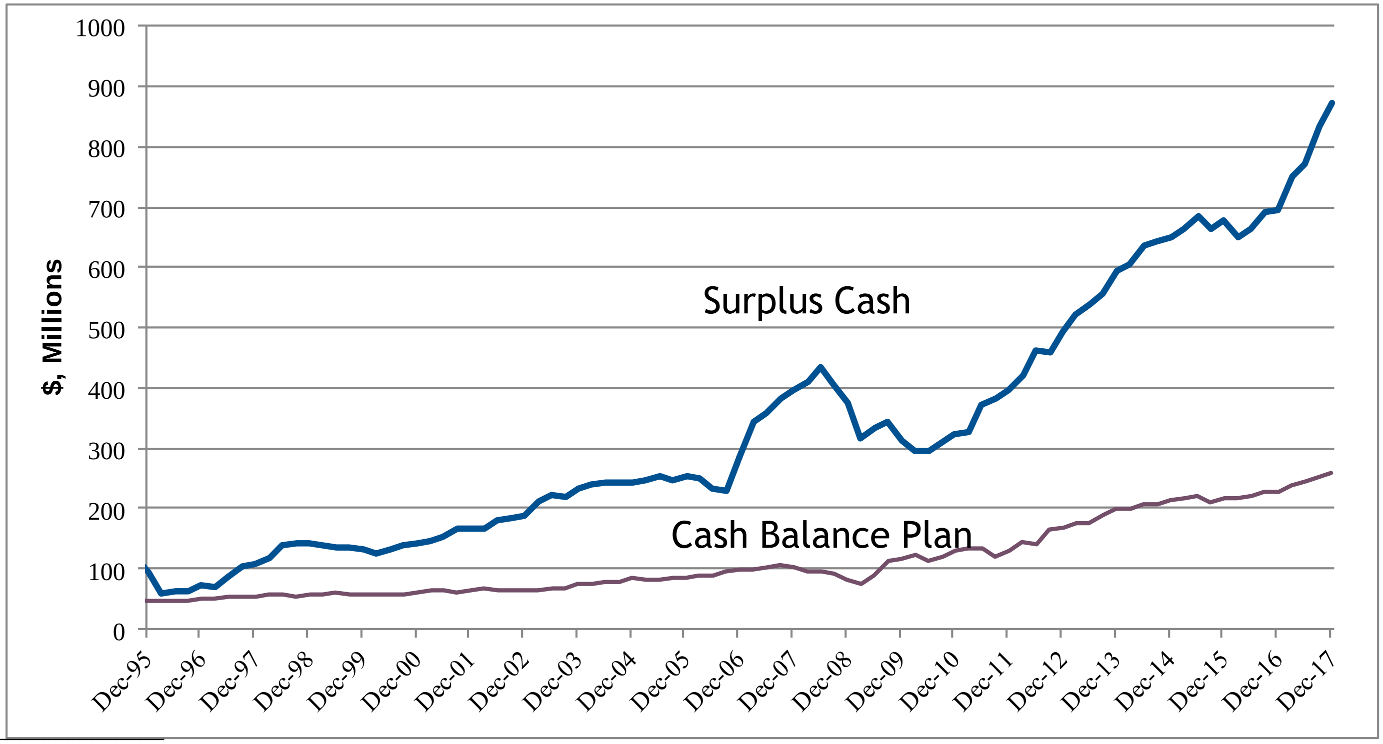
- A $2.6 million employer contribution was made to the Barrow Hanley Short-Term Fixed account.
- Oaktree Real Estate Opportunities Fund VI made a distribution payment of $1.2 million.
- Walton Street Real Estate Fund VII made a distribution payment of $1.2 million.
- Walton Street Real Estate Fund VIII called $0.8 million of capital.

[1] Reflects the date Pavilion's recommended portfolio was implemented (November 1, 2012).

# Market Value Reconciliation

As of December 31, 2017

| | Surplus Cash | | | | | Cash Balance Plan | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| $ in Millions | 2013 | 2014 | 2015 | 2016 | 2017 | 2013 | 2014 | 2015 | 2016 | 2017 |
| **Beginning Market Value** | **$493.8** | **$596.3** | **$651.6** | **$677.5** | **$694.7** | **$168.8** | **$198.3** | **$213.7** | **$216.8** | **$228.1** |
| **Net Cash Flow** | $55.3 | $27.4 | $27.0 | ($17.5) | $89.0 | $2.4 | $3.8 | $0.6 | $0.4 | ($0.8) |
| Income | n/a | $12.3 | $12.6 | $12.4 | $14.2 | n/a | $3.4 | $3.3 | $3.4 | $3.6 |
| Realized Gain/(Loss) | n/a | $10.4 | $4.4 | $7.1 | $9.6 | n/a | $4.7 | $2.0 | $4.5 | $2.2 |
| Unrealized Gain/(Loss) | n/a | $5.3 | ($18.0) | $15.1 | $64.1 | n/a | $3.4 | ($2.7) | $3.0 | $25.9 |
| **Capital App/(Dep)** | $47.2 | $27.9 | ($1.0) | $34.6 | $87.9 | $27.2 | $11.5 | $2.5 | $10.9 | $31.8 |
| **End of Period Market Value** | **$596.3** | **$651.6** | **$677.5** | **$694.7** | **$871.9** | **$198.3** | **$213.7** | **$216.8** | **$228.1** | **$259.1** |
| **Return Net of Fees** | 8.8% | 4.4% | -0.2% | 5.2% | 11.8% | 15.8% | 5.6% | 1.1% | 4.9% | 14.5% |




[1] 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 December 31, 2017

| Fund Name | Qualitative Compliance | Performance Compliance | 3 Year Return | 3 Year Rank | 3 Year Sharpe | 5 Year Return | 5 Year Rank | 5 Year Sharpe |
|---|---|---|---|---|---|---|---|---|
| | | | Short-Term | | | Longer-Term | | |
| 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 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Walter Scott Int'l (Dreyfus) - Both Plans | ✓ | ✓ | ✓ | ✓ | ✓ | ✖ | ✖ | ✓ |
| Northern Cross Int'l (Harbor Int'l) - 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 | Qualitative Compliance | In the fourth quarter, Tom Trentman was added as a co-PM to the strategy; he joins CIO Frank Sands, Jr., Mike Sramek, and Wes Johnston as PMs on the Select Growth strategy. Mr. Trentman will continue to act as co-sector head for the technology sector. |
| Sands Large Cap Growth (Touchstone) - Both Plans | Performance Compliance | Despite a relative rebound in calendar year 2017, the strong style headwinds that Sands faced in 2016 continue to drag down the manager's 3-year and 5-year annualized returns. With the Russell 1000 Growth Index landing in the top quartile of the Large Cap Growth peer group, it has been a challenging bogey to beat over those periods. While the past few years have been driven by large factor swings within the Large Cap Growth market segment, we believe that skilled active managers focused on fundamentals will add alpha over time. |
| Wellington Small Cap Value - Surplus Cash | Performance Compliance | While we are disappointed with recent underperformance, Wellington has not performed outside of expectations. This is a quality-oriented value manager which we would expect to lag in a lower quality, growth-oriented market. 2016 was particularly challenging for the strategy to keep up, as the benchmark was up nearly 32%. We expect this manager to add value in down markets and believe that patience will be rewarded over the long-term. |
| Wellington Small Cap Value - Pension | Performance Compliance | While we are disappointed with recent underperformance, Wellington has not performed outside of expectations. This is a quality-oriented value manager which we would expect to lag in a lower quality, growth-oriented market. 2016 was particularly challenging for the strategy to keep up, as the benchmark was up nearly 32%. We expect this manager to add value in down markets and believe that patience will be rewarded over the long-term. |

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.

# Performance Summary

## Compliance Checklist

As of December 31, 2017

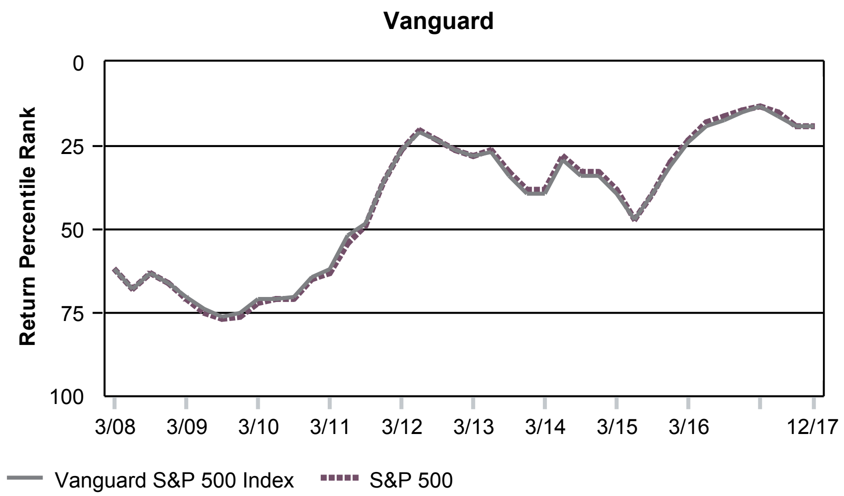
| Portfolio | Score Factor | Comments |
|---|---|---|
| Northern Cross Int'l (Harbor Int'l) - Both Plans | Performance Compliance | 2017 marked the third out of the last five calendars years where the Harbor International Fund has trailed the MSCI ACWI ex. U.S. Index. While there have been a few positives over the last five years, from a regional stock selection perspective little has worked. The majority of the underperformance can be tied to a few broad factors. In 2013, Japan dramatically outpaced the broader benchmark, but Harbor was, and still is, significantly underweight the region. In 2014, U.K. stocks fell on macroeconomic and political concerns, and in 2015, an underweight in Japan and lagging stock selection again in the U.K. hurt performance. Outside of trailing stock selection in the Healthcare sector, Harbor's underperformance in 2016 was driven mainly by lagging performance in the fourth quarter. During the quarter, the U.S. elections supplied a boost to many interest-rate sensitive and cyclical stocks around the globe as investors viewed the election of President Trump as a potential boon in economic growth. The strategy's underweight to the cyclical areas of the market like Energy, Materials, and Industrials held back relative returns. This strategy has a slight value philosophy bias, which has been a headwind over the last few years. As a reminder, this team's focus on long-term returns will result in a portfolio that differs significantly from the MSCI ACWI ex. U.S. Index and style benchmark, resulting in a high tracking error portfolio. |
| Barrow Hanley Short Fixed - Surplus Cash | Qualitative Compliance | In August 2017, Barrow Hanley announced that John Williams (Managing Director, Portfolio Manager) will retire in February of 2018 after 35 years with the firm. Mark Luchsinger and Scott McDonald were named as Co-Heads of Fixed Income in 2017 to help facilitate the leadership transition. |
| Barrow Hanley Short Fixed - Pension | Qualitative Compliance | In August 2017, Barrow Hanley announced that John Williams (Managing Director, Portfolio Manager) will retire in February of 2018 after 35 years with the firm. Mark Luchsinger and Scott McDonald were named as Co-Heads of Fixed Income in 2017 to help facilitate the leadership transition. |
| MetWest Fixed - Surplus Cash | Qualitative Compliance | On December 1, 2017, TCW announced that The Carlyle Group entered a deal to sell a portion of its stake in TCW to Nippon Life Insurance Company, based in Japan. Along with the addition of a new third party owner, TCW's employee ownership will increase meaningfully. Following the close of the announced transaction, the ownership structure will become 44.07% TCW employees, 31.18% Carlyle, and 24.75% Nippon Life Insurance Company, while the current ownership structure has been 60% Carlyle and 40% TCW since 2013. |
| MetWest Fixed - Surplus Cash | Performance Compliance | Over the past few years, TCW has held the view that investors are not being fairly compensated for holding corporate credit given valuations and what they perceive as weakening fundamentals. In addition, the team has been cautious on interest rate risk. The net result has been a defensively positioned portfolio that has trailed both more aggressive peers and the index as spreads grind tighter and interest rates remain relatively range bound. Going forward, we expect TCW to be in a positive position to deploy capital when the next bout of volatility arises. |
| Met West Fixed - Pension | Qualitative Compliance | On December 1, 2017, TCW announced that The Carlyle Group entered a deal to sell a portion of its stake in TCW to Nippon Life Insurance Company, based in Japan. Along with the addition of a new third party owner, TCW's employee ownership will increase meaningfully. Following the close of the announced transaction, the ownership structure will become 44.07% TCW employees, 31.18% Carlyle, and 24.75% Nippon Life Insurance Company, while the current ownership structure has been 60% Carlyle and 40% TCW since 2013. |
| Met West Fixed - Pension | Performance Compliance | Over the past few years, TCW has held the view that investors are not being fairly compensated for holding corporate credit given valuations and what they perceive as weakening fundamentals. In addition, the team has been cautious on interest rate risk. The net result has been a defensively positioned portfolio that has trailed both more aggressive peers and the index as spreads grind tighter and interest rates remain relatively range bound. Going forward, we expect TCW to be in a positive position to deploy capital when the next bout of volatility arises. |
| Lighthouse Diversified - Pension | Qualitative Compliance | During the third quarter of 2017, Managing Director and Investment Committee member Barry Timmins left the Firm. Lighthouse remains one of our top conviction FoHF managers, but we are closely monitoring investment professional turnover and performance over the next six months. |

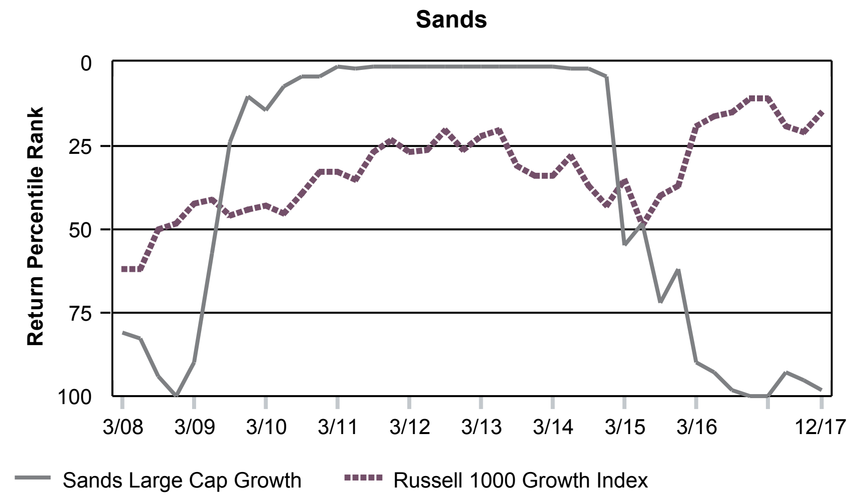
Performance compliance represents Pavilion's view on manager performance relative to Pavilion's expectations for performance, based primarily on manager investment philosophy and process. The three and five year return, rank and Sharpe ratio goals are as follows: the annualized return exceeds the benchmark's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

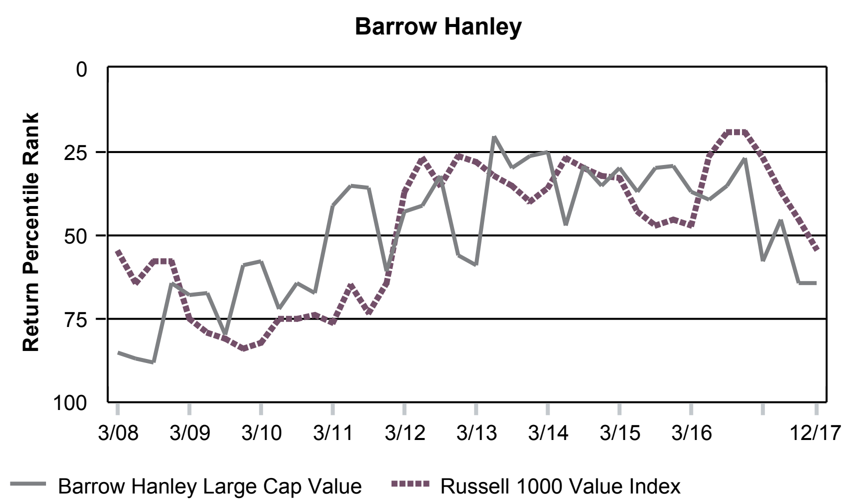
# Manager Performance Evaluation

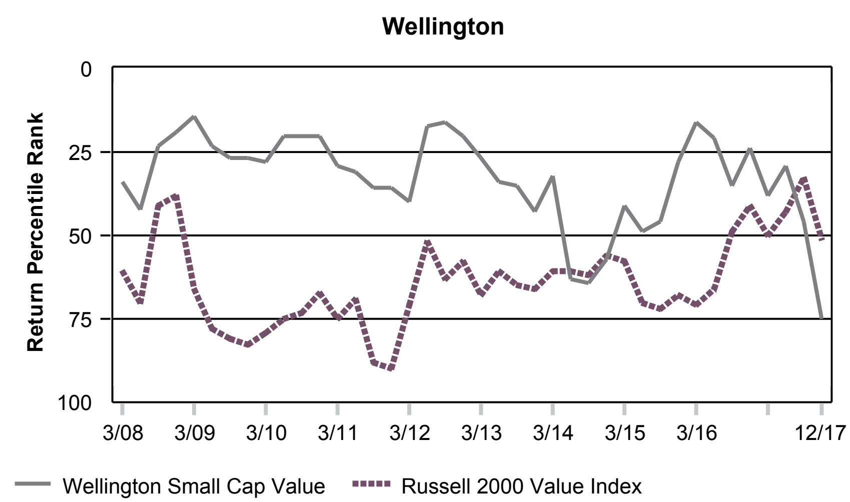
## Rolling 3 Year Rankings vs. Peers

As of December 31, 2017

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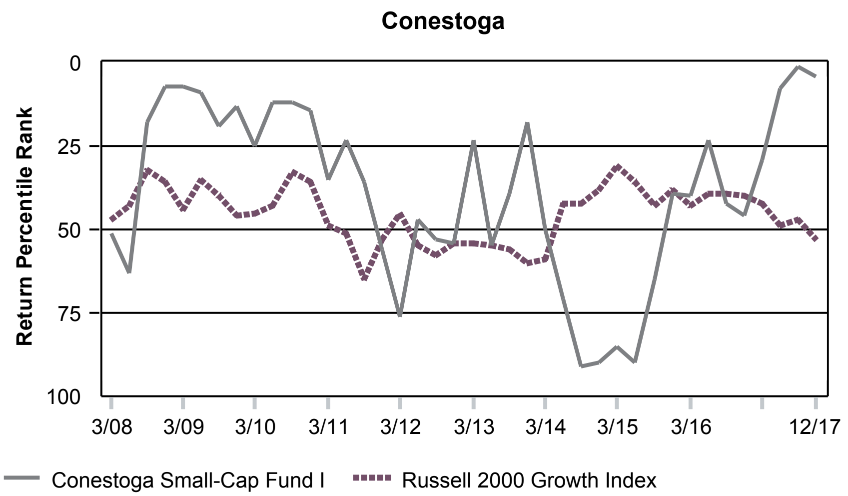
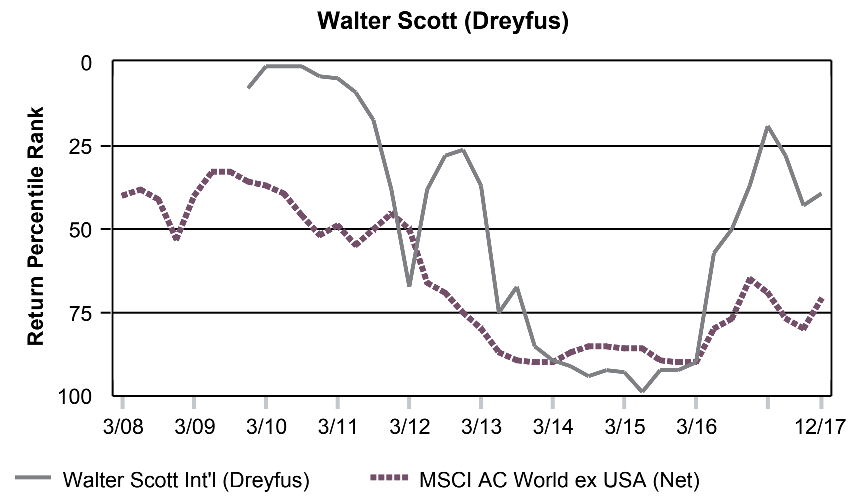
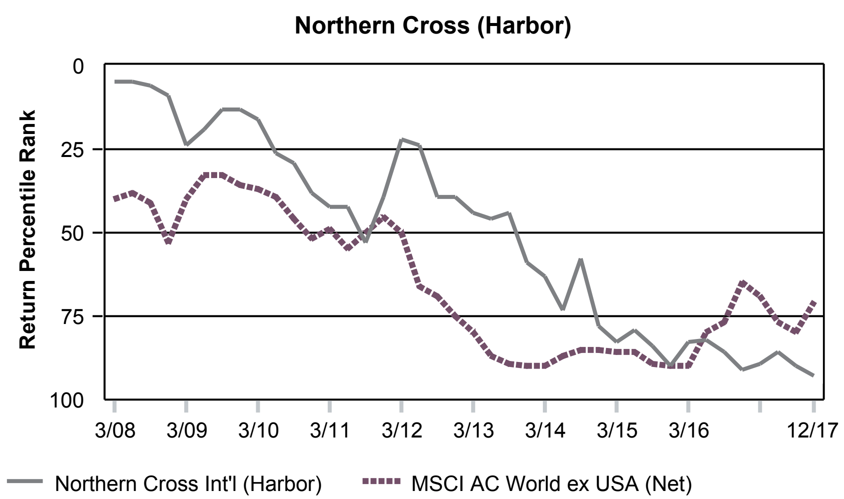
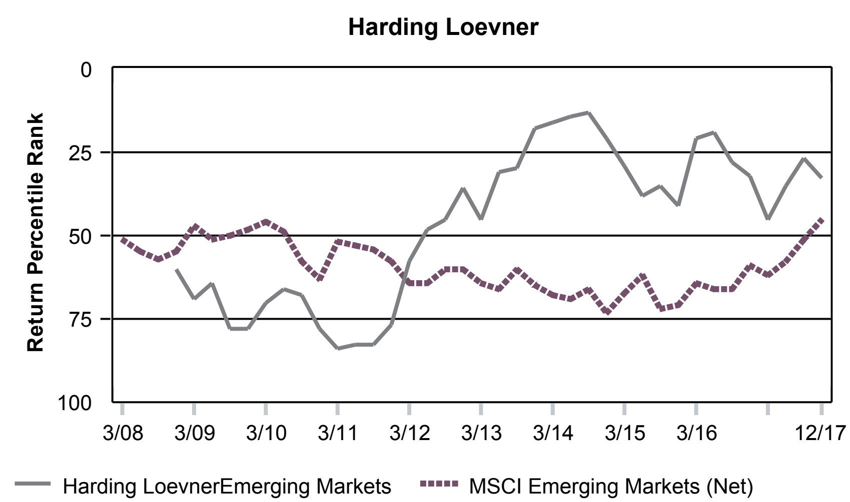
# Manager Performance Evaluation
## Rolling 3 Year Rankings vs. Peers
As of December 31, 2017



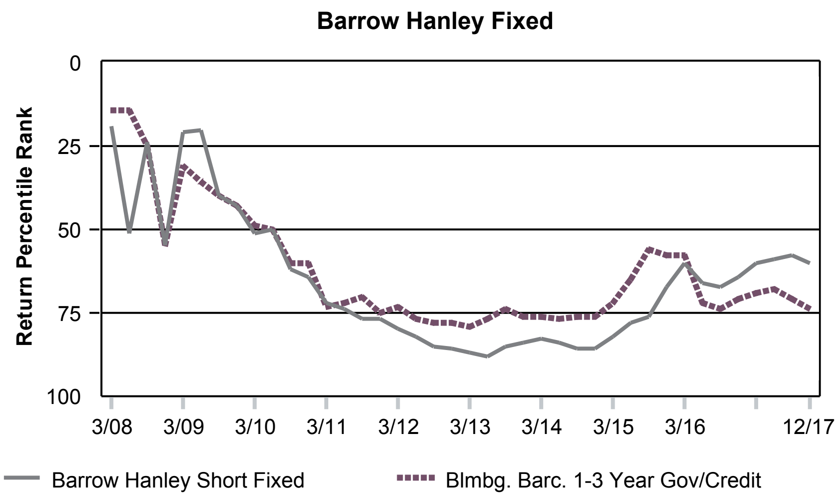



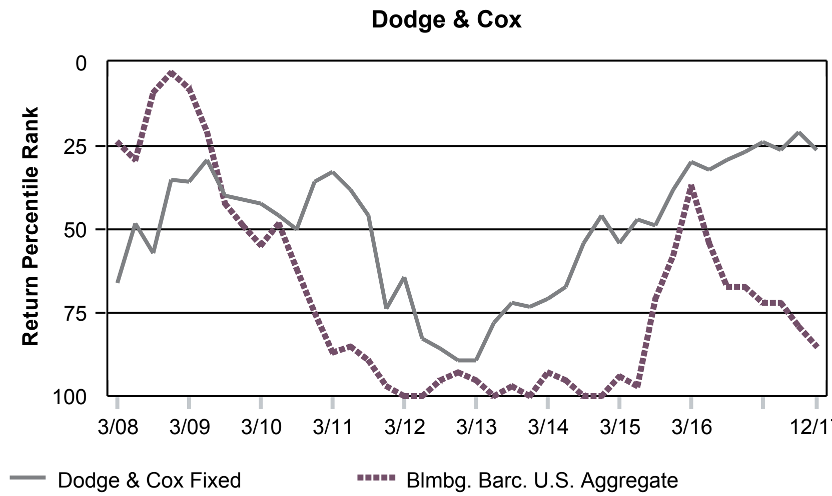



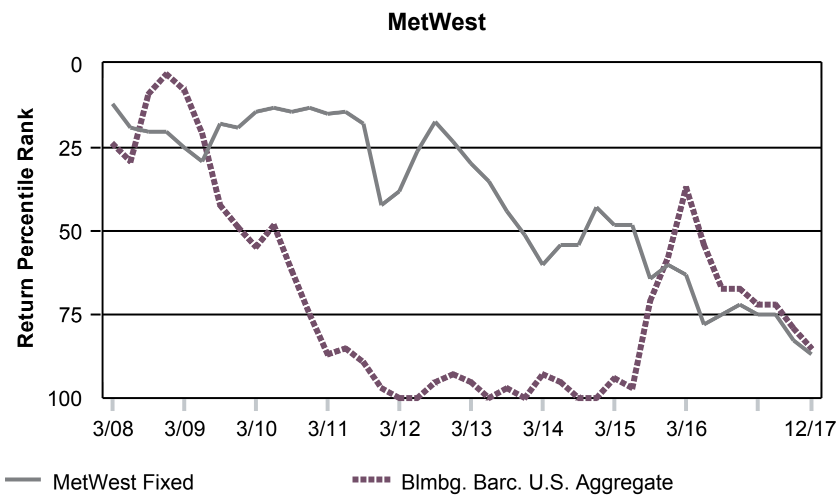
# Manager Performance Evaluation

## Rolling 3 Year Rankings vs. Peers

As of December 31, 2017



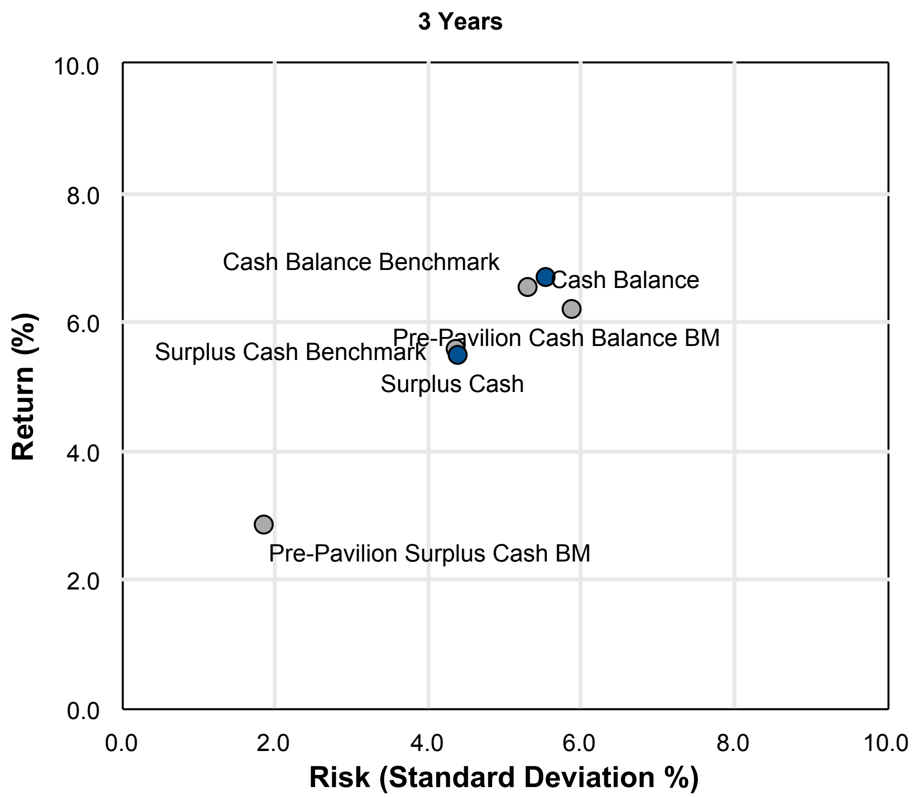



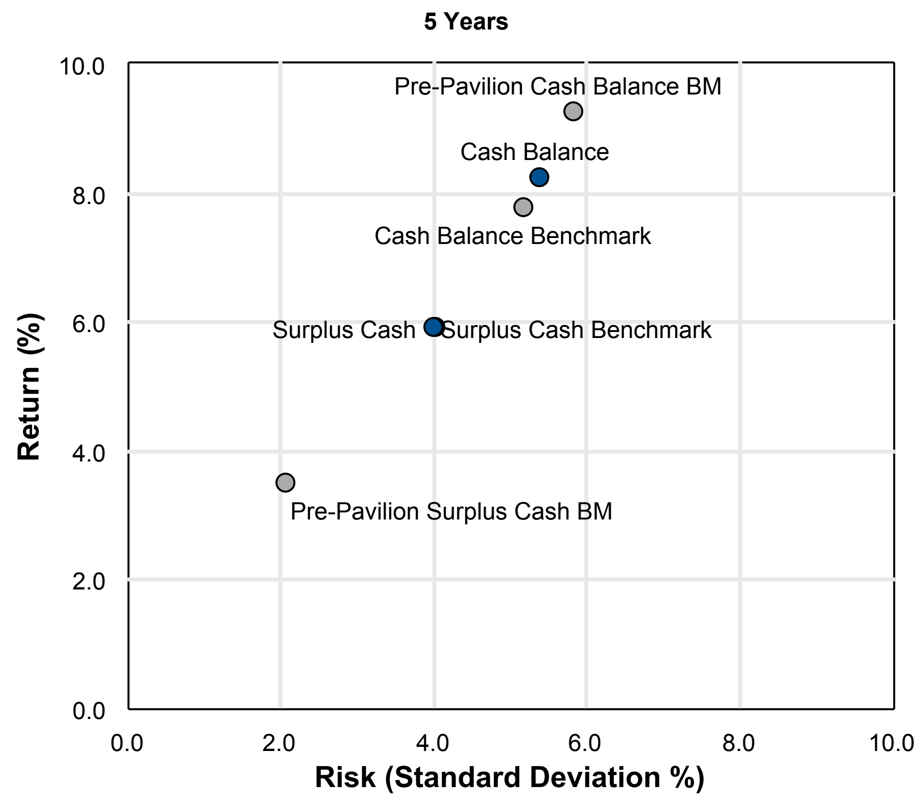
# Performance Summary

# Surplus Cash and Cash Balance Plan

## Risk and Return Summary (Net of Fees)

As of December 31, 2017



# Surplus Cash Portfolio ex District

## Composite Asset Allocation & Performance

As of December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Total Surplus Cash X District** | **871,939,635** | **100.0** | **2.6** | **5.4** | **11.8** | **11.8** | **5.5** | **5.9** | **5.7** | **6.0** | **5y 2m** |
| Surplus Cash Total Benchmark | | | 2.7 | 5.6 | 11.5 | 11.5 | 5.6 | 5.9 | 5.3 | 5.9 | |
| Pre-Pavilion Surplus Cash Total Benchmark | | | 0.9 | 1.9 | 4.1 | 4.1 | 2.8 | 3.5 | 4.1 | 3.4 | |
| **Total Surplus Cash X District X Privates** | **848,234,245** | **97.3** | **2.7** | **5.5** | **12.0** | **12.0** | **5.3** | **5.8** | **5.7** | **5.8** | **5y 2m** |
| Surplus Cash Total Benchmark x Privates | | | 2.7 | 5.7 | 11.7 | 11.7 | 5.6 | 5.9 | 5.4 | 6.0 | |
| **Total Equity Composite** | **368,503,055** | **42.3** | **4.9** | **10.0** | **22.9** | **22.9** | **9.5** | **12.1** | **6.6** | **12.4** | **5y 2m** |
| Total Equity Benchmark - Surplus | | | 5.6 | 11.2 | 23.0 | 23.0 | 9.9 | 12.5 | 6.5 | 12.8 | |
| **Domestic Equity Composite** | **231,473,350** | **26.5** | **5.5** | **10.6** | **20.9** | **20.9** | **10.1** | **14.8** | **7.7** | **14.8** | **5y 2m** |
| Domestic Equity Benchmark - Surplus | | | 6.0 | 11.0 | 20.4 | 20.4 | 11.1 | 15.5 | 7.8 | 15.4 | |
| Large Cap Equity Composite | 189,241,211 | 21.7 | 6.0 | 10.8 | 22.3 | 22.3 | 10.0 | 15.1 | 7.9 | 15.2 | 5y 2m |
| Large Cap Equity Benchmark | | | 6.6 | 11.4 | 21.8 | 21.8 | 11.3 | 15.8 | 7.9 | 15.6 | |
| Small Cap Equity Composite | 42,232,139 | 4.8 | 3.3 | 10.1 | 15.2 | 15.2 | 10.7 | 13.6 | - | 13.4 | 5y 2m |
| Small Cap Equity Benchmark | | | 3.3 | 9.2 | 14.8 | 14.8 | 10.0 | 14.2 | 8.7 | 14.6 | |
| **International Equity Composite** | **137,029,705** | **15.7** | **3.9** | **8.9** | **26.6** | **26.6** | **8.7** | **6.5** | **-** | **7.5** | **5y 2m** |
| MSCI AC World ex USA (Net) | | | 5.0 | 11.5 | 27.2 | 27.2 | 7.8 | 6.8 | 1.8 | 7.7 | |

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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Total Fixed Income Composite** | **355,074,577** | **40.7** | **0.2** | **1.0** | **3.1** | **3.1** | **2.3** | **2.1** | **3.8** | **2.1** | **5y 2m** |
| Total Fixed Income Benchmark - Surplus | | | 0.2 | 1.0 | 2.9 | 2.9 | 1.9 | 1.9 | 3.4 | 1.8 | |
| **Short Duration Fixed Income Composite** | **91,472,852** | **10.5** | **-0.1** | **0.2** | **1.0** | **1.0** | **1.1** | **0.9** | **2.7** | **0.8** | **5y 2m** |
| Short Duration Fixed Income Benchmark - Surplus | | | -0.2 | 0.1 | 0.8 | 0.8 | 0.9 | 0.8 | 2.6 | 0.8 | |
| **Market Duration Fixed Income Composite** | **263,601,725** | **30.2** | **0.4** | **1.3** | **4.0** | **4.0** | **2.7** | **2.6** | **5.1** | **2.6** | **5y 2m** |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 | 1.2 | 3.5 | 3.5 | 2.2 | 2.1 | 4.0 | 2.0 | |
| **Total Alternatives Composite** | **148,362,003** | **17.0** | **2.8** | **5.2** | **7.1** | **7.1** | **3.6** | **-** | **-** | **4.5** | **4y 8m** |
| Total Alternatives Benchmark - Surplus | | | 1.9 | 4.1 | 7.5 | 7.5 | 4.3 | - | - | 4.8 | |
| **Real Estate Composite** | **23,705,389** | **2.7** | **0.6** | **1.7** | **6.3** | **6.3** | **8.4** | **-** | **-** | **10.7** | **4y 4m** |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 10.0 | |
| **Hedge Fund Composite** | **124,656,614** | **14.3** | **3.3** | **6.1** | **7.2** | **7.2** | **2.2** | **-** | **-** | **3.1** | **4y 8m** |
| HFRI Fund of Funds Composite Index | | | 2.0 | 4.3 | 7.7 | 7.7 | 2.6 | 4.0 | 1.1 | 3.4 | |

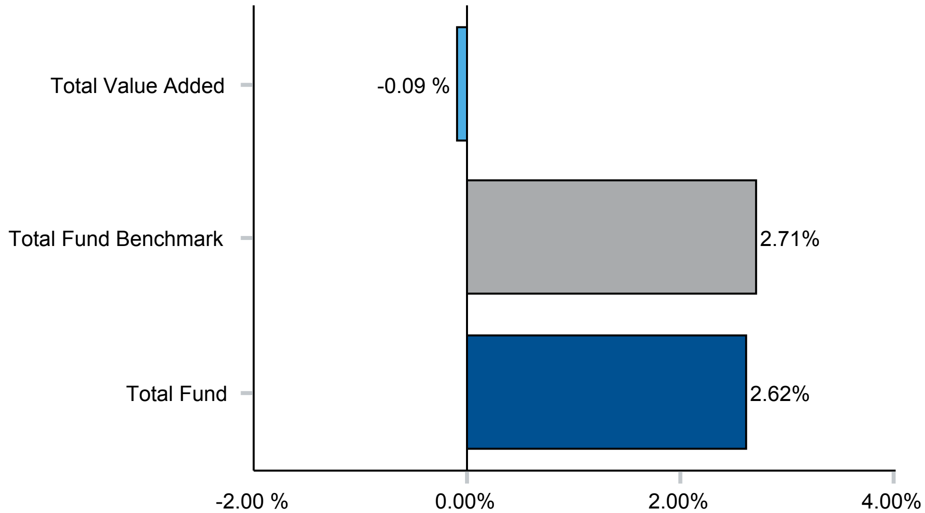
Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.
Peer group percentile ranks are shown in parentheses.

# Surplus Cash Portfolio ex District

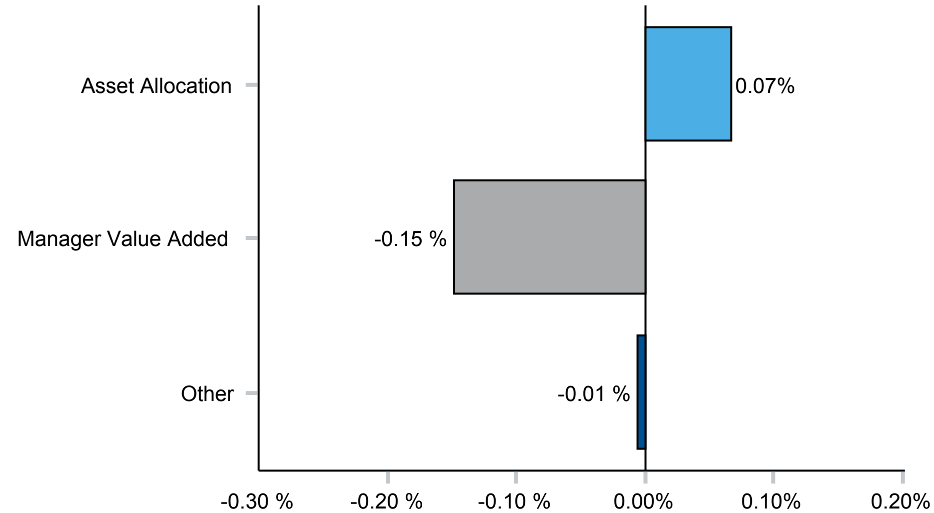
## Attribution Analysis

1 Quarter Ending December 31, 2017

**Total Fund Performance**

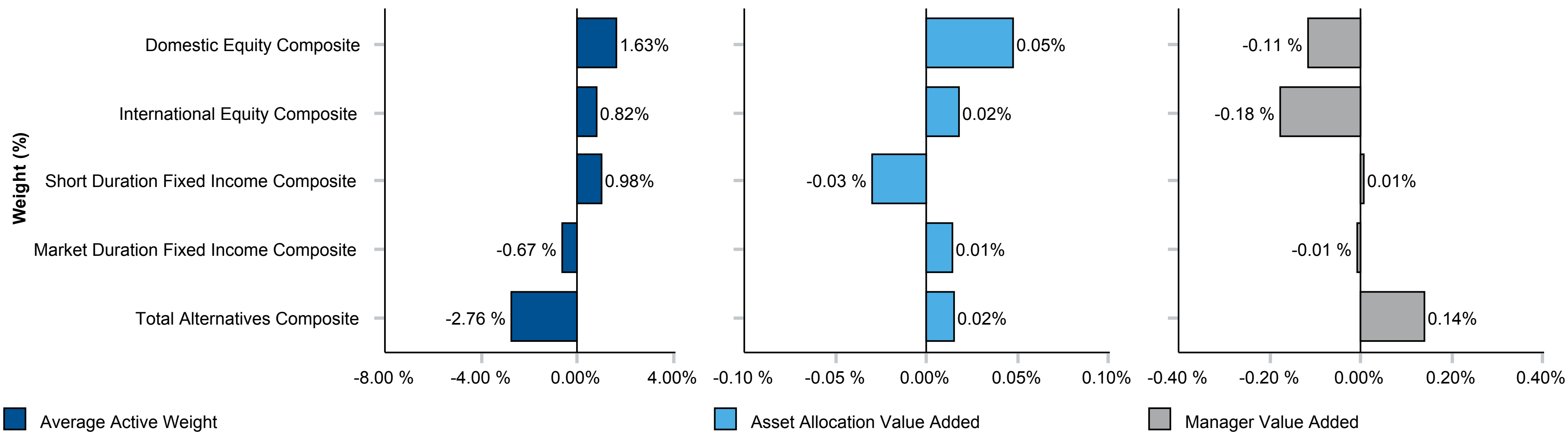



**Total Value Added:-0.09 %**




**Total Asset Allocation:0.07%**

**Total Manager Value Added:-0.15 %**




"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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Large-Cap Equity** | | | | | | | | | | | |
| Vanguard S&P 500 Index | 118,782,104 | 13.6 | 6.6 (49) | 11.4 (47) | 21.8 (47) | 21.8 (47) | 11.4 (20) | 15.8 (28) | 8.5 (39) | 15.5 (-) | 5y 2m |
| S&P 500 | | | 6.6 (49) | 11.4 (47) | 21.8 (46) | 21.8 (46) | 11.4 (20) | 15.8 (27) | 8.5 (39) | 15.6 (-) | |
| *eV Large Cap Core Median* | | | *6.6* | *11.2* | *21.5* | *21.5* | *10.3* | *14.9* | *8.3* | - | |
| Sands Large Cap Growth (Touchstone) | 34,452,566 | 4.0 | 3.8 (95) | 10.5 (82) | 34.7 (14) | 34.7 (14) | 7.2 (99) | 13.6 (89) | 10.3 (18) | 14.2 (-) | 5y 2m |
| Russell 1000 Growth Index | | | 7.9 (14) | 14.2 (21) | 30.2 (41) | 30.2 (41) | 13.8 (16) | 17.3 (19) | 10.0 (24) | 17.1 (-) | |
| *eV Large Cap Growth Median* | | | *6.7* | *12.5* | *29.0* | *29.0* | *11.7* | *16.0* | *8.9* | - | |
| Barrow Hanley Large Cap Value | 36,006,542 | 4.1 | 6.3 (44) | 8.9 (70) | 13.6 (84) | 13.6 (84) | 8.4 (65) | 14.1 (49) | 7.3 (52) | 9.3 (-) | 17y 5m |
| Russell 1000 Value Index | | | 5.3 (71) | 8.6 (73) | 13.7 (84) | 13.7 (84) | 8.7 (55) | 14.0 (49) | 7.1 (59) | 7.4 (-) | |
| *eV Large Cap Value Median* | | | *6.0* | *10.3* | *16.5* | *16.5* | *9.0* | *14.0* | *7.4* | - | |
| **Small-Cap Equity** | | | | | | | | | | | |
| Wellington Small Cap Value | 21,199,799 | 2.4 | 3.0 (68) | 6.7 (78) | 4.2 (93) | 4.2 (93) | 8.2 (76) | 12.6 (71) | 9.9 (28) | 13.2 (-) | 5y 2m |
| Russell 2000 Value Index | | | 2.0 (80) | 7.3 (72) | 7.8 (71) | 7.8 (71) | 9.5 (52) | 13.0 (62) | 8.2 (74) | 13.5 (-) | |
| *eV Small Cap Value Median* | | | *3.5* | *8.7* | *10.3* | *10.3* | *9.6* | *13.7* | *9.0* | - | |
| Conestoga Small Cap Growth | 21,032,340 | 2.4 | 3.7 (71) | 13.8 (17) | 28.7 (19) | 28.7 (19) | 16.8 (5) | 16.9 (25) | 11.4 (11) | 27.5 (-) | 1y 6m |
| Russell 2000 Growth Index | | | 4.6 (50) | 11.1 (47) | 22.2 (57) | 22.2 (57) | 10.3 (54) | 15.2 (48) | 9.2 (46) | 24.1 (-) | |
| *eV Small Cap Growth Median* | | | *4.6* | *10.7* | *23.5* | *23.5* | *10.6* | *15.1* | *8.9* | - | |
| **International Equity** | | | | | | | | | | | |
| Walter Scott Int'l (Dreyfus) | 57,063,690 | 6.5 | 4.6 (48) | 9.7 (70) | 27.0 (57) | 27.0 (57) | 9.7 (40) | 6.6 (90) | 4.7 (25) | 7.5 (-) | 5y 2m |
| MSCI AC World ex USA (Net) | | | 5.0 (36) | 11.5 (44) | 27.2 (55) | 27.2 (55) | 7.8 (72) | 6.8 (87) | 1.8 (85) | 7.7 (-) | |
| *eV Non US Diversified All Median* | | | *4.5* | *11.0* | *27.9* | *27.9* | *9.0* | *8.7* | *3.1* | - | |
| Northern Cross Int'l (Harbor) | 51,920,666 | 6.0 | 2.2 (95) | 5.9 (97) | 22.9 (86) | 22.9 (86) | 5.8 (94) | 5.2 (97) | 2.1 (74) | 6.5 (-) | 5y 2m |
| MSCI AC World ex USA (Net) | | | 5.0 (36) | 11.5 (44) | 27.2 (55) | 27.2 (55) | 7.8 (72) | 6.8 (87) | 1.8 (85) | 7.7 (-) | |
| *eV Non US Diversified All Median* | | | *4.5* | *11.0* | *27.9* | *27.9* | *9.0* | *8.7* | *3.1* | - | |
| Harding Loevner Emerging Markets | 28,045,350 | 3.2 | 5.7 (73) | 13.4 (62) | 35.3 (56) | 35.3 (56) | 9.9 (34) | 6.3 (29) | 2.7 (46) | 19.0 (-) | 2y 4m |
| MSCI Emerging Markets (Net) | | | 7.4 (29) | 15.9 (34) | 37.3 (43) | 37.3 (43) | 9.1 (46) | 4.3 (68) | 1.7 (68) | 18.6 (-) | |
| *eV International Emerging Equity Median* | | | *6.6* | *14.4* | *35.9* | *35.9* | *8.9* | *5.1* | *2.3* | - | |

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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Short Duration Fixed Income** | | | | | | | | | | | |
| Barrow Hanley Short Fixed | 87,371,480 | 10.0 | -0.2 (74) | 0.2 (80) | 1.0 (73) | 1.0 (73) | 1.1 (61) | 0.9 (65) | 1.8 (78) | 4.7 (-) | 26y 9m |
| Blmbg. Barc. 1-3 Year Gov/Credit | | | -0.2 (83) | 0.1 (86) | 0.8 (82) | 0.8 (82) | 0.9 (75) | 0.8 (71) | 1.9 (76) | 4.2 (-) | |
| *eV US Short Fixed Income Median* | | | *0.0* | *0.4* | *1.5* | *1.5* | *1.3* | *1.1* | *2.2* | - | |
| Cash Composite | 4,101,372 | 0.5 | 0.3 | 0.4 | 0.7 | 0.7 | 0.4 | 0.3 | - | 0.1 | 5y 2m |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.2 | |
| **Market Duration Fixed Income** | | | | | | | | | | | |
| Dodge & Cox Fixed | 132,177,312 | 15.2 | 0.4 (73) | 1.6 (58) | 4.5 (61) | 4.5 (61) | 3.3 (27) | 3.2 (24) | 5.1 (40) | 3.1 (-) | 5y 2m |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 (69) | 1.2 (87) | 3.5 (92) | 3.5 (92) | 2.2 (86) | 2.1 (91) | 4.0 (95) | 2.0 (-) | |
| *eV Core Plus Fixed Income Median* | | | *0.5* | *1.6* | *4.7* | *4.7* | *3.0* | *2.8* | *4.9* | - | |
| MetWest Fixed | 118,268,023 | 13.6 | 0.4 (74) | 1.1 (91) | 3.5 (93) | 3.5 (93) | 2.2 (88) | 2.1 (91) | 5.3 (31) | 2.1 (-) | 5y 2m |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 (69) | 1.2 (87) | 3.5 (92) | 3.5 (92) | 2.2 (86) | 2.1 (91) | 4.0 (95) | 2.0 (-) | |
| *eV Core Plus Fixed Income Median* | | | *0.5* | *1.6* | *4.7* | *4.7* | *3.0* | *2.8* | *4.9* | - | |
| Met West Total Return Bond Plan - CONCERN | 13,156,391 | 1.5 | 0.4 (69) | 1.1 (91) | 3.5 (93) | 3.5 (93) | 2.1 (90) | 2.6 (68) | - | 2.5 (-) | 1y 11m |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 (69) | 1.2 (87) | 3.5 (92) | 3.5 (92) | 2.2 (86) | 2.1 (91) | 4.0 (95) | 2.5 (-) | |
| *eV Core Plus Fixed Income Median* | | | *0.5* | *1.6* | *4.7* | *4.7* | *3.0* | *2.8* | *4.9* | - | |
| **Real Estate** | | | | | | | | | | | |
| Oaktree Real Estate Opportunities Fund VI | 10,251,715 | 1.2 | 1.3 | 3.8 | 5.8 | 5.8 | 6.5 | - | - | 8.7 | 4y 4m |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 10.0 | |
| Walton Street Real Estate Fund VII, L.P. | 8,903,942 | 1.0 | 0.0 | 1.7 | 8.0 | 8.0 | 11.2 | - | - | 16.5 | 4y 2m |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 10.0 | |
| Walton Street Real Estate Fund VIII, L.P. | 4,549,732 | 0.5 | 0.0 | 2.4 | - | - | - | - | - | 9.5 | 0y 7m |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 4.1 | |
| **Hedge Funds** | | | | | | | | | | | |
| Hedge Fund Composite | 124,656,614 | 14.3 | 3.3 | 6.1 | 7.2 | 7.2 | 2.2 | - | - | 3.1 | 4y 8m |
| HFRI Fund of Funds Composite Index | | | 2.0 | 4.3 | 7.7 | 7.7 | 2.6 | 4.0 | 1.1 | 3.4 | |

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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Total Plan** | | | | | | | | | | | |
| Total Surplus Cash X District | 871,939,635 | 100.0 | 2.6 | 5.4 | 11.8 | 11.8 | 5.5 | 5.9 | 5.7 | 6.0 | 5y 2m |
| Total Surplus Cash Benchmark | | | 2.7 | 5.6 | 11.5 | 11.5 | 5.6 | 5.9 | 5.3 | 5.9 | |
| Pre-Pavilion Total Surplus Cash Benchmark | | | 0.9 | 1.9 | 4.1 | 4.1 | 2.8 | 3.5 | 4.1 | 3.4 | |

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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Total Cash Balance Plan** | **259,059,538** | **100.0** | **3.0** | **6.3** | **14.5** | **14.5** | **6.7** | **8.2** | **6.2** | **8.4** | **5y 2m** |
| Total Cash Balance Plan Benchmark | | | 3.3 | 6.7 | 13.5 | 13.5 | 6.5 | 7.8 | 5.5 | 7.9 | |
| Pre-Pavilion Total Cash Balance Plan Benchmark | | | 3.3 | 5.6 | 9.6 | 9.6 | 6.2 | 9.3 | 6.2 | 9.2 | |
| **Total Cash Balance Plan X Private Structures** | **244,128,812** | **94.2** | **3.1** | **6.6** | **15.1** | **15.1** | **6.5** | **8.0** | **6.1** | **8.2** | **5y 2m** |
| Cash Balance Plan Total X Privates Benchmark | | | 3.4 | 6.9 | 13.8 | 13.8 | 6.4 | 7.6 | 5.5 | 7.7 | |
| **Total Equity Composite** | **139,347,904** | **53.8** | **4.8** | **9.8** | **22.9** | **22.9** | **9.2** | **11.7** | **6.0** | **12.1** | **5y 2m** |
| Total Equity Benchmark | | | 5.7 | 11.2 | 23.0 | 23.0 | 10.0 | 12.4 | 6.5 | 12.7 | |
| **Domestic Equity Composite** | **90,371,497** | **34.9** | **5.4** | **10.5** | **21.2** | **21.2** | **9.8** | **14.8** | **7.2** | **14.7** | **5y 2m** |
| Domestic Equity Benchmark | | | 6.1 | 11.1 | 20.7 | 20.7 | 11.2 | 15.6 | 7.8 | 15.5 | |
| Large Cap Equity Composite | 76,035,510 | 29.4 | 5.9 | 10.6 | 22.3 | 22.3 | 9.7 | 15.0 | 7.4 | 15.0 | 5y 2m |
| Large Cap Equity Benchmark | | | 6.6 | 11.4 | 21.8 | 21.8 | 11.3 | 15.8 | 7.9 | 15.6 | |
| Small Cap Equity Composite | 14,335,987 | 5.5 | 3.3 | 10.1 | 15.0 | 15.0 | 10.6 | 13.6 | - | 13.4 | 5y 2m |
| Small Cap Equity Benchmark | | | 3.3 | 9.2 | 14.8 | 14.8 | 10.0 | 14.2 | 8.7 | 14.6 | |
| **International Equity Composite** | **48,976,407** | **18.9** | **3.7** | **8.6** | **26.4** | **26.4** | **8.1** | **6.2** | **-** | **7.3** | **5y 2m** |
| MSCI AC World ex USA (Net) | | | 5.0 | 11.5 | 27.2 | 27.2 | 7.8 | 6.8 | 1.8 | 7.7 | |

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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Total Fixed Income Composite** | **73,128,707** | **28.2** | **0.3** | **1.2** | **3.5** | **3.5** | **2.3** | **2.4** | **4.9** | **2.3** | **5y 2m** |
| Total Fixed Income Benchmark | | | 0.3 | 1.1 | 2.9 | 2.9 | 1.9 | 1.8 | 3.8 | 1.7 | |
| **Short Duration Fixed Income Composite** | **10,760,483** | **4.2** | **-0.1** | **0.2** | **1.2** | **1.2** | **1.1** | **0.9** | **-** | **0.9** | **5y 2m** |
| Short Duration Fixed Income Benchmark | | | -0.2 | 0.1 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 | 0.8 | |
| **Market Duration Fixed Income Composite** | **62,368,224** | **24.1** | **0.4** | **1.4** | **3.9** | **3.9** | **2.6** | **2.8** | **5.1** | **2.8** | **5y 2m** |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 | 1.2 | 3.5 | 3.5 | 2.2 | 2.1 | 4.0 | 2.0 | |
| **Total Alternatives Composite** | **46,582,927** | **18.0** | **1.8** | **4.1** | **8.8** | **8.8** | **6.1** | **8.5** | **-** | **8.5** | **5y 2m** |
| Total Alternatives Benchmark | | | 1.9 | 4.1 | 7.4 | 7.4 | 4.8 | 6.0 | - | 6.2 | |
| **Hedge Fund of Fund Composite** | **31,652,201** | **12.2** | **2.4** | **5.4** | **10.3** | **10.3** | **4.7** | **7.2** | **-** | **7.2** | **5y 2m** |
| HFRI Fund of Funds Composite Index | | | 2.0 | 4.3 | 7.7 | 7.7 | 2.6 | 4.0 | 1.1 | 4.2 | |
| **Real Estate Composite** | **14,930,726** | **5.8** | **0.6** | **1.7** | **5.9** | **5.9** | **8.3** | **10.6** | **-** | **10.6** | **5y** |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 10.2 | |

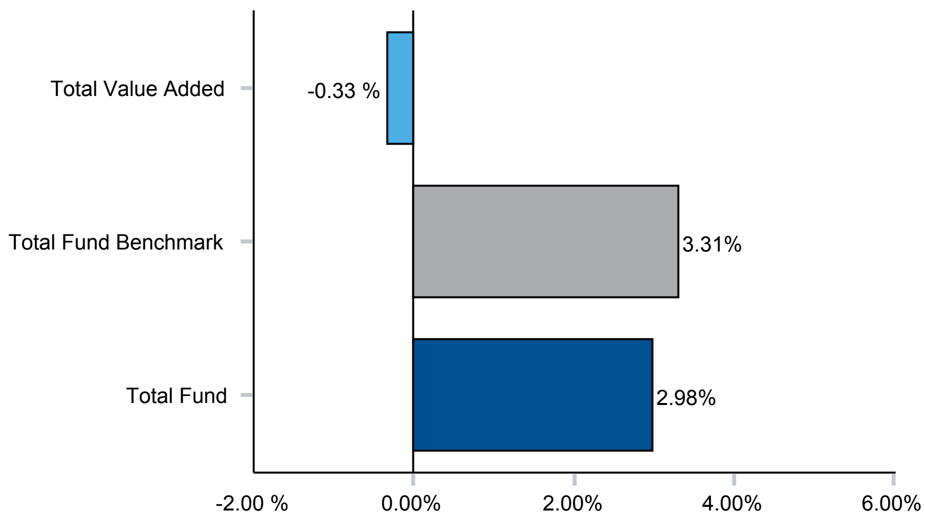
Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.
Peer group percentile ranks are shown in parentheses.

# Cash Balance Plan

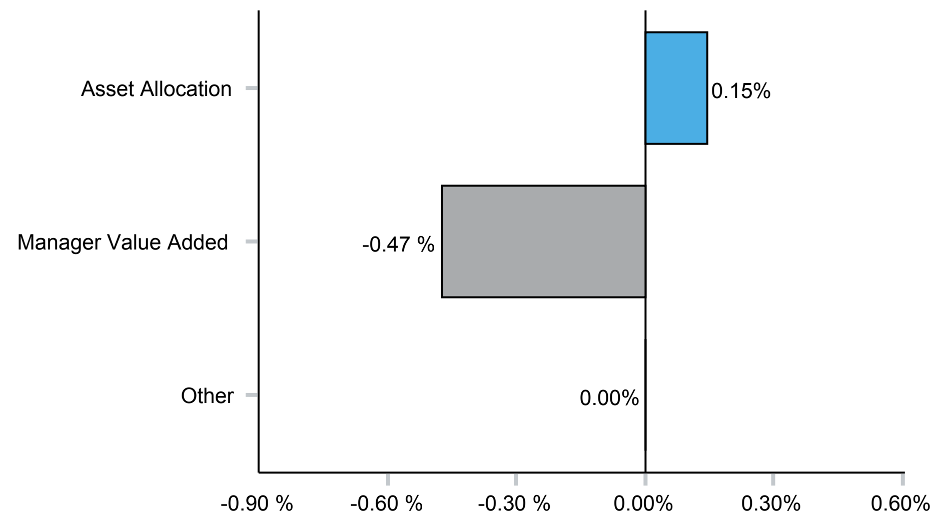
## Attribution Analysis

1 Quarter Ending December 31, 2017

**Total Fund Performance**

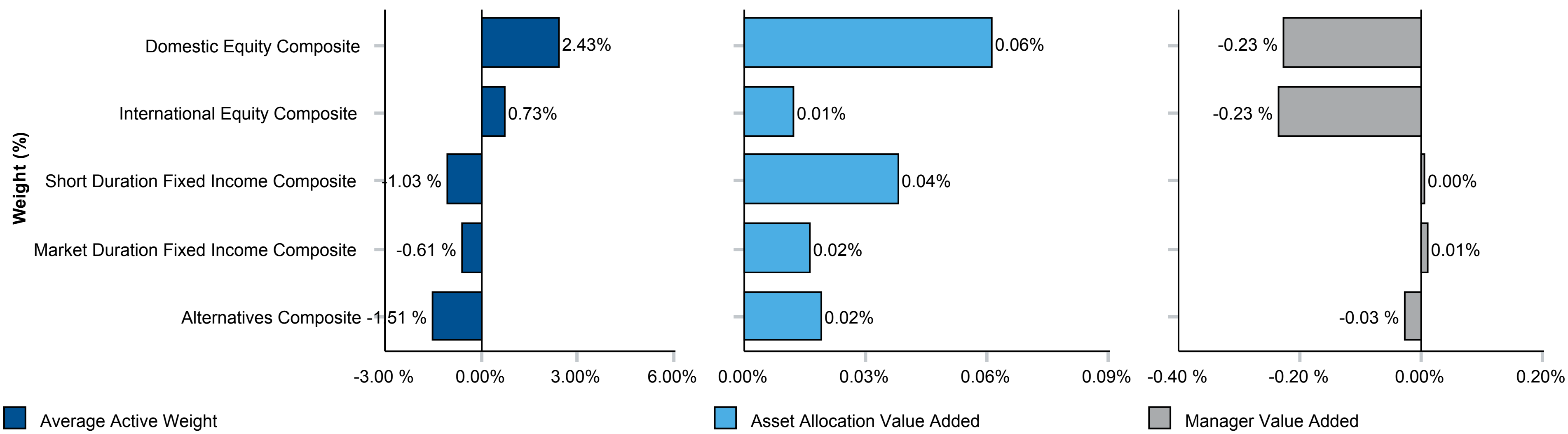



**Total Value Added:-0.33 %**




**Total Asset Allocation:0.15%**

**Total Manager Value Added:-0.47 %**




"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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Large-Cap Equity** | | | | | | | | | | | |
| Vanguard Institutional Index Fund | 39,304,309 | 15.2 | 6.6 (49) | 11.4 (47) | 21.8 (47) | 21.8 (47) | 11.4 (20) | 15.8 (28) | 8.5 (39) | 15.5 (-) | 5y 2m |
| S&P 500 | | | 6.6 (49) | 11.4 (47) | 21.8 (46) | 21.8 (46) | 11.4 (20) | 15.8 (27) | 8.5 (39) | 15.6 (-) | |
| *eV Large Cap Core Median* | | | *6.6* | *11.2* | *21.5* | *21.5* | *10.3* | *14.9* | *8.3* | - | |
| Sands Large Cap Growth (Touchstone) | 18,472,164 | 7.1 | 3.8 (95) | 10.5 (82) | 34.7 (14) | 34.7 (14) | 7.2 (99) | 13.6 (89) | 10.3 (18) | 14.2 (-) | 5y 2m |
| Russell 1000 Growth Index | | | 7.9 (14) | 14.2 (21) | 30.2 (41) | 30.2 (41) | 13.8 (16) | 17.3 (19) | 10.0 (24) | 17.1 (-) | |
| *eV Large Cap Growth Median* | | | *6.7* | *12.5* | *29.0* | *29.0* | *11.7* | *16.0* | *8.9* | - | |
| Barrow Hanley Large Cap Value | 18,259,037 | 7.0 | 6.3 (44) | 9.0 (69) | 13.8 (82) | 13.8 (82) | 8.6 (57) | 14.4 (43) | 7.4 (48) | 14.2 (-) | 5y 2m |
| Russell 1000 Value Index | | | 5.3 (71) | 8.6 (73) | 13.7 (84) | 13.7 (84) | 8.7 (55) | 14.0 (49) | 7.1 (59) | 14.0 (-) | |
| *eV Large Cap Value Median* | | | *6.0* | *10.3* | *16.5* | *16.5* | *9.0* | *14.0* | *7.4* | - | |
| **Small-Cap Equity** | | | | | | | | | | | |
| Wellington Small Cap Value | 7,149,812 | 2.8 | 2.9 (70) | 6.5 (79) | 3.8 (95) | 3.8 (95) | 8.1 (77) | 12.5 (71) | 9.9 (29) | 13.1 (-) | 5y 2m |
| Russell 2000 Value Index | | | 2.0 (80) | 7.3 (72) | 7.8 (71) | 7.8 (71) | 9.5 (52) | 13.0 (62) | 8.2 (74) | 13.5 (-) | |
| *eV Small Cap Value Median* | | | *3.5* | *8.7* | *10.3* | *10.3* | *9.6* | *13.7* | *9.0* | - | |
| Conestoga Small Cap Growth | 7,186,175 | 2.8 | 3.7 (71) | 13.8 (17) | 28.7 (19) | 28.7 (19) | 16.8 (5) | 16.9 (25) | 11.4 (11) | 27.5 (-) | 1y 6m |
| Russell 2000 Growth Index | | | 4.6 (50) | 11.1 (47) | 22.2 (57) | 22.2 (57) | 10.3 (54) | 15.2 (48) | 9.2 (46) | 24.1 (-) | |
| *eV Small Cap Growth Median* | | | *4.6* | *10.7* | *23.5* | *23.5* | *10.6* | *15.1* | *8.9* | - | |
| **International Equity** | | | | | | | | | | | |
| Walter Scott Int'l (Dreyfus) | 21,830,594 | 8.4 | 4.6 (48) | 9.7 (70) | 27.0 (57) | 27.0 (57) | 9.7 (40) | 6.6 (90) | 4.7 (25) | 7.5 (-) | 5y 2m |
| MSCI AC World ex USA (Net) | | | 5.0 (36) | 11.5 (44) | 27.2 (55) | 27.2 (55) | 7.8 (72) | 6.8 (87) | 1.8 (85) | 7.7 (-) | |
| *eV Non US Diversified All Median* | | | *4.5* | *11.0* | *27.9* | *27.9* | *9.0* | *8.7* | *3.1* | - | |
| Northern Cross Int'l (Harbor) | 20,000,143 | 7.7 | 2.2 (95) | 5.9 (97) | 22.9 (86) | 22.9 (86) | 5.8 (94) | 5.2 (97) | 2.1 (74) | 6.5 (-) | 5y 2m |
| MSCI AC World ex USA (Net) | | | 5.0 (36) | 11.5 (44) | 27.2 (55) | 27.2 (55) | 7.8 (72) | 6.8 (87) | 1.8 (85) | 7.7 (-) | |
| *eV Non US Diversified All Median* | | | *4.5* | *11.0* | *27.9* | *27.9* | *9.0* | *8.7* | *3.1* | - | |
| Harding Loevner Inst. Emerging Markets I | 7,145,670 | 2.8 | 5.7 (73) | 13.4 (62) | 35.3 (56) | 35.3 (56) | 9.9 (34) | 6.3 (29) | 2.7 (46) | 25.2 (-) | 1y 2m |
| MSCI Emerging Markets (Net) | | | 7.4 (29) | 15.9 (34) | 37.3 (43) | 37.3 (43) | 9.1 (46) | 4.3 (68) | 1.7 (68) | 26.3 (-) | |
| *eV International Emerging Equity Median* | | | *6.6* | *14.4* | *35.9* | *35.9* | *8.9* | *5.1* | *2.3* | - | |

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 December 31, 2017

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Fiscal YTD | Year To Date | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Period |
| **Short Duration Fixed Income** | | | | | | | | | | | |
| Barrow Hanley Short Fixed | 7,767,278 | 3.0 | -0.2 (88) | 0.0 (92) | 0.7 (88) | 0.7 (88) | 0.9 (78) | 0.7 (78) | 1.7 (80) | 0.8 (-) | 5y 2m |
| Blmbg. Barc. 1-3 Year Gov/Credit | | | -0.2 (83) | 0.1 (86) | 0.8 (82) | 0.8 (82) | 0.9 (75) | 0.8 (71) | 1.9 (76) | 0.8 (-) | |
| *eV US Short Fixed Income Median* | | | *0.0* | *0.4* | *1.5* | *1.5* | *1.3* | *1.1* | *2.2* | - | |
| Cash Composite | 2,993,205 | 1.2 | 0.3 | 0.6 | 3.4 | 3.4 | 2.7 | 2.1 | - | 2.0 | 5y 2m |
| 90 Day U.S. Treasury Bill | | | 0.3 | 0.5 | 0.9 | 0.9 | 0.4 | 0.2 | 0.4 | 0.2 | |
| **Market Duration Fixed Income** | | | | | | | | | | | |
| Dodge & Cox Income Fund | 31,255,802 | 12.1 | 0.5 (57) | 1.6 (51) | 4.4 (64) | 4.4 (64) | 3.1 (44) | 3.1 (31) | 5.0 (46) | 6.8 (-) | 29y |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 (69) | 1.2 (87) | 3.5 (92) | 3.5 (92) | 2.2 (86) | 2.1 (91) | 4.0 (95) | 6.3 (-) | |
| *eV Core Plus Fixed Income Median* | | | *0.5* | *1.6* | *4.7* | *4.7* | *3.0* | *2.8* | *4.9* | - | |
| Met West Total Return Fund Pl | 31,112,422 | 12.0 | 0.4 (71) | 1.1 (91) | 3.4 (96) | 3.4 (96) | 2.0 (91) | 2.5 (72) | 5.6 (22) | 2.6 (-) | 5y 2m |
| Blmbg. Barc. U.S. Aggregate | | | 0.4 (69) | 1.2 (87) | 3.5 (92) | 3.5 (92) | 2.2 (86) | 2.1 (91) | 4.0 (95) | 2.0 (-) | |
| *eV Core Plus Fixed Income Median* | | | *0.5* | *1.6* | *4.7* | *4.7* | *3.0* | *2.8* | *4.9* | - | |
| **Hedge Fund of Funds** | | | | | | | | | | | |
| Lighthouse Diversified | 16,335,804 | 6.3 | 1.8 | 3.0 | 5.3 | 5.3 | 3.2 | 5.7 | 3.0 | 5.7 | 5y 2m |
| HFRI Fund of Funds Composite Index | | | 2.0 | 4.3 | 7.7 | 7.7 | 2.6 | 4.0 | 1.1 | 4.2 | |
| Pointer Offshore LTD | 15,316,397 | 5.9 | 3.1 | 8.1 | 16.4 | 16.4 | 6.5 | 8.9 | 6.2 | 8.9 | 5y |
| HFRI Fund of Funds Composite Index | | | 2.0 | 4.3 | 7.7 | 7.7 | 2.6 | 4.0 | 1.1 | 4.0 | |
| **Real Estate** | | | | | | | | | | | |
| Oaktree RE Opportunities Fund VI | 6,091,245 | 2.4 | 1.3 | 3.8 | 5.1 | 5.1 | 6.2 | - | - | 9.1 | 4y 11m |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 10.2 | |
| Walton Street Real Estate Fund VII, L.P.[CE] | 5,339,687 | 2.1 | 0.0 | 1.7 | 8.0 | 8.0 | 11.2 | - | - | 15.4 | 4y 6m |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 10.1 | |
| Walton Street Real Estate Fund VIII, L.P.[CE] | 3,499,794 | 1.4 | 0.0 | 2.4 | - | - | - | - | - | 9.5 | 0y 7m |
| NCREIF Property Index | | | 1.8 | 3.5 | 7.0 | 7.0 | 9.4 | 10.2 | 6.1 | 4.1 | |
| **Total Plan** | | | | | | | | | | | |
| Total Cash Balance Plan | 259,059,538 | 100.0 | 3.0 | 6.3 | 14.5 | 14.5 | 6.7 | 8.2 | 6.2 | 8.4 | 5y 2m |
| Total Cash Balance Plan Benchmark | | | 3.3 | 6.7 | 13.5 | 13.5 | 6.5 | 7.8 | 5.5 | 7.9 | |
| Pre-Pavilion Total Cash Balance Plan Benchmark | | | 3.3 | 5.6 | 9.6 | 9.6 | 6.2 | 9.3 | 6.2 | 9.2 | |

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 December 31, 2017 ($ in Millions)

| Partnership | Vintage Year | Committed Capital | Paid-in Capital | Unfunded Commitment | Market Value[1] | Distributions | Total Value | Net IRR[2] | TV / PI | D / PI |
|---|---|---|---|---|---|---|---|---|---|---|
| **Surplus Cash** | | | | | | | | | | |
| Oaktree RE Opportunities VI | 2012 | $14.0 | $14.0 | $3.2 | $10.3 | $8.9 | $19.2 | 9.2% | 1.4 | 0.6 |
| Walton Street RE Fund VII | 2012 | $14.0 | $11.5 | $8.1 | $8.9 | $6.2 | $15.1 | 14.7% | 1.3 | 0.5 |
| Walton Street RE Fund VIII | 2017 | $13.0 | $3.3 | $9.7 | $4.5 | $0.0 | $4.5 | N/A | 1.4 | 0.0 |
| Total | | $41.0 | $28.8 | $21.1 | $23.7 | $15.1 | $38.9 | | 1.4 | 0.5 |
| **Cash Balance** | | | | | | | | | | |
| Oaktree RE Opportunities VI | 2012 | $8.4 | $8.4 | $1.9 | $6.1 | $5.7 | $11.7 | 8.8% | 1.4 | 0.7 |
| Walton Street RE Fund VII | 2012 | $8.4 | $6.9 | $4.9 | $5.3 | $3.7 | $9.1 | 14.5% | 1.3 | 0.5 |
| Walton Street RE Fund VIII | 2017 | $10.0 | $2.5 | $7.5 | $3.5 | $0.0 | $3.5 | N/A | 1.4 | 0.0 |
| Total | | $26.8 | $17.8 | $14.3 | $14.9 | $9.4 | $24.3 | | 1.4 | 0.5 |

[1] 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.
[2] Net IRR is through the previous quarter end.

# Asset Class Diversification

# Current Views and Recommendations: Spring Cleaning

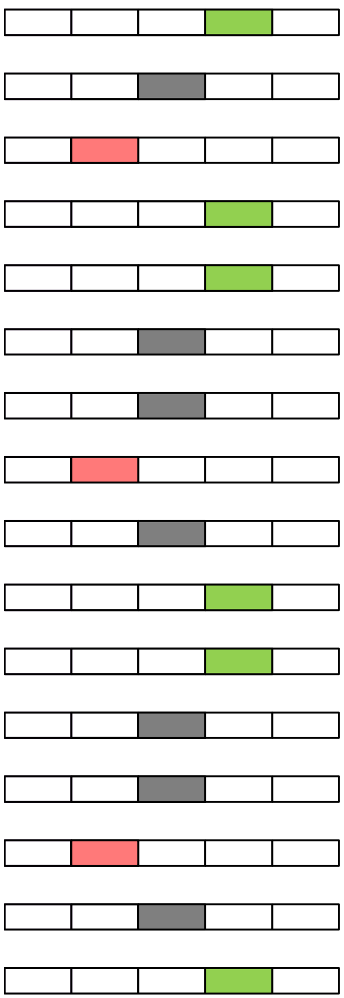
Prepare for a shift to a higher volatility regime:

- Ensure adequate liquidity sources
- Ensure appropriate diversification – diversification is likely to provide more important benefits than has been the case since the equity market bottom in March of 2009

| Recommendation | Implication |
|---|---|
| Ensure the availability of adequate liquidity | Sufficient liquidity should be available in portfolio sleeves such that timely rebalancing can be undertaken to manage risk, capture diversification benefits, and take advantage of tactical opportunities from market dislocations. |
| Build in a portfolio stabilizer through fixed income | Higher quality fixed income provides diversification and downside protection relative to equities and equity substitutes in the event of a volatility regime shift. |
| Maintain U.S./Emerging Markets equity barbell | Overweight U.S. and emerging market equities and underweight developed ex-U.S. equities. This provides maximum exposure to global growth while managing overall equity portfolio volatility. |
| Evaluate equity portfolio structure | Up/down market risks have shifted. Evaluate allocations to index funds, types of index funds used, as well as the types of active managers in the investment program with the goal of reducing exposure to the momentum factor and managing overall equity portfolio beta. |
| Reduce corporate credit spread duration exposure | Credit spreads are priced to perfection providing little protection against any spread widening which is likely to occur in the event of an increase in volatility. |
| Evaluate alternative strategies | Consider alternative strategies that may provide positive performance during a higher volatility regime or equity market downturn. |

# Asset Class Outlooks

**Near-Term View**



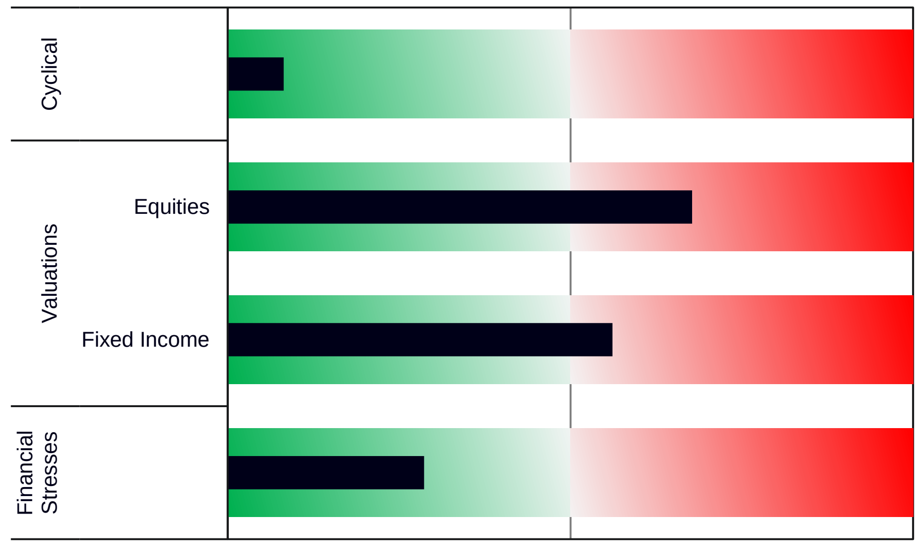
| | LT Return* | Qualitative Assessment |
|---|---|---|
| US Large Cap Equity | 7.2% | ▪ Overweight U.S. and emerging market equities while underweighting developed ex-U.S. equities. This provides maximum exposure to global growth while managing overall equity portfolio volatility and reducing currency risk.<br>▪ Up/down market risks have shifted. Evaluate allocations to index funds, types of index funds used, as well as the types of active managers in the investment program with the goal of reducing exposure to the momentum factor and controlling overall equity portfolio beta. |
| US Small Cap Equity | 8.4% | |
| International Equity | 7.6% | |
| Emerging Markets | 9.1% | |
| Private Equity | 10.5% | |
| Long/Short Equity | 5.1% | |
| Bonds – Core (US) | 3.1% | ▪ Despite low yield levels, high quality fixed income continues to provide investors with diversification benefits. Diversification benefits appear to be particularly pronounced in the securitized markets tied to U.S. housing and the consumer.<br>▪ Improving global growth combined with attractive relative yields have made emerging market debt an appealing investment with upside potential from currency moves. As with other spread product, however, historically narrow spreads should give pause to investors for whom equity investments are an option.<br>▪ 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. |
| Bonds – Core (Non-Dollar) | 2.8% | |
| Bonds – Spread Sectors | 3.8% | |
| Bonds – Emerging Markets | 4.9% | |
| Long/Short Fixed Income | 5.0% | |
| Distressed | 8.8% | |
| Diversified Hedge Funds | 4.9/5.5% | ▪ Opportunities exist for nimble, specialized multi-strategy and diversifying strategies. |
| Real Assets – Commodities | 5.4% | ▪ Inflationary risks remain muted. To become a more elevated risk, the emergence of stronger growth likely is required. As a result, investors should receive near-term inflation protection from equity positions.<br>▪ Strategies with income and some sensitivity to inflation, however, offer opportunities. |
| Real Assets – Real Estate | 6.4% | |
| Real Assets – Infrastructure | 6.3% | |

****Represents 2017 PAG Asset Allocation Assumptions published in January 2017***

# Where are We Now: Cyclical Risks Remain Low

- Cyclical risks and financial stresses appear very low - a key reason why we believe that risk assets should perform well in 2018.
- However, the post-global financial crisis period of global monetary accommodation is coming to an end, beginning with the U.S. Europe, the U.K., Canada, and Japan have all signaled intentions to normalize monetary policy.
- Equity, fixed income, and real estate valuations are full.
- Full valuations, a shift in monetary policy, and the potential for policy mistakes to increase cyclical risks likely will change the volatility regime. Investor sentiment and excessive risk-taking behavior is likely to turn as well. This is a good time to evaluate and potentially reposition portfolios (i.e., spring cleaning) to avoid uncompensated risks.

**Current Risk Levels**



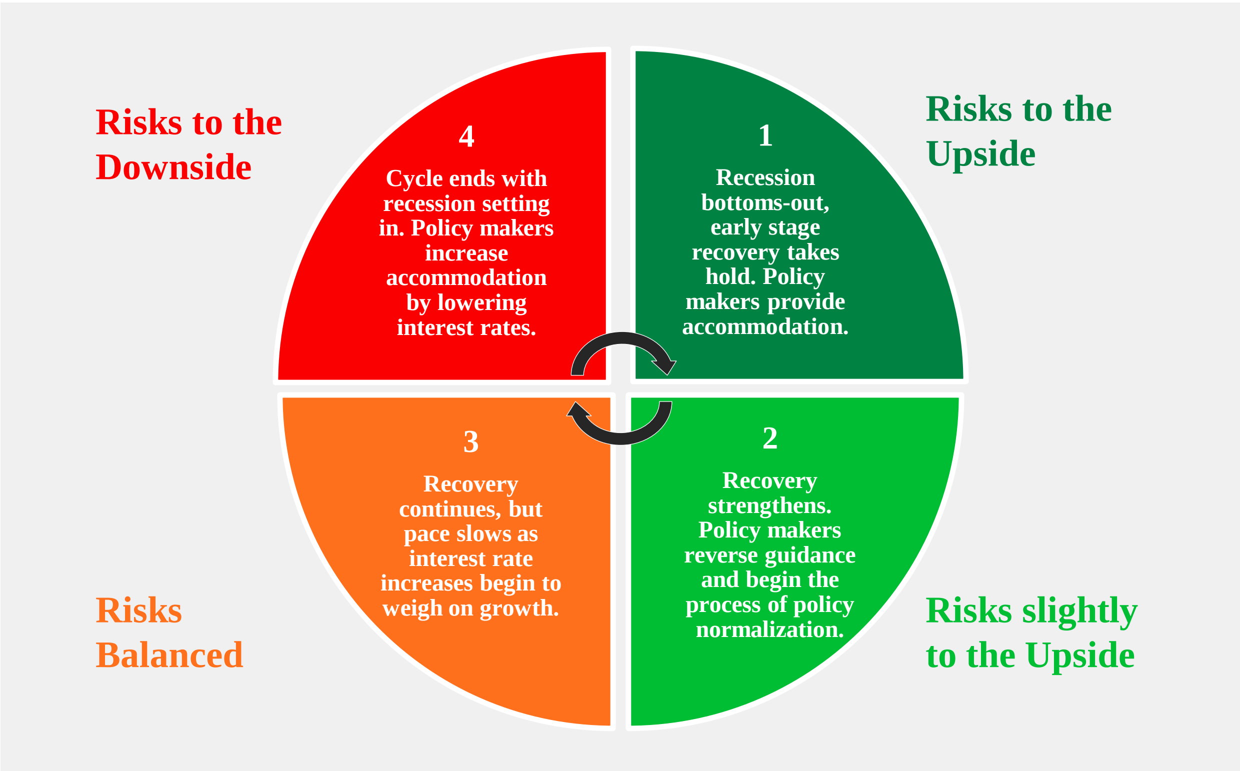

***Source: Bloomberg, FactSet, Recession Alert, & Pavilion Analysis***

**Real World GDP Growth**
(Latest Estimate: 4.9)


*Note: The black dashed line represents the model's estimate of long-run growth. The real-time estimate of underlying activity (blue line) considers only the data available at each point in time. The historical estimate (red line) uses all available data as of today, including revisions.*
*Source: Fulcrum Asset Management.*

# Tracking the Cycle

**The business cycle remains intact with a low probability of a recession.**
**These conditions suggest risk assets can continue to provide positive returns.**




Current Broad Market Indicators:

- Global growth: **positive, above trend**
- Inflation risks: **low likely rising**
- Accommodation: **positive but declining**
- Interest rates: **rising gradually, yield curve flattening**
- Volatility: **low/low**
- Valuations: **full**
- Earnings: **improving**

**The business cycle continues to age and is likely transitioning from the second to third stage.**

# Growth Has Improved

Economic growth continues to improve across virtually all economic regions. This improvement is illustrated by the Composite Purchasing Managers Indices representing manufacturing as well as service sectors in most economies.

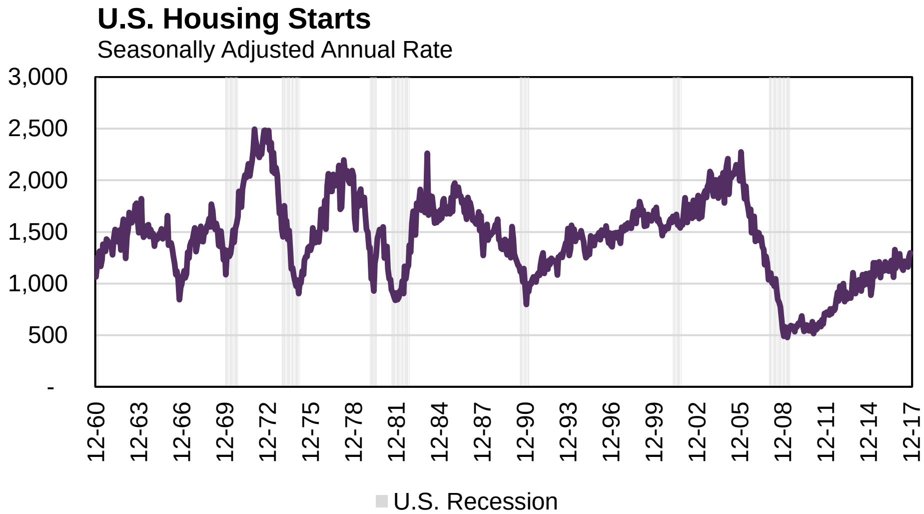
| | Dec-15 | Jan-16 | Feb-16 | Mar-16 | Apr-16 | May-16 | Jun-16 | Jul-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 | Jan-17 | Feb-17 | Mar-17 | Apr-17 | May-17 | Jun-17 | Jul-17 | Aug-17 | Sep-17 | Oct-17 | Nov-17 | Dec-17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Global | 53.2 | 52.3 | 52.8 | 53.3 | 52.5 | 52.3 | 50.6 | 51.4 | 51.4 | 51.0 | 51.2 | 51.6 | 51.7 | 51.7 | 53.2 | 53.3 | 53.5 | 53.8 | 53.6 | 53.8 | 53.7 | 53.8 | 53.7 | 53.6 | 53.9 |
| Developed | 53.7 | 53.2 | 51.2 | 51.7 | 51.9 | 51.5 | 51.5 | 51.6 | 51.7 | 52.0 | 53.7 | 54.0 | 54.1 | 54.6 | 54.1 | 54.2 | 54.4 | 54.4 | 54.5 | 54.4 | 54.6 | 54.6 | 55.0 | 54.9 | 54.8 |
| Emerging | 49.5 | 50.1 | 49.0 | 50.4 | 49.9 | 49.5 | 50.0 | 51.4 | 51.3 | 51.2 | 51.8 | 51.5 | 51.9 | 51.9 | 52.1 | 52.5 | 52.0 | 52.3 | 51.5 | 51.4 | 52.1 | 51.9 | 51.5 | 51.9 | 53.0 |
| U.S. | 54.0 | 53.2 | 50.0 | 51.3 | 52.4 | 50.9 | 51.2 | 51.8 | 51.5 | 52.3 | 54.9 | 54.9 | 54.1 | 55.8 | 54.1 | 53.0 | 53.2 | 53.6 | 53.9 | 54.6 | 55.3 | 54.8 | 55.2 | 54.5 | 54.1 |
| Canada* | 47.5 | 49.3 | 49.4 | 51.5 | 52.2 | 52.1 | 51.8 | 51.9 | 51.1 | 50.3 | 51.1 | 51.5 | 51.8 | 53.5 | 54.7 | 55.5 | 55.9 | 55.1 | 54.7 | 55.5 | 54.6 | 55.0 | 54.3 | 54.4 | 54.7 |
| U.K. | 55.1 | 55.7 | 52.7 | 53.7 | 52.0 | 53.2 | 52.6 | 47.5 | 53.4 | 54.0 | 54.7 | 55.1 | 56.6 | 55.2 | 53.7 | 54.9 | 56.2 | 54.3 | 53.8 | 54.1 | 54.0 | 54.2 | 55.8 | 54.8 | 54.9 |
| Euro Zone | 54.3 | 53.6 | 53.0 | 53.1 | 53.0 | 53.1 | 53.1 | 53.2 | 52.9 | 52.6 | 53.3 | 53.9 | 54.4 | 54.4 | 56.0 | 56.4 | 56.8 | 56.8 | 56.3 | 55.7 | 55.7 | 56.7 | 56.0 | 57.5 | 58.1 |
| Germany | 55.5 | 54.5 | 54.1 | 54.0 | 53.6 | 54.5 | 54.4 | 55.3 | 53.3 | 52.8 | 55.1 | 55.0 | 55.2 | 54.8 | 56.1 | 57.1 | 56.7 | 57.4 | 56.4 | 54.7 | 55.8 | 57.7 | 56.6 | 57.3 | 58.9 |
| France | 50.1 | 50.2 | 49.3 | 50.0 | 50.2 | 50.9 | 49.6 | 50.1 | 51.9 | 52.7 | 51.6 | 51.4 | 53.1 | 54.1 | 55.9 | 56.8 | 56.6 | 56.9 | 56.6 | 55.6 | 55.2 | 57.1 | 57.4 | 60.3 | 59.6 |
| Italy | 56.0 | 53.8 | 53.7 | 52.4 | 53.1 | 50.8 | 52.6 | 52.2 | 51.9 | 51.1 | 51.1 | 53.4 | 52.9 | 52.8 | 54.8 | 54.2 | 56.8 | 55.2 | 54.5 | 56.2 | 55.8 | 54.3 | 53.9 | 56.0 | 56.5 |
| Spain | 55.2 | 55.3 | 54.5 | 55.1 | 55.2 | 54.8 | 55.7 | 53.7 | 54.8 | 54.1 | 54.4 | 55.2 | 55.5 | 54.7 | 57.0 | 56.8 | 57.3 | 57.2 | 57.7 | 56.7 | 55.3 | 56.4 | 55.1 | 55.2 | 55.4 |
| Greece* | 50.2 | 50.0 | 48.4 | 49.0 | 49.7 | 48.4 | 50.4 | 48.7 | 50.4 | 49.2 | 48.6 | 48.3 | 49.3 | 46.6 | 47.7 | 46.7 | 48.2 | 49.6 | 50.5 | 50.5 | 52.2 | 52.8 | 52.1 | 52.2 | 53.1 |
| Ireland | 59.2 | 61.1 | 59.5 | 60.7 | 58.1 | 59.1 | 59.2 | 56.5 | 56.9 | 54.8 | 54.0 | 55.5 | 58.4 | 59.3 | 57.8 | 56.9 | 58.7 | 58.7 | 58.0 | 57.0 | 58.2 | 57.6 | 56.0 | 57.7 | 60.2 |
| Australia | 51.9 | 51.5 | 53.5 | 58.1 | 53.4 | 51.0 | 51.8 | 56.4 | 46.9 | 49.8 | 50.9 | 54.2 | 55.4 | 51.2 | 59.3 | 57.5 | 59.2 | 54.8 | 55.0 | 56.0 | 59.8 | 54.2 | 51.1 | 57.3 | 56.2 |
| Japan | 52.2 | 52.6 | 51.0 | 49.9 | 48.9 | 49.2 | 49.0 | 50.1 | 49.8 | 48.9 | 51.3 | 52.0 | 52.8 | 52.3 | 52.2 | 52.9 | 52.6 | 53.4 | 52.9 | 51.8 | 51.9 | 51.7 | 53.4 | 52.2 | 52.2 |
| China | 49.4 | 50.1 | 49.4 | 51.3 | 50.8 | 50.5 | 50.3 | 51.9 | 51.8 | 51.4 | 52.9 | 52.9 | 53.5 | 52.2 | 52.6 | 52.1 | 51.2 | 51.5 | 51.1 | 51.9 | 52.4 | 51.4 | 51.0 | 51.6 | 53.0 |
| Indonesia* | 47.8 | 48.9 | 48.7 | 50.6 | 50.9 | 50.6 | 51.9 | 48.4 | 50.4 | 50.9 | 48.7 | 49.7 | 49.0 | 50.4 | 49.3 | 50.5 | 51.2 | 50.6 | 49.5 | 48.6 | 50.7 | 50.4 | 50.1 | 50.4 | 49.3 |
| S. Korea* | 50.7 | 49.5 | 48.7 | 49.5 | 50.0 | 50.1 | 50.5 | 50.1 | 48.6 | 47.6 | 48.0 | 48.0 | 49.4 | 49.0 | 49.2 | 48.4 | 49.4 | 49.2 | 50.1 | 49.1 | 49.9 | 50.6 | 50.2 | 51.2 | 49.9 |
| Taiwan* | 51.7 | 50.6 | 49.4 | 51.1 | 49.7 | 48.5 | 50.5 | 51.0 | 51.8 | 52.2 | 52.7 | 54.7 | 56.2 | 55.6 | 54.5 | 56.2 | 54.4 | 53.1 | 53.3 | 53.6 | 54.3 | 54.2 | 53.6 | 56.3 | 56.6 |
| India | 51.6 | 53.3 | 51.2 | 54.3 | 52.8 | 50.9 | 51.1 | 52.4 | 54.6 | 52.4 | 55.4 | 49.1 | 47.6 | 49.4 | 50.7 | 52.3 | 51.3 | 52.5 | 52.7 | 46.0 | 49.0 | 51.1 | 51.3 | 50.3 | 53.0 |
| Brazil | 43.9 | 45.1 | 39.0 | 40.8 | 39.0 | 38.3 | 42.3 | 46.4 | 44.4 | 46.1 | 44.9 | 45.3 | 45.2 | 44.7 | 46.6 | 48.7 | 50.4 | 50.4 | 48.5 | 49.4 | 49.6 | 51.1 | 49.5 | 48.9 | 48.8 |
| Mexico* | 52.4 | 52.2 | 53.1 | 53.2 | 52.4 | 53.6 | 51.1 | 50.6 | 50.9 | 51.9 | 51.8 | 51.1 | 50.2 | 50.8 | 50.6 | 51.5 | 50.7 | 51.2 | 52.3 | 51.2 | 52.2 | 52.8 | 49.2 | 52.4 | 51.7 |
| Russia | 47.8 | 48.4 | 50.6 | 50.8 | 51.3 | 51.2 | 53.5 | 53.5 | 52.9 | 53.1 | 53.7 | 55.8 | 56.6 | 58.3 | 55.4 | 56.3 | 55.3 | 56.0 | 54.8 | 53.4 | 54.2 | 54.8 | 53.2 | 56.3 | 56.0 |

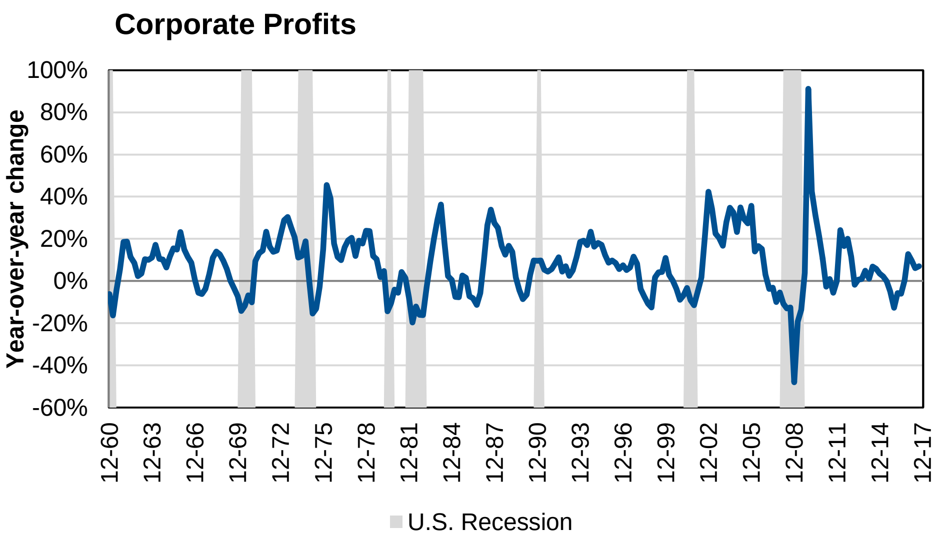
*Source: Bloomberg, JP Morgan*

| Key | Contraction | Expansion |
|---|---|---|

* Indicates manufacturing PMI data

# Global Economic Growth Should Continue



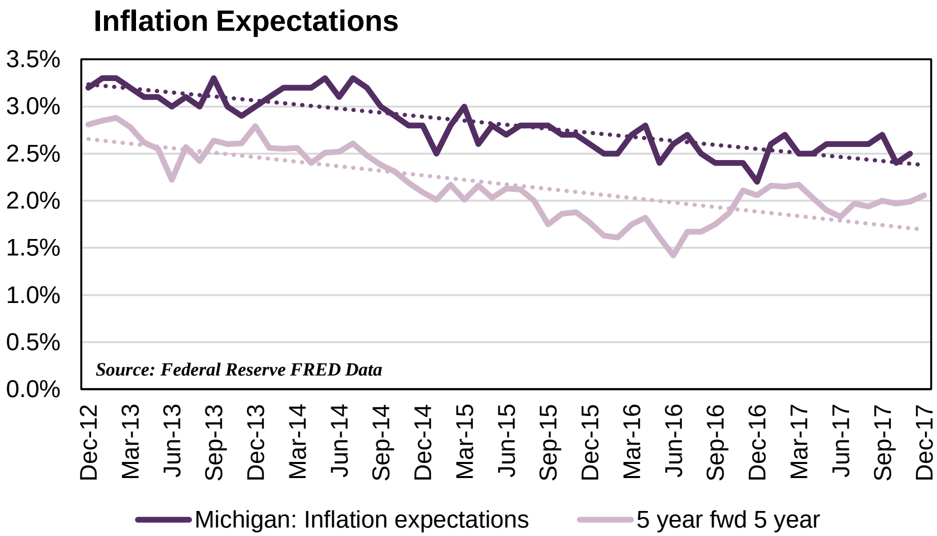




- ✓ Global growth: **positive, above trend**
- ❑ Inflation risks: **low likely rising**
- ❑ Accommodation: **positive but declining**
- ❑ Interest rates: **rising gradually, yield curve flattening**
- ❑ Volatility: **low**/**low**
- ❑ Valuations: **full**
- ❑ Earnings: **improving**

- Long-leading indicators such as employment growth, housing starts, and corporate profits suggest growth should continue.
- The middle income consumer is seeing a recovery in median wages and housing wealth that will strengthen demand and contribute to consumption growth.
- Tax cuts should provide additional although modest stimulus near-term.

PAVILION

# Inflation to Remain Subdued

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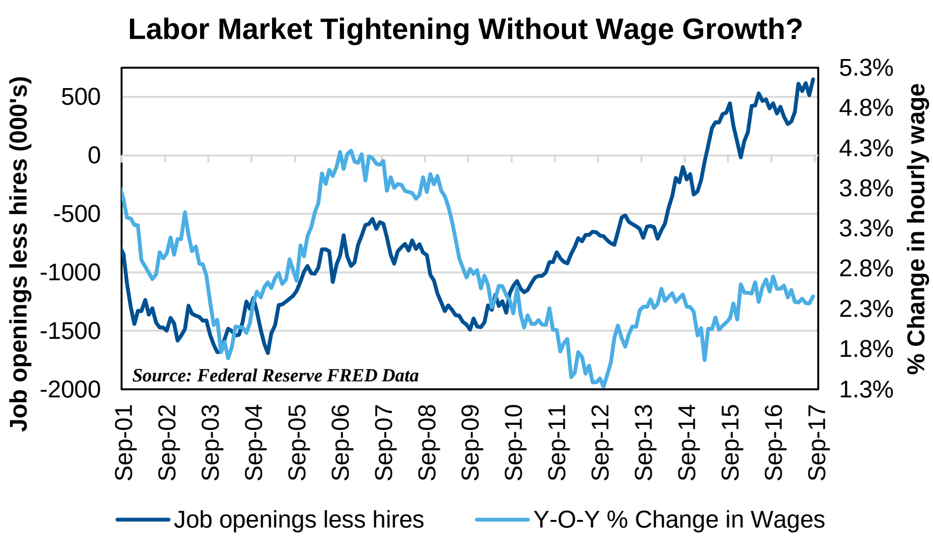
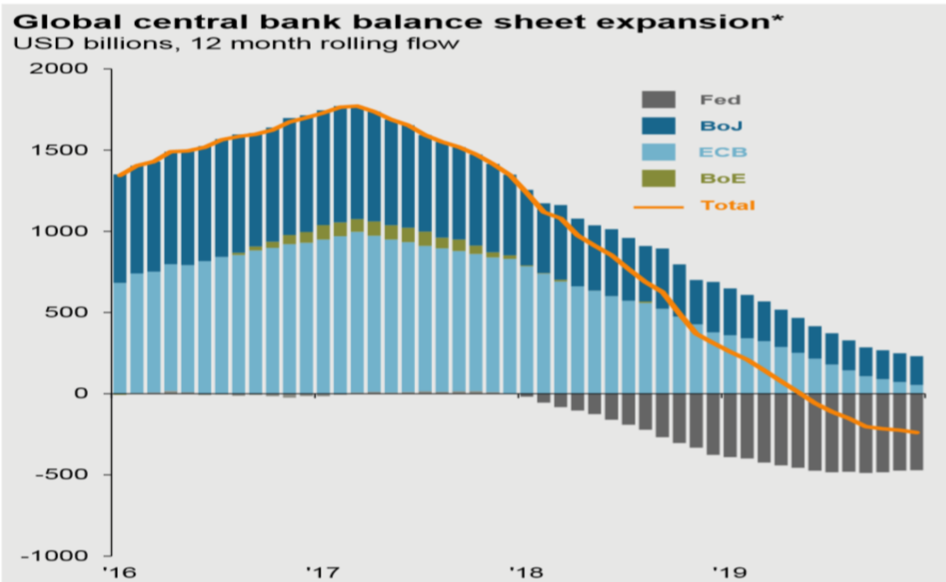



- Inflation remains subdued across developed markets, as well as most emerging markets. This likely will keep interest rates in check.
- One indicator to watch is wage growth. Should wages increase due to a tight labor market, inflation and interest rates could move up further than expected.

# Accommodation: Positive but Declining

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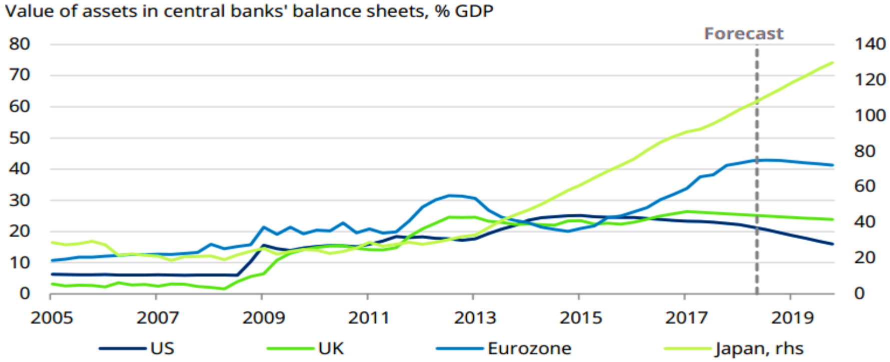
**Central Bank Balance Sheets are Starting to Contract, With the Exception of Japan**

Value of assets in central banks' balance sheets, % GDP

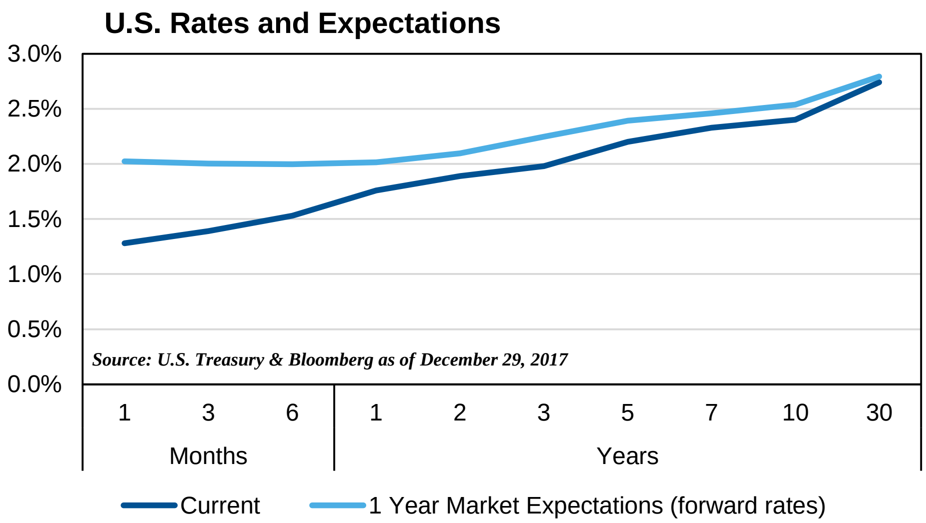


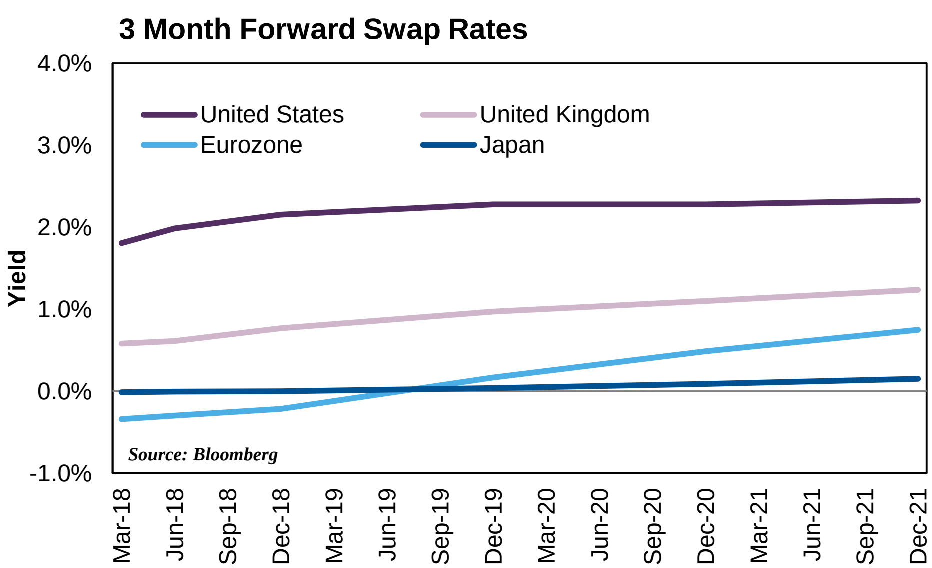

Forecast begins Q3 2017.
Source: Thomson Datastream, Schroders Economics Group, 26 September 2017.

- **U.S.:** Began normalizing monetary policy via three rate increases in 2017 and another three are anticipated in 2018. In addition, the Fed has begun very gradually reducing its balance sheet.
- **E.C.B.:** Minutes suggest an increasing possibility of concluding securities purchases in September, earlier than expected.
- **Japan:** The consensus anticipates that Japan also will begin the removal of various accommodative measures.

Source: J.P. Morgan Asset Management
*Includes the Bank of Japan, Bank of England, European Central Bank, and Federal Reserve. Balance sheet expansion assumes no more quantitative easing (QE) from BoE; tapering of ECB QE to 30bn EUR in January 2018 and 0 in October 2018; tapering of BoJ QE to 50trn JPY ann. in 1Q18, 40trn JPY ann. in 2Q18, 30trn JPY ann. in 4Q18, and 20 trn JPY ann. in 2019; and tapering of Fed QE per the September FOMC statement, incorporating a maturity schedule. Data are as of December 31, 2017

# Yield Curve: Steady but Flattening

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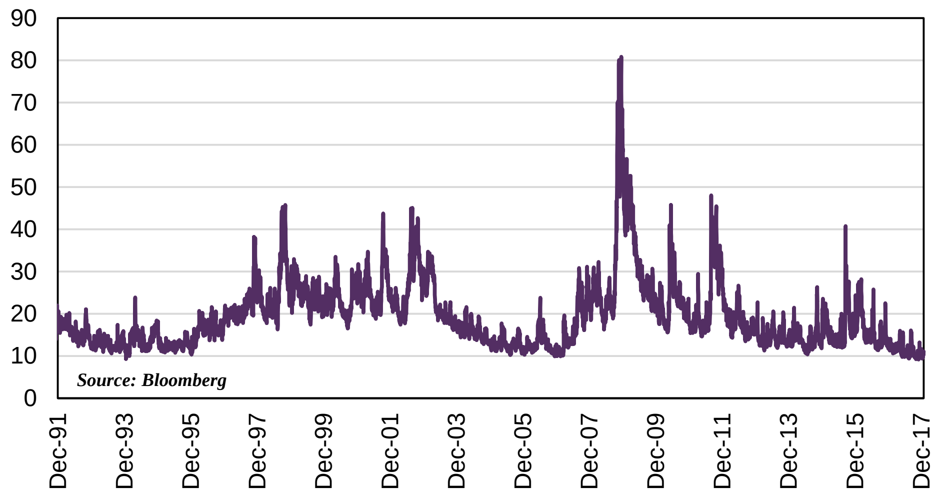
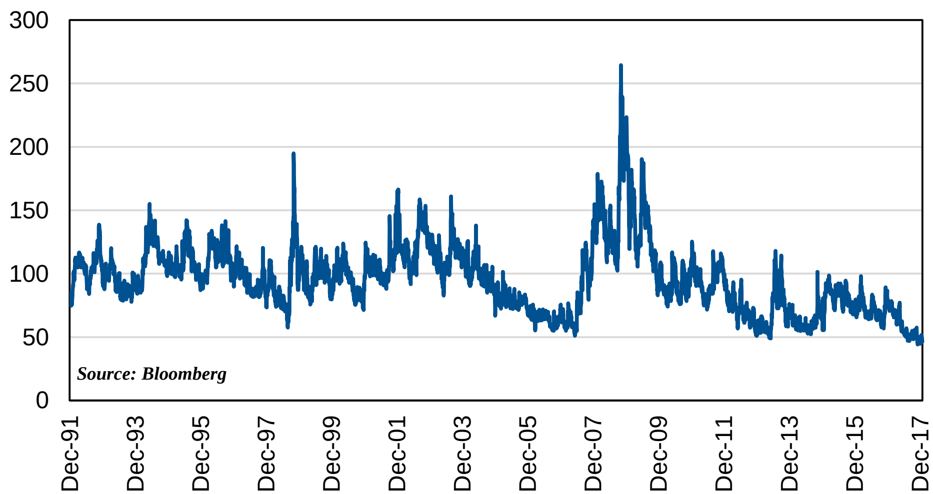
- Expectations are that interest rates will rise slightly, but be restrained by the gradual nature with which the Fed removes monetary accommodation and secular pressures (demographics, savings glut).
- While the divergence in monetary policies drove tightening financial conditions in late 2015, 2017 saw most central banks begin amending guidance resulting in monetary policy divergences narrowing.

# Volatility: Low

**VIX Index – Equity Market Volatility is at Historic Lows**




**MOVE Index - Bond Market Volatility is at Historic Lows**

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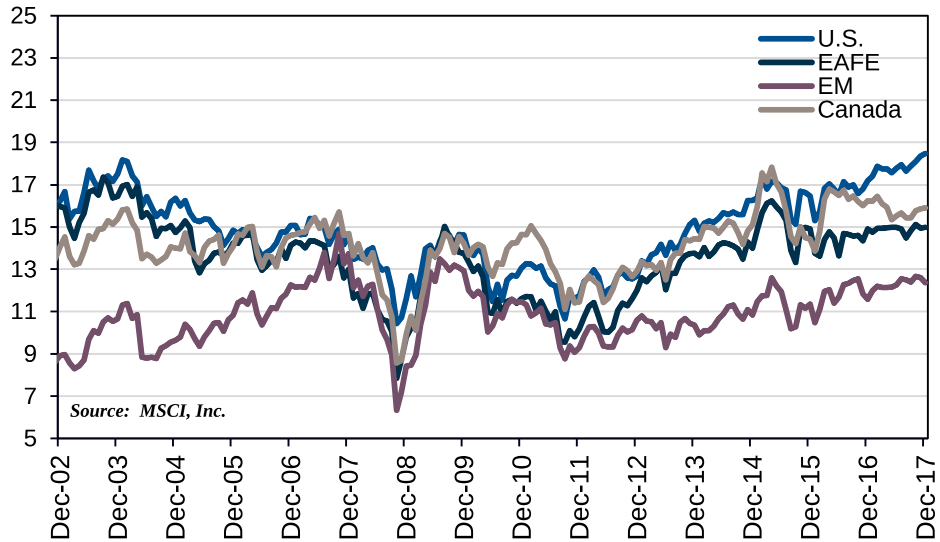
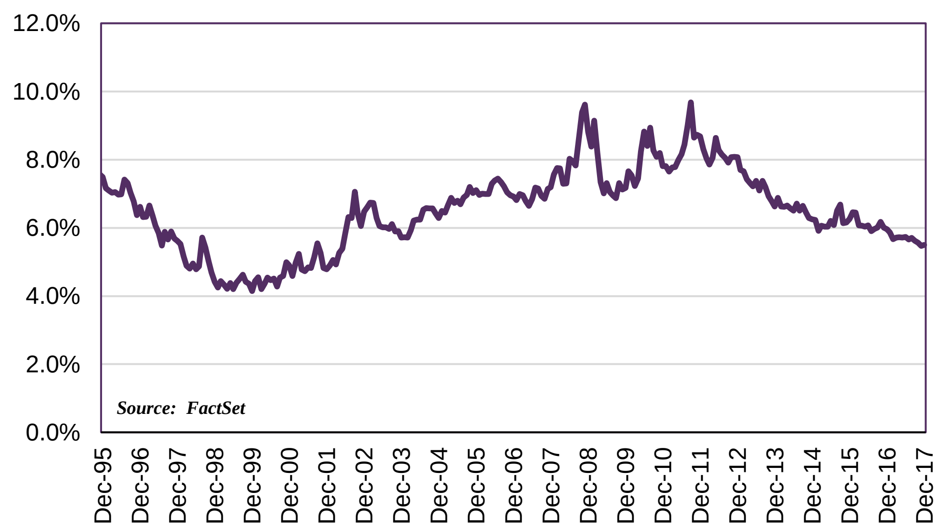
- Volatility in both the stock and bond markets is at historic low points. This is one factor that has resulted in full valuation levels.
- With a shift in monetary policy beginning in the U.S., as well as signals from the Eurozone and Japan on concerns over continued low interest rate policies, uncertainly levels likely will increase pushing up measured levels of volatility.

# Equity Valuations: Full

**Forward P/E Ratios**




**S&P 500 Forward Earnings Yield**

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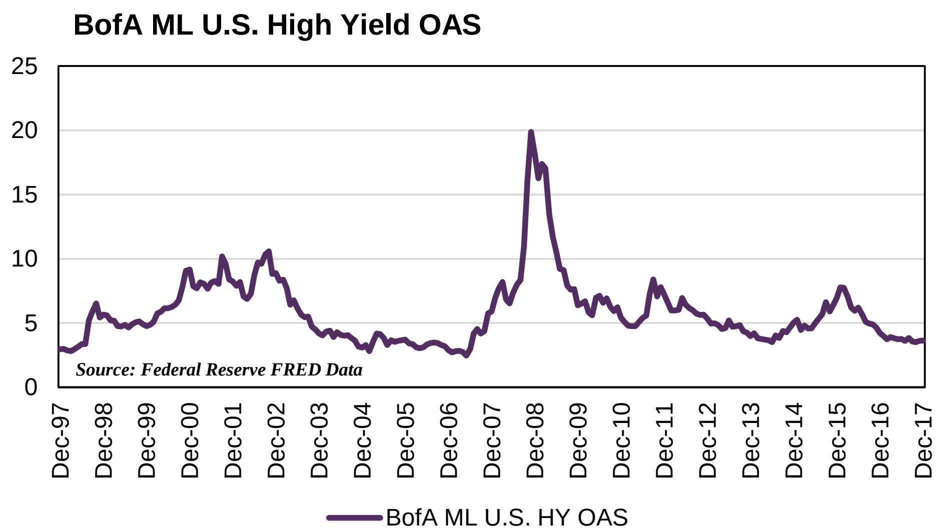
- Equity valuations are full relative to historic levels. Low interest rate and volatility levels are supportive of higher equity valuations. The earnings yield on the S&P 500 remains attractive relative to the yield on bonds.
- Current equity fundamentals are very strong and stronger than they have been at prior market peaks.

# Fixed Income Valuations: Full

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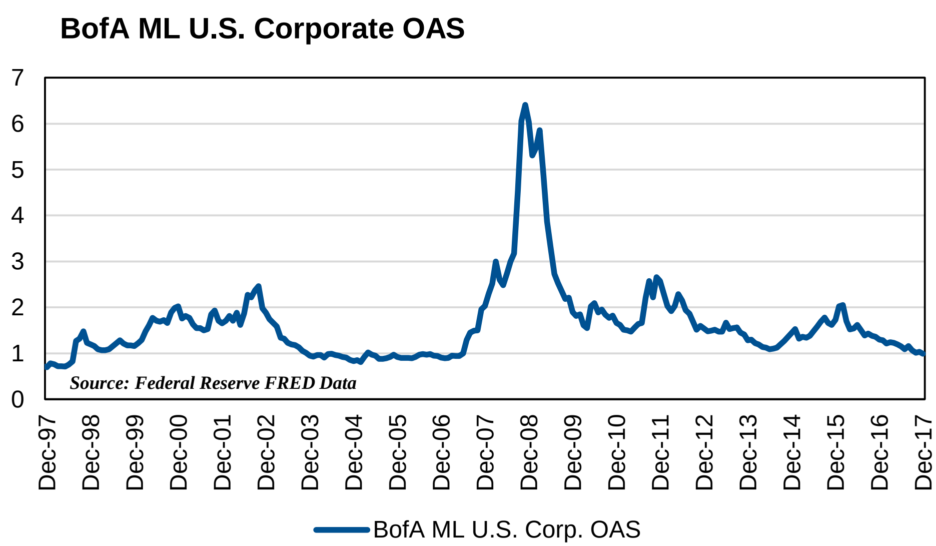
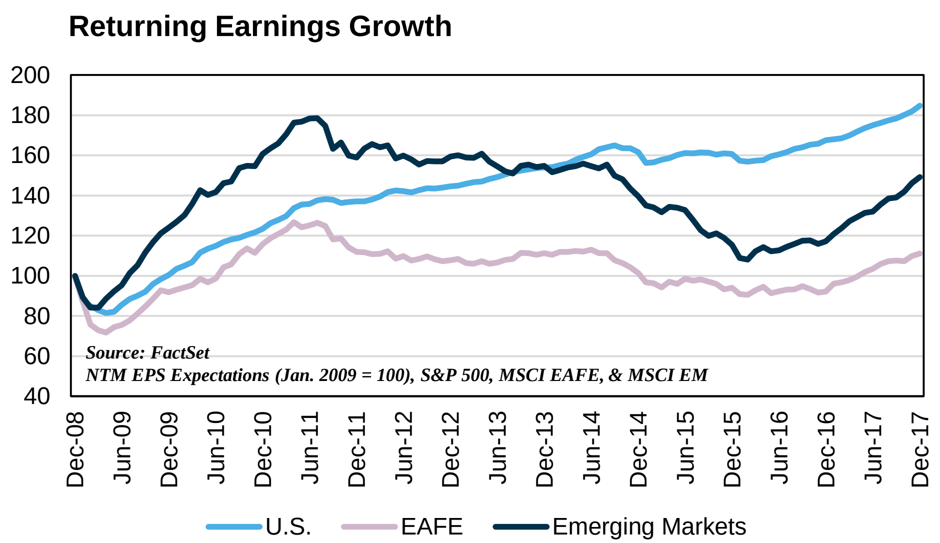



- According to Fitch, the rating outlook trend is the most upbeat its been in a decade, with positive outlooks outnumbering negatives. Reflecting this rosy outlook, credit spreads are at tight levels.
- Accommodative monetary policy and a low interest rate environment have been supportive of improving credit quality. An increase in interest rates due to monetary policy tightening would increase funding costs, and potentially increase uncertainty leading to greater risk aversion. Both factors could lead to spread widening.

# Earnings: Improving

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- ✓ Volatility: **low/low**
- ✓ Valuations: **full**
- ✓ Earnings: **improving**

**Tax scenario analysis**

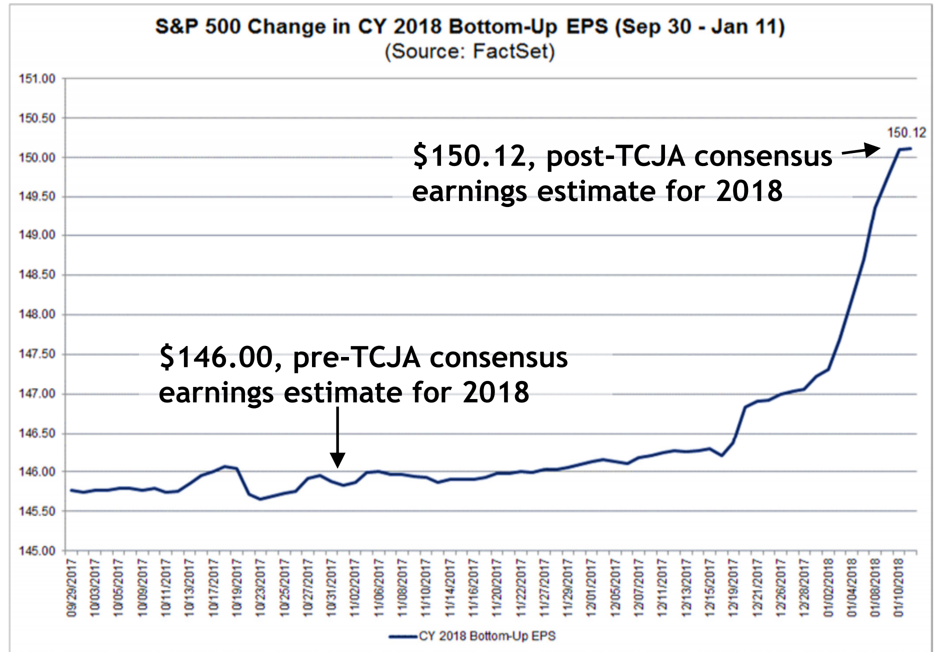
| | House Plan 21% tax rate | Senate Plan 21% tax rate |
|---|---|---|
| **S&P 500 Consensus 2018 EPS** | **$146.00** | **$146.00** |
| + Reduction in corporate tax rate | +12.90 | +12.90 |
| - Limiting interest deductibility | -1.00 | -2.80 |
| - One-time repatriation tax on foreign earnings | -3.80 | -4.00 |
| + Cash repatriation induced buybacks | +2.50 | +2.40 |
| *Total benefit from tax reform* | *+10.60* | *+8.50* |
| *Upside to consensus 2018 EPS* | *+7.3%* | *+5.8%* |
| **S&P EPS impact** | **$156.60** | **$154.50** |
| + Immediate expensing of capex (cash flow benefit) | +3.80 | +3.80 |
| Total cash flow benefit | $160.40 | $158.30 |

***Source: JP Morgan Equity Strategy, December 14, 2017***

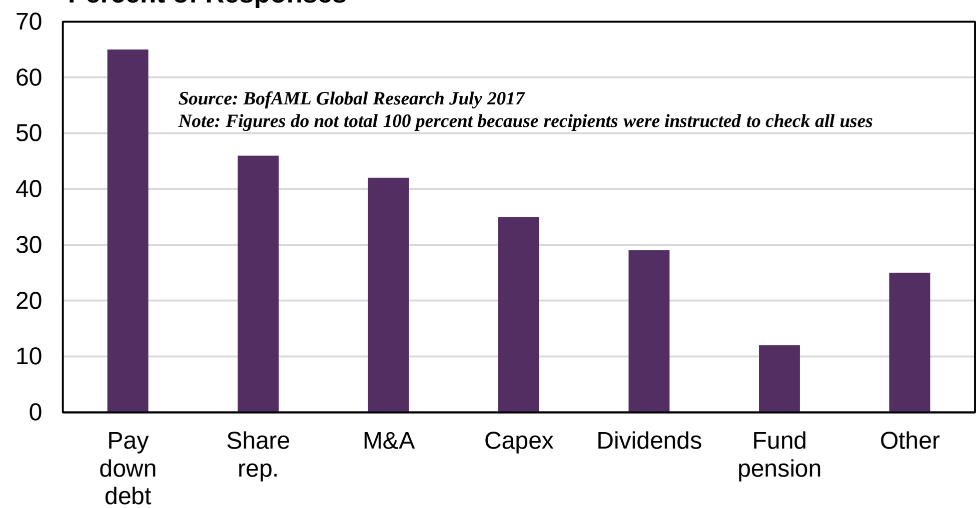
- Earnings growth is accelerating worldwide at 10% to 15% depending on the region.
- U.S. corporate tax cuts are estimated to increase earnings by 5% to 10%, although full analysis is far from complete.
- U.S. equity valuations look full to expensive. At low interest rate levels, however, valuations look more reasonable. Emerging market valuations are most attractive.

# Tax Cuts and Jobs Act

- The “Tax Cuts and Jobs Act” (TCJA) was passed by Congress on December 20th and signed into law on the 22nd.
- According to the Tax Policy Institute, 80.4% of households will receive some form of tax cut.
- Despite the cut, the impact on GDP growth likely will be modest with estimates ranging from 0.25% to 0.5% for 2018.
- The biggest impact from TCJA is the reduction in the corporate rate to 21%. How much will this effect earnings and how much is priced in?
- Analysts have only recently begun to revise earnings estimates to account for TCJA – according to FactSet, only 40% of analysts had revised estimates through January 11, so there appears to be room to go higher.



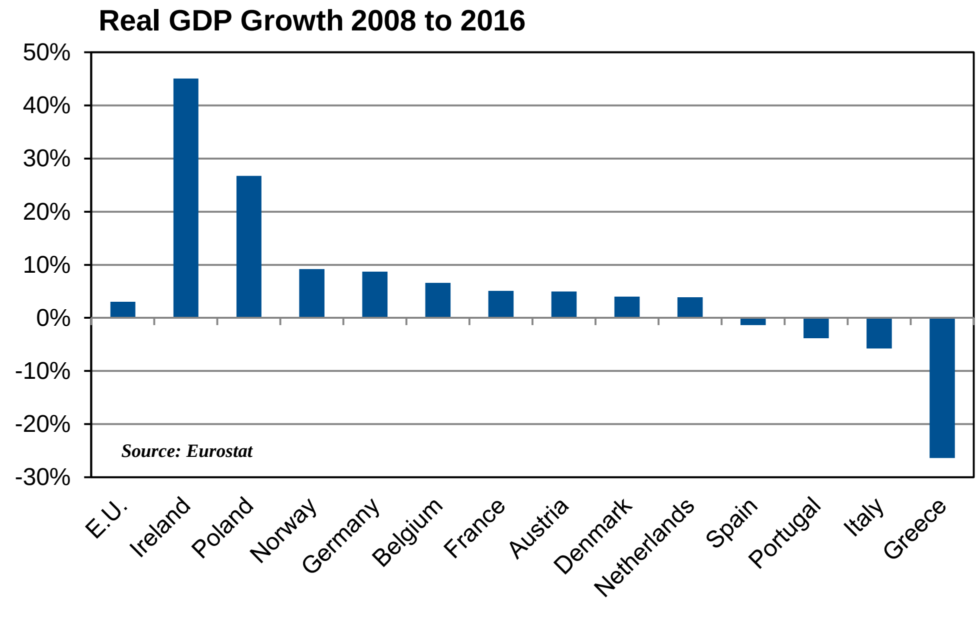

**How Would the Proceeds of Repatriated Earnings be Used?**
**Percent of Responses**

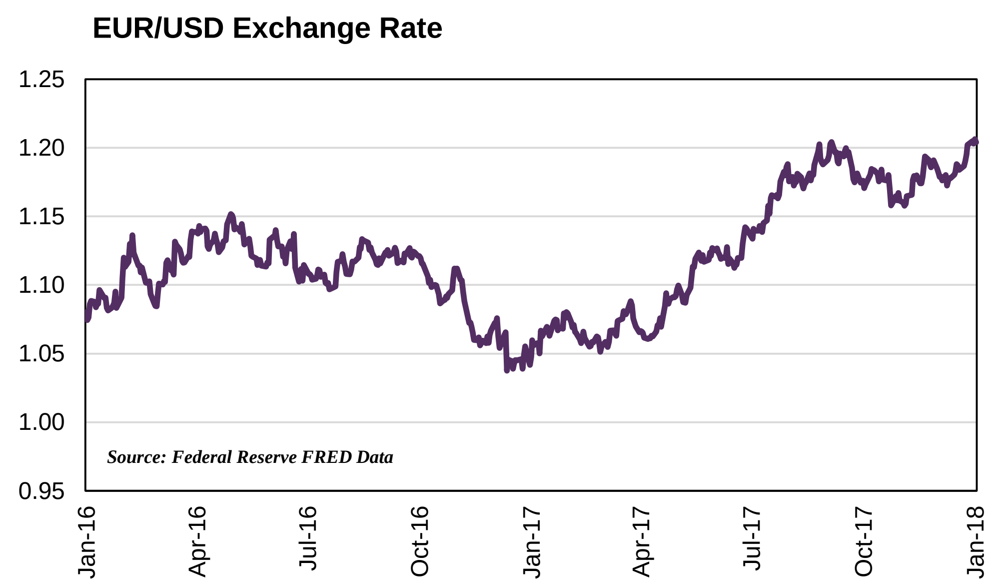


# Risks Remain: Normalizing Policy Too Quickly

**What will Europe do?**

- In April and July of 2011, fearful of inflation, the E.C.B. raised rates only to reverse course in December of that year.
- Once again the E.C.B. faces the challenge of a policy shift – when and how they should begin the process of normalizing rates.
- Moving too soon risks not only stalling the recovery but also catalyzing simmering populist movements currently destabilizing the E.U. – for example the disruptions in Catalonia and Greece.
- The challenge for the E.C.B. will be achieving a gradual policy shift without contributing to a rapid appreciation in the Euro, which would tighten financial conditions and potentially choke off E.U. growth.
- Such a move likely would create spillover effects in other economies putting further upward pressure on U.S. rates.

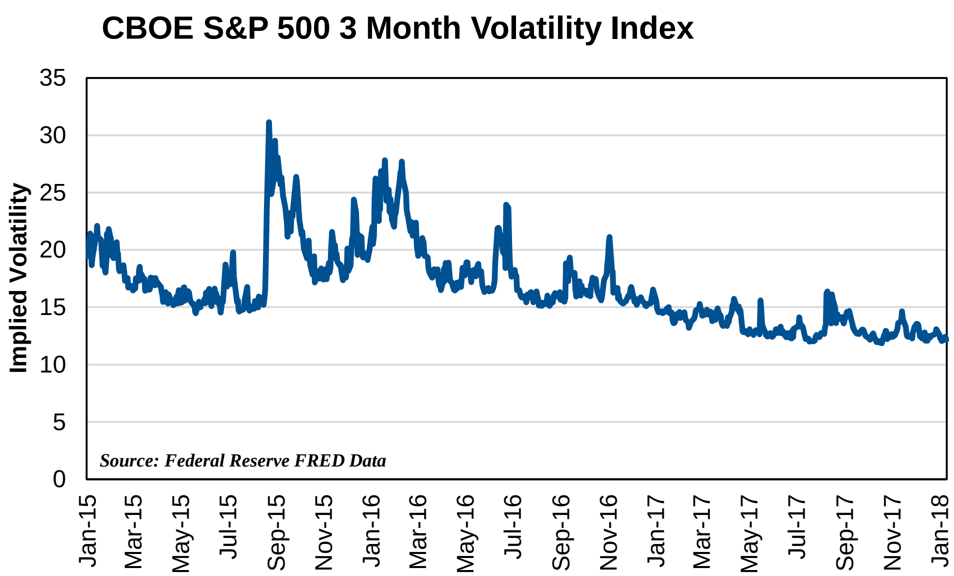


# Risks Remain: Transitioning From Low Volatility Regime

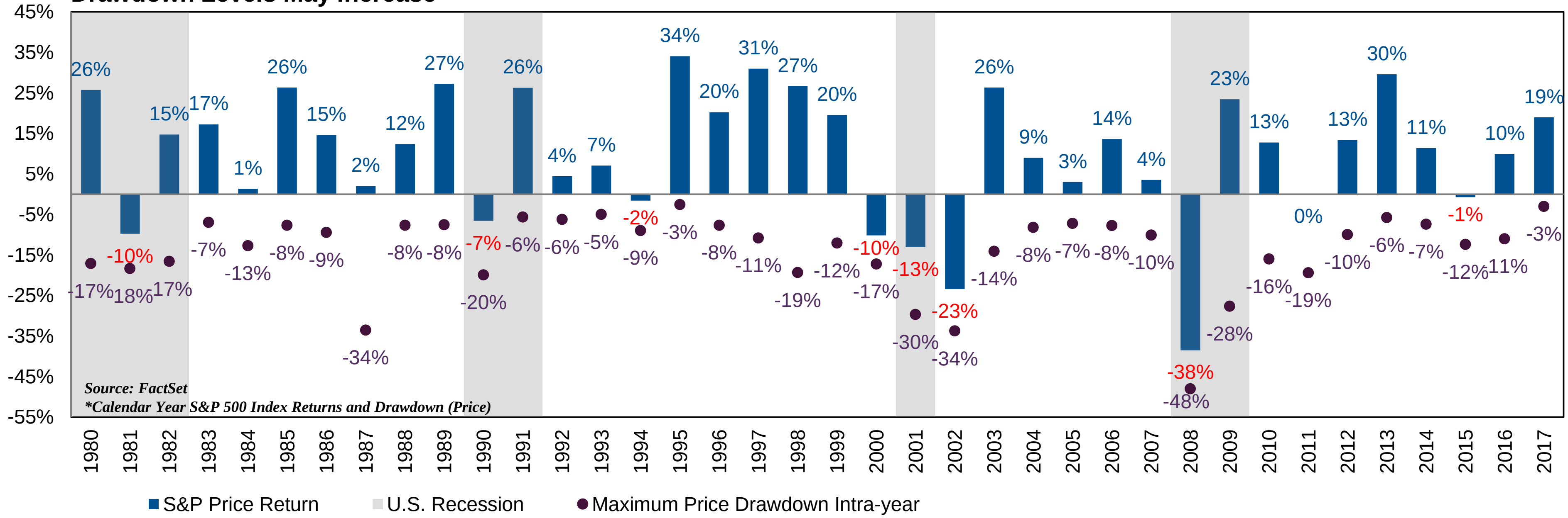
**Eventually, markets will transition from the current low volatility regime. Periods of low volatility often cause risk positions to build up. Transitions to higher volatility regimes can result in reductions of higher risk positions that create a negative feedback response – prices decline, volatility increases, and more selling occurs. This is particularly true given the increased reliance upon quantitative trading strategies and risk parity programs. Potential catalysts for such a shift include:**

- **Policy misstep by central bankers:** While the E.C.B. may present the biggest risk, other central banks also risk tightening financial conditions too quickly and reversing growth.
- **Breakdown in trade:** From Brexit to NAFTA, numerous trade agreements are under review or renegotiation. Any material disruption in trade, for example the U.S. unilaterally stepping out of NAFTA, could slow global growth.
- **Elevation in geo-political tensions:** Rhetoric between the U.S. and North Korea has escalated. Should tensions increase, risk assets could sell-off.
- **Government shut down or leadership uncertainty:** Polarization between the Democrat and Republican parties creates political uncertainty.



# Asset Implications: Summary Outlook

**Extreme Levels of Low Volatility are Unlikely to Persist, Portfolios Should be Prepared for Normalizing Markets: Drawdown Levels May Increase***

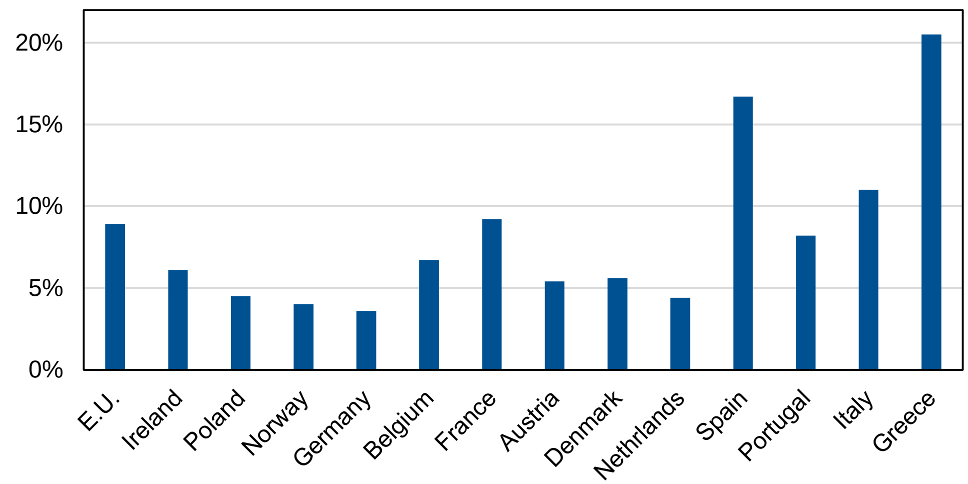



| Summary | Themes & Implementation | Key Risks |
|---|---|---|
| ▪ The synchronized global growth experienced in 2017 is expected to continue at least for the first half of 2018 and likely beyond, which should be supportive of risk assets.<br>▪ Low volatility regimes typically end due to weakening economic conditions usually following the tightening of financial conditions by policy makers.<br>▪ While the current stage of the economic cycle may persist for several quarters if not years, now is the time to begin some spring cleaning. | ▪ Game plan:<br>- Liquidity: provide flexibility to manage exposures and cash flows<br>- Diversification: protect capital in future bouts of volatility<br>- Volatility: reduce sensitivity to momentum while evaluating dynamic strategies<br>▪ Maintain U.S./Emerging Markets equity barbell<br>▪ Evaluate the equity structure to assure portfolio characteristics are suitable for an increase in volatility<br>▪ Reduce corporate credit spread duration exposure | Catalysts of volatility spikes<br>▪ Central bank policy misstep<br>▪ Trade policy disruption<br>▪ International conflict<br>▪ Governmental shock |

# Asset Implications: Equity Outlook

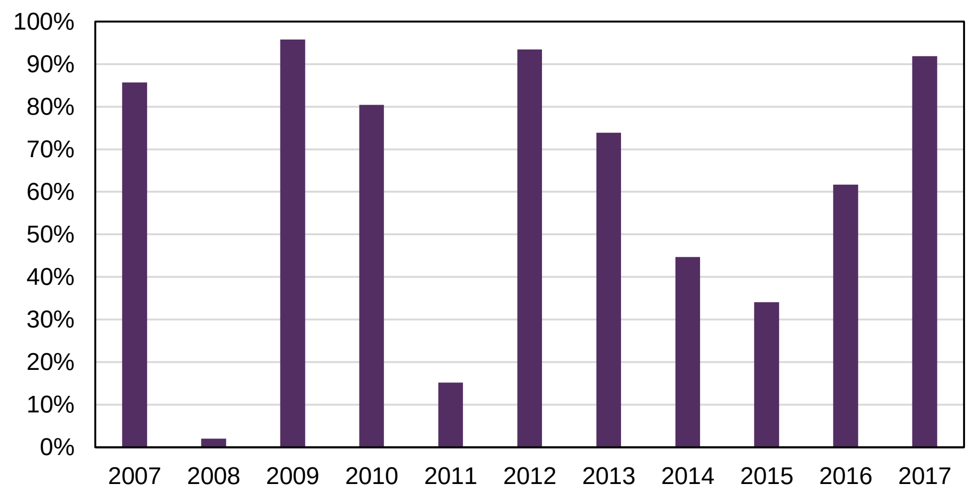
| Summary | |
|---|---|
| Strong equity market performance during 2017 was been a global phenomenon, reflecting improvements in worldwide growth, continued improvements in financial conditions, strong earnings growth and constrained inflation. 2018 should be a continuation of the past year but with elevated risks related to valuation levels and a move toward monetary policy normalization. | |
| **Themes & Implementation** | |
| Normalizing Volatility | Evaluate overall equity portfolio beta, concentration, and up/down market capture to assure appropriate levels of downside protection. |
| Uneven Regional Risks | Developed international markets, in particular Europe, have and will face challenges, as countries within the region have experienced an uneven recovery since the financial crisis. |
| Emerging Market Opportunities | Economic growth and stability, improved ROE and earnings combined with favorable valuations have enhanced the prospects for emerging markets. We recommend an overweight to emerging markets equity (higher beta) be balanced with an emphasis on U.S. equities (lower beta) to control risk exposures. |
| **Key Risks** | |
| Policy Misstep | As central banks shift guidance and policy towards the removal of accommodation, the risk is that they move too quickly. The European Central Bank may have the most difficult task, given the still uneven recovery in Europe. |

**Unemployment Rates Across the Eurozone**




*Source: Eurostat, January 9, 2018 release*

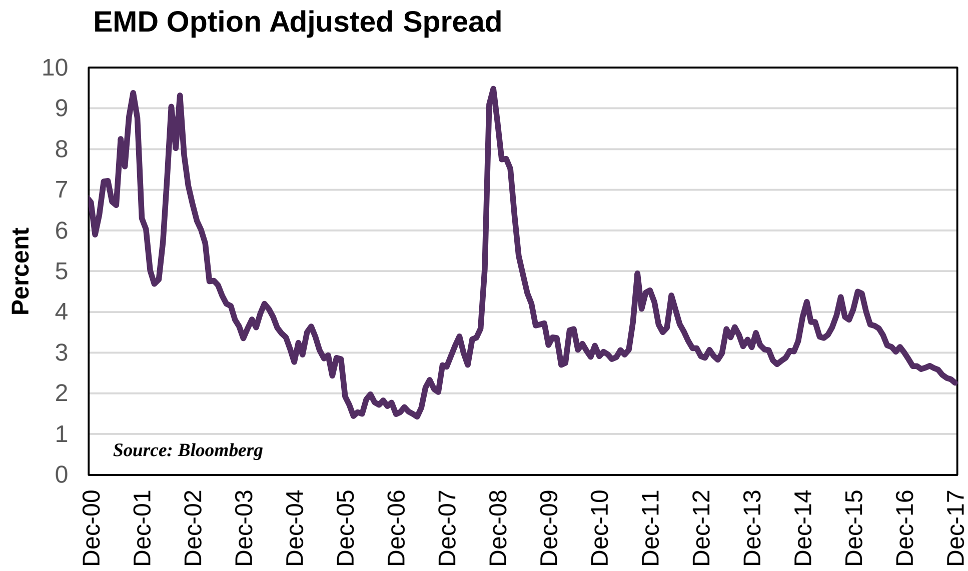
**Percent of Countries in MSCI ACWI With Positive Equity Market Returns**

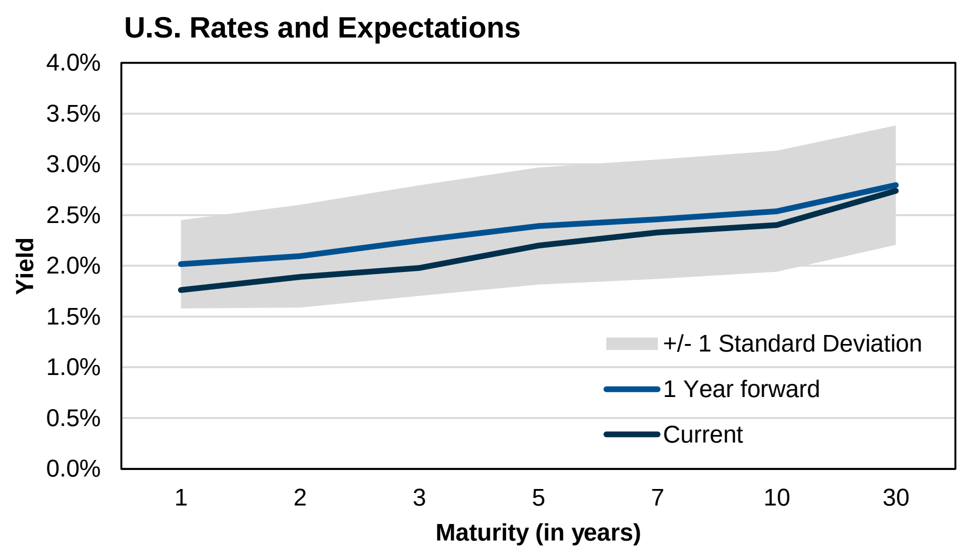



*Source: FactSet & Pavilion Analysis as of 12/29/2017*

# Asset Implications: Fixed Income Outlook

| Summary | |
|---|---|
| Despite low yield levels, high quality fixed income continues to provide investors with some diversification benefits and return opportunities. | |
| **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. |
| Emerging Markets Strengthening | Improving global growth conditions and attractive yields have made emerging market debt an appealing investment with upside potential for currency moves. Selectivity is becoming more important with the expectation of monetary policy shifts. |
| Illiquidity Premium | 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 with a focus on off-market transactions. Commitment levels should be managed carefully. |
| **Key Risks** | |
| Central Bank Policy | Improving economic conditions have motivated central bankers in the U.K., Japan, Canada, and the E.U. to contemplate the prospects for monetary policy normalization.  While the goal is to reduce accommodation without derailing growth, sharp changes in guidance likely would result in spiking correlations between risk (equity) and defensive assets (fixed income). |

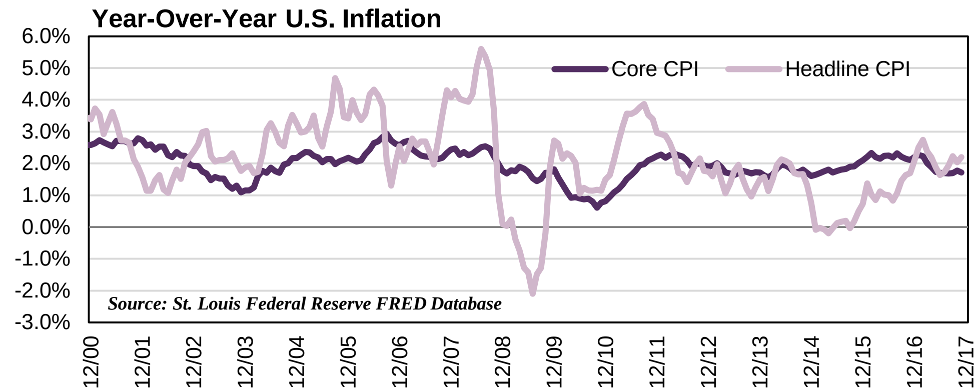


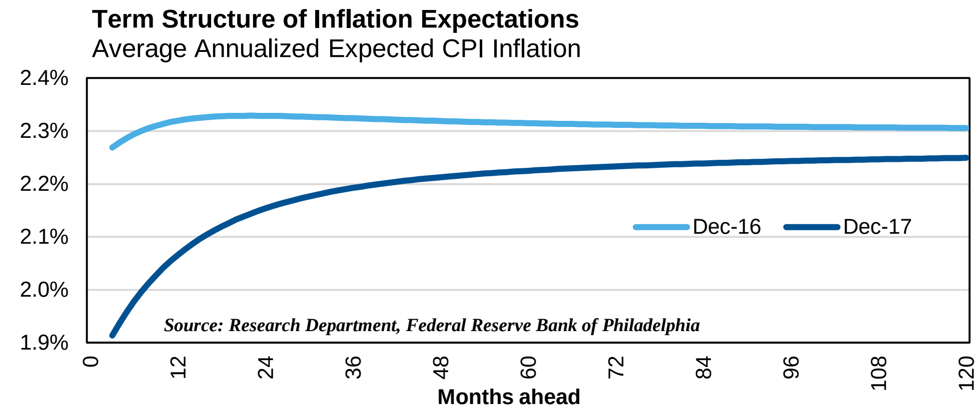



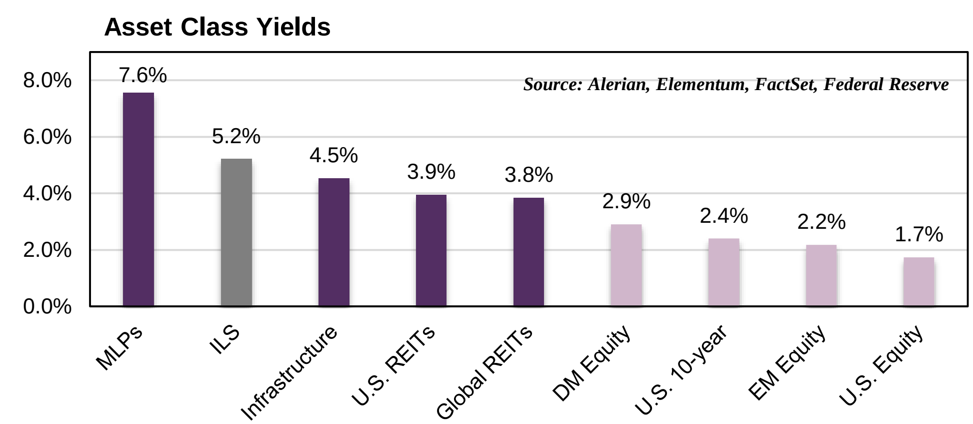

*Source: U.S. Treasury & Bloomberg as of December 29, 2017*

# Asset Implications: Real Assets Outlook

| Summary | |
|---|---|
| Inflationary risks remain muted, as a multitude of factors has weighed 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 strong economic growth. Real assets are expected to have a modest tailwind from earnings growth, somewhat offset by a modest valuation headwind from rising discount rates. |
| Diversified Earnings | Inflation-linked allocations with economic growth drivers represent a balance between return diversification and inflation protection. |
| Subdued Inflation | With inflation unlikely to spike, assets that provide protection against unexpected inflation, like commodities and natural resource equities, are likely to 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 | A targeted trade war with China appears to have abated, but rhetoric between North Korea and the U.S. has escalated. If policies become more aggressive toward North Korea, its close ally, China, may retaliate through trade policy with rippling effects on goods prices. |



# Asset Class Diversification

## Surplus Cash Investment Program Structure

As of December 31, 2017

| Manager | Asset Class/Type | Total Assets ($, mil.) | Percent of Total | Target Allocation | Weighting Relative to Target | Target Range |
|---|---|---|---|---|---|---|
| **Large-Cap Domestic Equity** | | **$189.2** | **21.7%** | **20.0%** | **+ 1.7%** | **20-30%** |
| Vanguard S&P 500 Index | Large-Cap Index | $118.8 | 13.6% | 10.0% | + 3.6% | |
| Sands | Large-Cap Growth | $ 34.5 | 4.0% | 5.0% | - 1.0% | |
| Barrow Hanley | Large-Cap Value | $ 36.0 | 4.1% | 5.0% | - 0.9% | |
| **Small-Cap Domestic Equity** | | **$ 42.2** | **4.8%** | **5.0%** | **- 0.2%** | |
| Conestoga | Small-Cap Growth | $ 21.0 | 2.4% | 2.5% | - 0.1% | |
| Wellington | Small-Cap Value | $ 21.2 | 2.4% | 2.5% | - 0.1% | |
| **International Equity** | | **$137.0** | **15.7%** | **15.0%** | **+ 0.7%** | **10-20%** |
| Walter Scott | Developed and Emerging | $ 57.1 | 6.5% | | | |
| Harbor | Developed and Emerging | $ 51.9 | 6.0% | | | |
| Harding Loevner | Emerging | $ 28.0 | 3.2% | | | |
| **Short-Duration Fixed Income** | | **$ 91.5** | **10.5%** | **10.0%** | **+ 0.5%** | **8-12%** |
| Barrow Hanley | Short Duration | $ 87.4 | 10.0% | | | |
| Cash | Money Market | $ 4.1 | 0.5% | | | |
| **Market-Duration Fixed Income** | | **$263.6** | **30.2%** | **30.0%** | **+ 0.2%** | **25-35%** |
| Dodge & Cox | Market Duration | $132.2 | 15.2% | 15.0% | + 0.2% | |
| MetWest | Market Duration | $131.4 | 15.1% | 15.0% | + 0.1% | |
| **Alternatives** | | **$148.4** | **17.0%** | **20.0%** | **- 3.0%** | **17-23%** |
| Oaktree RE Opps VI | Real Estate | $ 10.3 | 1.2% | | | |
| Walton Street RE VII | Real Estate | $ 8.9 | 1.0% | | | |
| Walton Street RE VIII | Real Estate | $ 4.5 | 0.5% | | | |
| Direct Hedge Fund Composite | Hedge Fund | $124.7 | 14.3% | | | |
| **Total (X District)** | | **$871.9** | **100.0%** | | | |
| District Assets - Barrow Hanley | Short Duration | $ 31.4 | | | | |
| Debt Reserves - Ponder | Short Duration | $244.6 | | | | |
| **Total Surplus Cash** | | **$1,147.9** | | | | |

*Totals may not add due to rounding.

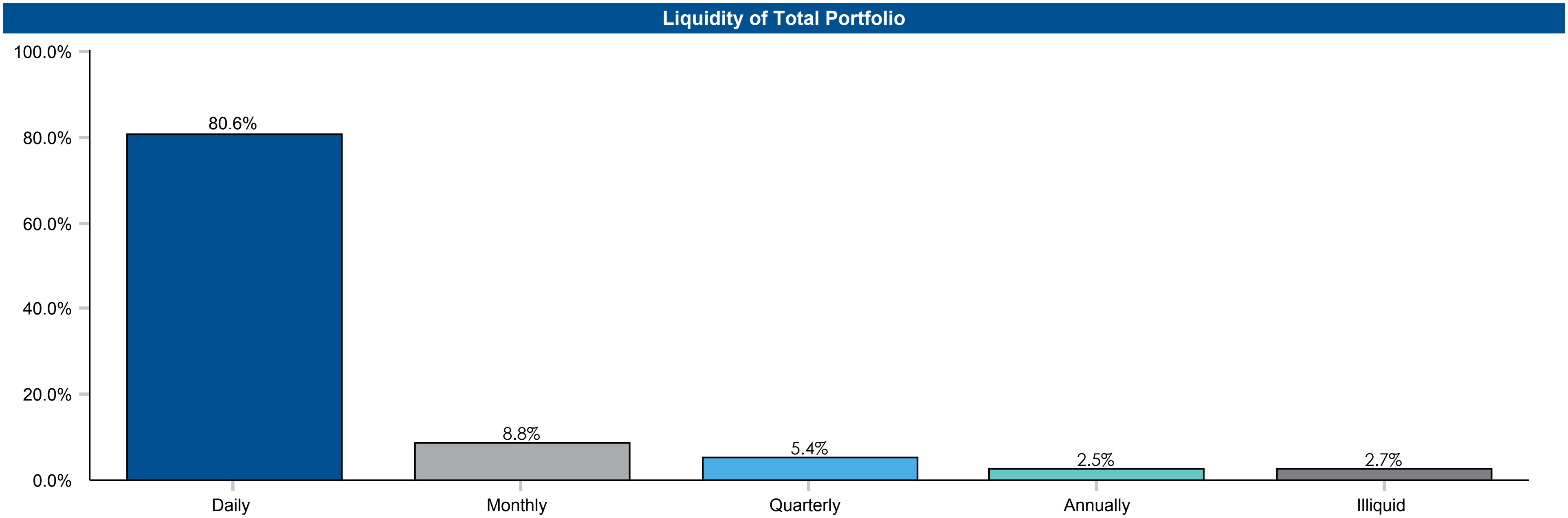
# Liquidity Schedule - Surplus

As of December 31, 2017

| Investments | Market Value ($) | Daily ($) | Monthly ($) | Quarterly ($) | Annually ($) | Illiquid ($) | Contributions | Withdrawals | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Vanguard S&P 500 Index | 118,782,104 | 118,782,104 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Sands Large Cap Growth (Touchstone) | 34,452,566 | 34,452,566 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Barrow Hanley Large Cap Value | 36,006,542 | 36,006,542 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Wellington Small Cap Value | 21,199,799 | -- | 21,199,799 | -- | -- | -- | Monthly | Monthly | 10 Day Notice |
| Conestoga Small-Cap Fund I | 21,032,340 | 21,032,340 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Walter Scott Int'l (Dreyfus) | 57,063,690 | 57,063,690 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Northern Cross Int'l (Harbor) | 51,920,666 | 51,920,666 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Harding Loevner Inst. Emerging Markets I | 28,045,350 | 28,045,350 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Barrow Hanley Short Fixed | 87,371,480 | 87,371,480 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Cash Account | 2,593,535 | 2,593,535 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Cash Account - CONCERN | 86,061 | 86,061 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Hedge Funds Cash | 1,421,775 | 1,421,775 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Dodge & Cox Fixed | 132,177,312 | 132,177,312 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| MetWest Fixed | 118,268,023 | 118,268,023 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| MetWest Total Return Bond - CONCERN | 13,156,391 | 13,156,391 | -- | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Oaktree Capital Management RE Opp VI | 10,251,715 | -- | -- | -- | -- | 10,251,715 | Illiquid | Illiquid | Illiquid |
| Walton Street Real Estate Fund VII, L.P. | 8,903,942 | -- | -- | -- | -- | 8,903,942 | Illiquid | Illiquid | Illiquid |
| Walton Street Real Estate Fund VIII, L.P. | 4,549,732 | -- | -- | -- | -- | 4,549,732 | Illiquid | Illiquid | Illiquid |
| Blackrock The 32 Capital Fund, Ltd. | 5,738,505 | -- | 5,738,505 | -- | -- | -- | Monthly | Monthly | 30 Day Notice, No Lock-Up |
| Bloom Tree Offshore Fund Ltd. | 7,232,144 | -- | -- | 7,232,144 | -- | -- | Monthly | Quarterly | 45 Day Notice, No Lock-Up |
| Brevan Howard Multi-Strategy Fund Limited | 1,584,028 | -- | 1,584,028 | -- | -- | -- | Monthly | Monthly | Redemption in Progress |
| Capeview Azri 2X Fund USD B - U | 3,622,305 | -- | 3,622,305 | -- | -- | -- | Monthly | Monthly | 30 Day Notice, No Lock-Up |
| Capeview Azri Fund USD B – UV | 6,130,400 | -- | -- | 6,130,400 | -- | -- | Monthly | Quarterly | 30 Day Notice, 2.5% Redemption Penalty |
| Chatham Asset High Yield Offshore Fund, Ltd | 9,779,228 | -- | -- | 9,779,228 | -- | -- | Monthly | Quarterly | 45 Day Notice, 20% Fund level gate |
| DK Distressed Opportunities International, Ltd. | 10,278,954 | -- | -- | -- | 10,278,954 | -- | Monthly | Annually | 90 Day Notice, No Lock-Up |
| EMSO Saguaro, Ltd. | 10,470,180 | -- | 10,470,180 | -- | -- | -- | Monthly | Monthly | 60 Day Notice, 15% Fund level gate |
| ESG Cross Border Equity Offshore, Ltd.[CE] | 119,002 | -- | -- | 119,002 | -- | -- | Quarterly | Quarterly | Redemption in Progress |
| Fir Tree International Value (Non-US), L.P. | 794,326 | -- | -- | -- | 794,326 | -- | Annually | Annually | Redemption in Progress |
| Indus Japan Fund Ltd. | 8,379,323 | -- | -- | 8,379,323 | -- | -- | Monthly | Quarterly | 30 Day Notice, No Lock-up |
| Luxor Capital Partners Offshore, Ltd. | 1,368,522 | -- | -- | 1,368,522 | -- | -- | Quarterly | Quarterly | Redemption in Progress |
| Marathon Special Opportunity Fund Ltd.[CE] | 267,998 | -- | -- | -- | 267,998 | -- | Annually | Annually | Redemption in Progress |
| Marshall Wace Eureka Fund Class B2 | 9,664,655 | -- | 9,664,655 | -- | -- | -- | Monthly | Monthly | 30 Day Notice, No Lock-Up |
| Moore Macro Managers Fund | 6,501,143 | -- | -- | 6,501,143 | -- | -- | Monthly | Quarterly | 60 Day Notice, No Lock-Up |
| Pine River Fund Ltd. | 199,667 | -- | -- | 199,667 | -- | -- | Quarterly | Quarterly | Redemption in Progress |
| Renaissance RIDGE | 8,896,729 | -- | 8,896,729 | -- | -- | -- | Monthly | Monthly | Monthly with 45 Days Notice |
| Robeco Transtrend Diversified Fund LLC | 10,600,321 | -- | 10,600,321 | -- | -- | -- | Monthly | Monthly | 5 Day Notice, No Lock-Up |
| Stone Milliner Macro Inc Class A NI | 4,991,568 | -- | 4,991,568 | -- | -- | -- | Monthly | Monthly | 60 Day Notice, 25% Master Fund level gate |
| Tiger Eye Fund, Ltd. | 7,368,336 | -- | -- | 7,368,336 | -- | -- | Monthly | Quarterly | 60 Day Notice, 1% Penalty within First Year |
| York Credit Opportunities Unit Trust | 10,669,280 | -- | -- | -- | 10,669,280 | -- | Monthly | Annually | 60 Day Notice, No Lock-Up |
| **Total ($)** | **871,939,635** | **702,377,833** | **76,768,090** | **47,077,765** | **22,010,558** | **23,705,389** | | | |
| **Total (%)** | **100.0** | **80.6** | **8.8** | **5.4** | **2.5** | **2.7** | | | |

# Liquidity Schedule - Surplus

As of December 31, 2017



# Asset Class Diversification

## Cash Balance Plan Investment Program Structure

As of December 31, 2017

| Manager | Asset Class/Type | Total Assets ($, mil.) | Percent of Total | Target Allocation | Weighting Relative to Target | Target Range |
|---|---|---|---|---|---|---|
| **Large-Cap Domestic Equity** | | **$ 76.0** | **29.4%** | **27.0%** | **+ 2.4%** | **27-37%** |
| Vanguard S&P 500 Index | Large-Cap Index | $ 39.3 | 15.2% | 13.5% | + 1.7% | |
| Sands | Large-Cap Growth | $ 18.5 | 7.1% | 6.8% | + 0.3% | |
| Barrow Hanley | Large-Cap Value | $ 18.3 | 7.0% | 6.8% | + 0.2% | |
| **Small-Cap Domestic Equity** | | **$ 14.3** | **5.5%** | **5.0%** | **+ 0.5%** | |
| Conestoga | Small-Cap Growth | $ 7.2 | 2.8% | 2.5% | + 0.3% | |
| Wellington | Small-Cap Value | $ 7.1 | 2.8% | 2.5% | + 0.3% | |
| **International Equity** | | **$ 49.0** | **18.9%** | **18.0%** | **+ 0.9%** | **15-21%** |
| Walter Scott | Developed and Emerging | $ 21.8 | 8.4% | | | |
| Harbor | Developed and Emerging | $ 20.0 | 7.7% | | | |
| Harding Loevner | Emerging Markets | $ 7.1 | 2.8% | | | |
| **Short-Duration Fixed Income** | | **$ 10.8** | **4.2%** | **5.0%** | **- 0.8%** | **0-8%** |
| Barrow Hanley | Short Duration | $ 7.8 | 3.0% | | | |
| Cash | Money Market | $ 3.0 | 1.2% | | | |
| **Market-Duration Fixed Income** | | **$ 62.4** | **24.1%** | **25.0%** | **- 0.9%** | **20-30%** |
| Dodge & Cox | Market Duration | $ 31.3 | 12.1% | 12.5% | - 0.4% | |
| MetWest | Market Duration | $ 31.1 | 12.0% | 12.5% | - 0.5% | |
| **Alternatives** | | **$ 46.6** | **18.0%** | **20.0%** | **- 2.0%** | **17-23%** |
| Lighthouse | HFOF | $ 16.3 | 6.3% | | | |
| Pointer | HFOF | $ 15.3 | 5.9% | | | |
| Oaktree RE Opps VI | Real Estate | $ 6.1 | 2.4% | | | |
| Walton Street RE VII | Real Estate | $ 5.3 | 2.1% | | | |
| Walton Street RE VIII | Real Estate | $ 3.5 | 1.4% | | | |
| **Total** | | **$259.1** | **100.0%** | | | |

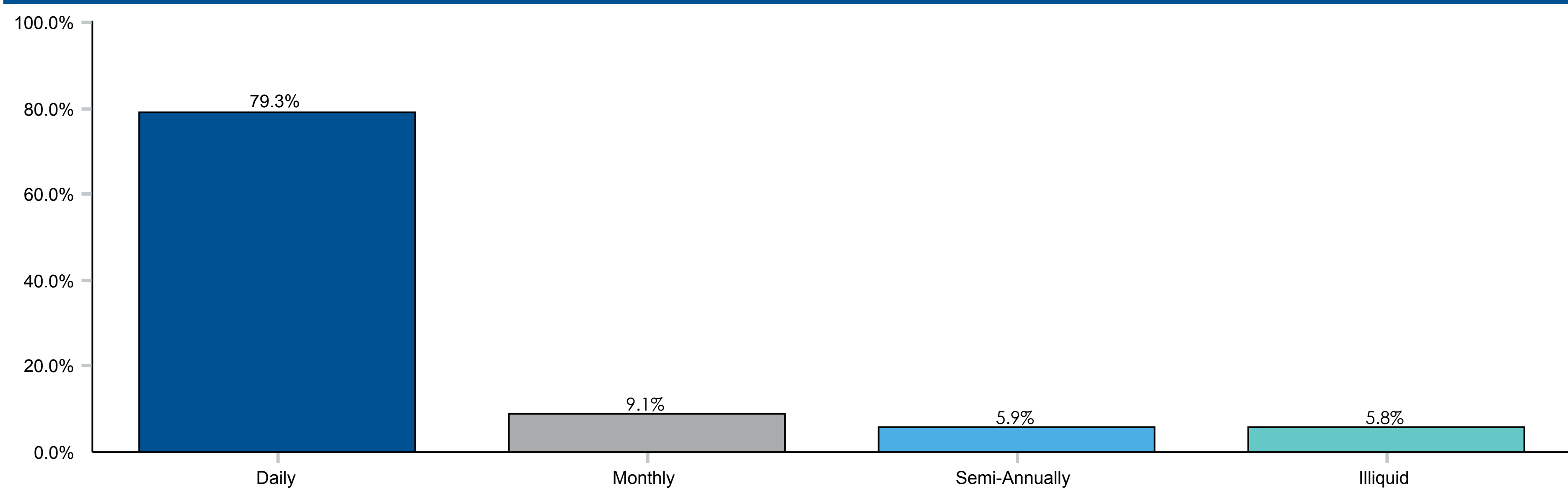
*Totals may not add due to rounding.

# Liquidity Schedule - Cash Balance

As of December 31, 2017

| Investments | Market Value ($) | Daily ($) | Monthly ($) | Semi-Annually ($) | Illiquid ($) | Contributions | Withdrawals | Notes |
|---|---|---|---|---|---|---|---|---|
| Barrow Hanley Large Cap Value | 18,259 | 18,259 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Sands Large Cap Growth (Touchstone) | 18,472 | 18,472 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Vanguard Institutional Index Fund | 39,304 | 39,304 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Wellington Small Cap Value | 7,150 | -- | 7,150 | -- | -- | Monthly | Monthly | Monthly, 10 Day Notice |
| Conestoga Small-Cap Fund I | 7,186 | 7,186 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Walter Scott Int'l (Dreyfus) | 21,831 | 21,831 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Northern Cross Int'l (Harbor) | 20,000 | 20,000 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Harding Loevner Inst. Emerging Markets I | 7,146 | 7,146 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Barrow Hanley Short Fixed | 7,767 | 7,767 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Cash Account | 2,946 | 2,946 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Disbursement Account | 47 | 47 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Dodge & Cox Income Fund | 31,256 | 31,256 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Met West Total Return Fund Pl | 31,112 | 31,112 | -- | -- | -- | Daily | Daily | Daily, No Lock-Up |
| Lighthouse Diversified | 16,336 | -- | 16,336 | -- | -- | Monthly | Monthly | 90 Day Notice |
| Pointer Offshore LTD | 15,316 | -- | -- | 15,316 | -- | Semi-Annually | Semi-Annually | Notice by Mar 15/Sept 15 |
| Oaktree RE Opportunities Fund V | 6,091 | -- | -- | -- | 6,091 | Illiquid | Illiquid | Illiquid |
| Walton Street Real Estate Fund VII, L.P.[CE] | 5,340 | -- | -- | -- | 5,340 | Illiquid | Illiquid | Illiquid |
| Walton Street Real Estate Fund VIII, L.P.[CE] | 3,500 | -- | -- | -- | 3,500 | Illiquid | Illiquid | Illiquid |
| **Total ($)** | **259,060** | **205,327** | **23,486** | **15,316** | **14,931** | | | |
| **Total (%)** | **100.0** | **79.3** | **9.1** | **5.9** | **5.8** | | | |

**Liquidity of Total Portfolio**



# Surplus Cash Equity Portfolio Characteristics

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

As of December 31, 2017

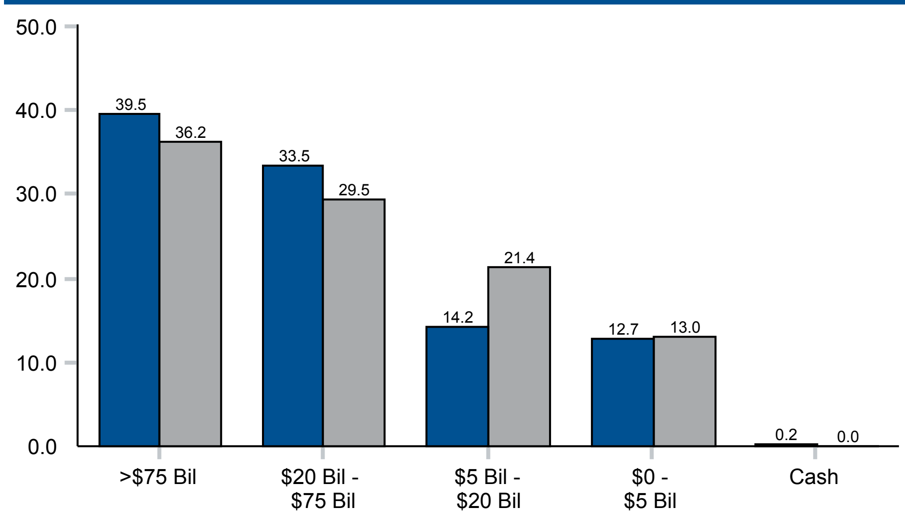
### Portfolio Characteristics

| | Portfolio | Benchmark |
|---|---|---|
| Wtd. Avg. Mkt. Cap ($M) | 118,939 | 111,750 |
| Median Mkt. Cap ($M) | 17,032 | 1,792 |
| Price/Earnings ratio | 24.0 | 19.4 |
| Price/Book ratio | 3.3 | 2.7 |
| 5 Yr. EPS Growth Rate (%) | 11.9 | 11.4 |
| Current Yield (%) | 1.8 | 2.3 |
| Debt to Equity | 1.0 | 1.1 |
| Number of Stocks | 825 | 8,653 |
| Beta (5 Years, Monthly) | 0.95 | 1.00 |
| Consistency (5 Years, Monthly) | 50.00 | 1.00 |
| Sharpe Ratio (5 Years, Monthly) | 1.22 | 1.14 |
| Information Ratio (5 Years, Monthly) | 0.20 | - |
| Up Market Capture (5 Years, Monthly) | 97.94 | - |
| Down Market Capture (5 Years, Monthly) | 90.22 | - |

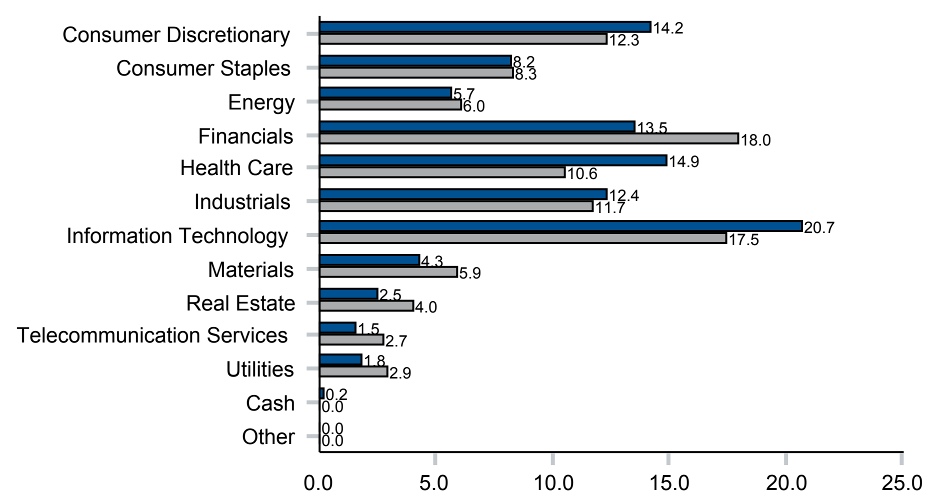
### Top Ten Equity Holdings

| | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|---|---|---|---|---|
| Amazon.com Inc | 1.3 | 0.9 | 0.4 | 21.6 |
| Apple Inc | 1.2 | 1.6 | -0.4 | 10.2 |
| Facebook Inc | 1.2 | 0.8 | 0.4 | 3.3 |
| Microsoft Corp | 1.2 | 1.2 | 0.0 | 15.4 |
| Alibaba Group Holding Ltd | 1.1 | 0.4 | 0.7 | -0.2 |
| Las Vegas Sands Corp | 1.0 | 0.1 | 0.9 | 9.4 |
| Visa Inc | 1.0 | 0.4 | 0.6 | 8.5 |
| Alphabet Inc | 0.9 | 0.6 | 0.3 | 8.2 |
| JPMorgan Chase & Co | 0.8 | 0.7 | 0.1 | 12.6 |
| Johnson & Johnson | 0.8 | 0.7 | 0.1 | 8.1 |
| % of Portfolio | 10.5 | 7.4 | 3.1 | |

### Distribution of Market Capitalization (%)




### Sector Weights (%)

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# Cash Balance Plan Equity Portfolio Characteristics

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

As of December 31, 2017

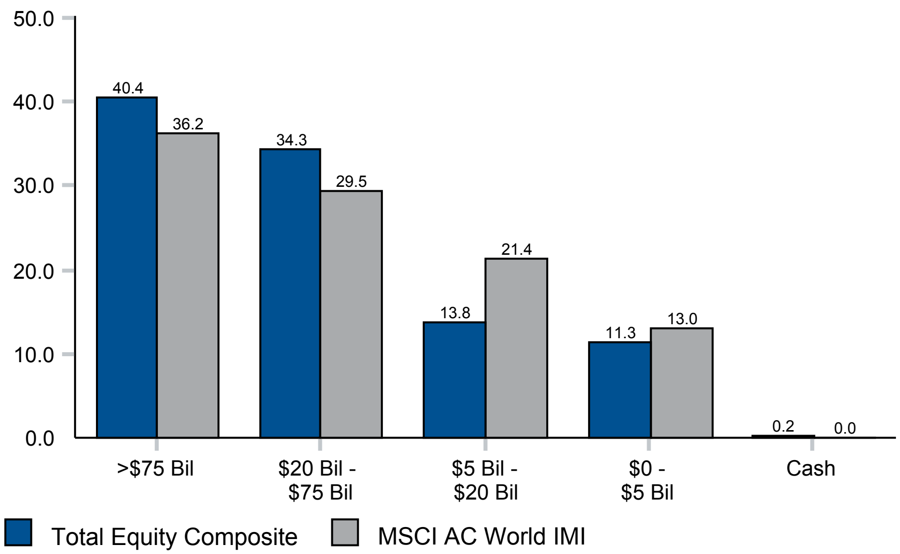
**Portfolio Characteristics**

| | Portfolio | Benchmark |
|---|---|---|
| Wtd. Avg. Mkt. Cap ($M) | 121,626 | 111,750 |
| Median Mkt. Cap ($M) | 17,032 | 1,792 |
| Price/Earnings ratio | 24.5 | 19.4 |
| Price/Book ratio | 3.4 | 2.7 |
| 5 Yr. EPS Growth Rate (%) | 12.5 | 11.4 |
| Current Yield (%) | 1.7 | 2.3 |
| Debt to Equity | 1.0 | 1.1 |
| Number of Stocks | 825 | 8,653 |
| Beta (5 Years, Monthly) | 0.96 | 1.00 |
| Consistency (5 Years, Monthly) | 50.00 | 1.00 |
| Sharpe Ratio (5 Years, Monthly) | 1.18 | 1.14 |
| Information Ratio (5 Years, Monthly) | 0.06 | - |
| Up Market Capture (5 Years, Monthly) | 97.95 | - |
| Down Market Capture (5 Years, Monthly) | 93.90 | - |

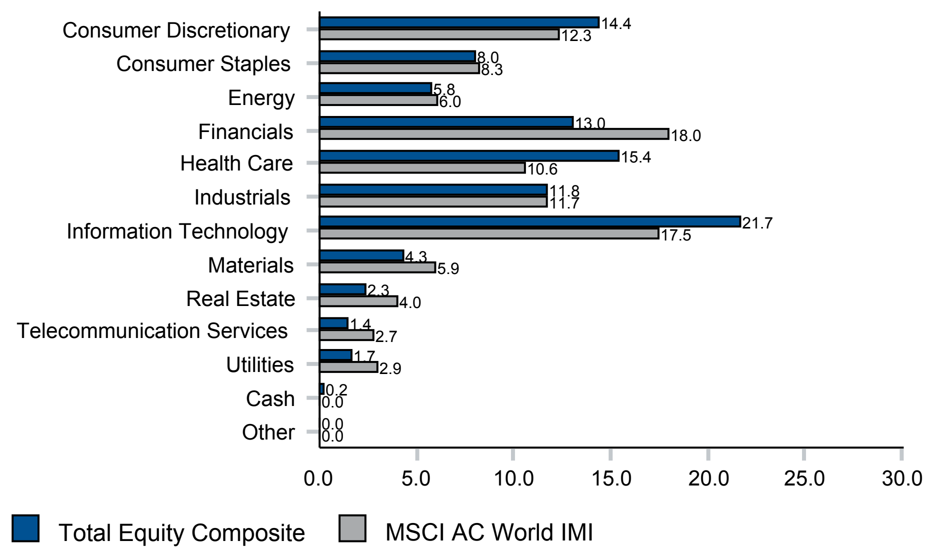
**Top Ten Equity Holdings**

| | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|---|---|---|---|---|
| Amazon.com Inc | 1.4 | 0.9 | 0.5 | 21.6 |
| Facebook Inc | 1.4 | 0.8 | 0.6 | 3.3 |
| Alibaba Group Holding Ltd | 1.3 | 0.4 | 0.9 | -0.2 |
| Visa Inc | 1.2 | 0.4 | 0.8 | 8.5 |
| Microsoft Corp | 1.1 | 1.2 | -0.1 | 15.4 |
| Apple Inc | 1.1 | 1.6 | -0.5 | 10.2 |
| Las Vegas Sands Corp | 1.0 | 0.1 | 0.9 | 9.4 |
| Alphabet Inc | 1.0 | 0.6 | 0.4 | 8.2 |
| Salesforce.com Inc. | 0.9 | 0.1 | 0.8 | 9.4 |
| JPMorgan Chase & Co | 0.9 | 0.7 | 0.2 | 12.6 |
| % of Portfolio | 11.3 | 6.8 | 4.5 | |

**Distribution of Market Capitalization (%)**




**Sector Weights (%)**



# Surplus Cash Equity Portfolio - Country/Region Allocation

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

As of December 31, 2017

| | Total Equity Composite | MSCI AC World IMI |
|---|---|---|
| Canada | 0.5 | 3.2 |
| United States | 61.0 | 49.9 |
| Australia | 0.5 | 2.3 |
| Hong Kong | 3.4 | 2.5 |
| New Zealand | 0.0 | 0.1 |
| Singapore | 0.2 | 0.7 |
| **Pacific ex Japan** | **4.2** | **5.6** |
| Japan | 5.5 | 8.3 |
| Austria | 0.1 | 0.1 |
| Belgium | 0.2 | 0.4 |
| Bermuda | 0.0 | 0.0 |
| Denmark | 1.3 | 0.6 |
| Finland | 0.3 | 0.3 |
| France | 4.2 | 3.0 |
| Germany | 1.8 | 3.1 |
| Ireland | 1.1 | 1.0 |
| Italy | 0.2 | 0.8 |
| Netherlands | 0.8 | 1.3 |
| Norway | 0.1 | 0.3 |
| Portugal | 0.0 | 0.1 |
| Spain | 0.5 | 1.0 |
| Sweden | 0.6 | 1.0 |
| Switzerland | 3.2 | 2.8 |
| **Europe ex UK** | **14.6** | **15.8** |
| United Kingdom | 5.1 | 6.6 |
| Israel | 0.2 | 0.2 |
| **Middle East** | **0.2** | **0.2** |
| **Developed Markets** | **91.0** | **89.6** |

| | Total Equity Composite | MSCI AC World IMI |
|---|---|---|
| China | 2.1 | 1.8 |
| India | 0.6 | 1.1 |
| Indonesia | 0.1 | 0.3 |
| Korea | 0.8 | 1.8 |
| Malaysia | 0.0 | 0.3 |
| Philippines | 0.0 | 0.1 |
| Taiwan | 1.2 | 1.4 |
| Thailand | 0.1 | 0.3 |
| **EM Asia** | **5.0** | **7.2** |
| Czech Republic | 0.1 | 0.0 |
| Greece | 0.0 | 0.0 |
| Hungary | 0.1 | 0.0 |
| Poland | 0.1 | 0.2 |
| Russia | 0.4 | 0.4 |
| Turkey | 0.1 | 0.1 |
| **EM Europe** | **0.8** | **0.7** |
| Brazil | 0.6 | 0.8 |
| Cayman Islands | 0.0 | 0.0 |
| Chile | 0.1 | 0.1 |
| Colombia | 0.7 | 0.0 |
| Mexico | 0.5 | 0.3 |
| Peru | 0.0 | 0.0 |
| Virgin Islands | 0.0 | 0.0 |
| **EM Latin America** | **1.9** | **1.3** |
| Egypt | 0.0 | 0.0 |
| Qatar | 0.0 | 0.1 |
| South Africa | 0.5 | 0.8 |
| United Arab Emirates | 0.2 | 0.1 |
| **EM Mid East+Africa** | **0.7** | **1.0** |
| **Emerging Markets** | **8.4** | **10.2** |
| **Frontier Markets** | **0.1** | **0.0** |
| Cash | 0.2 | 0.0 |
| Other | 0.3 | 0.1 |
| **Total** | **100.0** | **100.0** |

# Cash Balance Plan Equity Portfolio - Country/Region Allocation

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

As of December 31, 2017

| | Total Equity Composite | MSCI AC World IMI |
|---|---|---|
| Canada | 0.5 | 3.2 |
| United States | 62.5 | 49.9 |
| Australia | 0.5 | 2.3 |
| Hong Kong | 2.9 | 2.5 |
| New Zealand | 0.0 | 0.1 |
| Singapore | 0.3 | 0.7 |
| **Pacific ex Japan** | **3.7** | **5.6** |
| Japan | 5.6 | 8.3 |
| Austria | 0.1 | 0.1 |
| Belgium | 0.2 | 0.4 |
| Bermuda | 0.0 | 0.0 |
| Denmark | 1.3 | 0.6 |
| Finland | 0.3 | 0.3 |
| France | 4.3 | 3.0 |
| Germany | 1.9 | 3.1 |
| Ireland | 1.2 | 1.0 |
| Italy | 0.2 | 0.8 |
| Netherlands | 0.8 | 1.3 |
| Norway | 0.1 | 0.3 |
| Portugal | 0.0 | 0.1 |
| Spain | 0.6 | 1.0 |
| Sweden | 0.6 | 1.0 |
| Switzerland | 3.3 | 2.8 |
| **Europe ex UK** | **14.9** | **15.8** |
| United Kingdom | 5.1 | 6.6 |
| Israel | 0.2 | 0.2 |
| **Middle East** | **0.2** | **0.2** |
| **Developed Markets** | **92.4** | **89.6** |

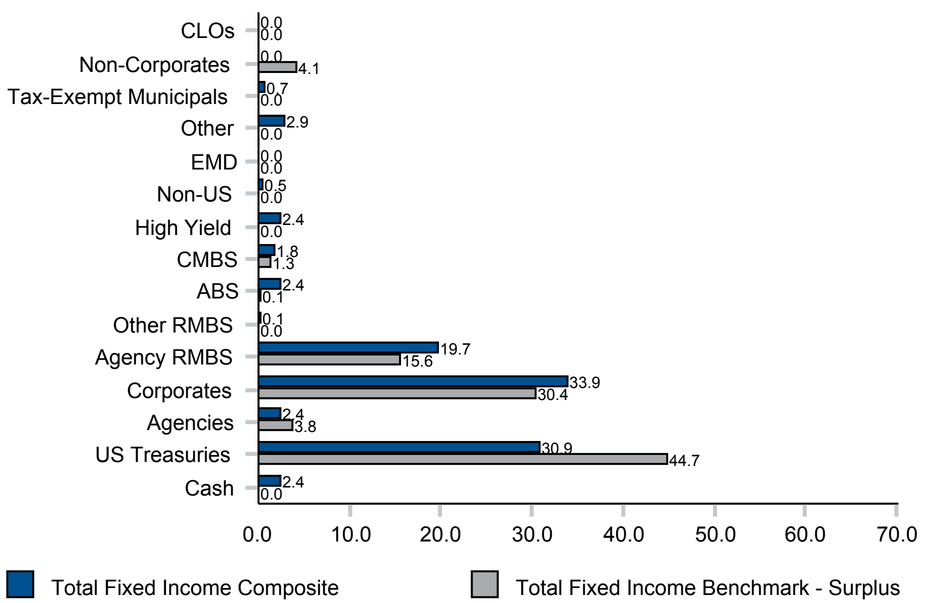
| | Total Equity Composite | MSCI AC World IMI |
|---|---|---|
| China | 2.3 | 1.8 |
| India | 0.4 | 1.1 |
| Indonesia | 0.1 | 0.3 |
| Korea | 0.6 | 1.8 |
| Malaysia | 0.0 | 0.3 |
| Philippines | 0.0 | 0.1 |
| Taiwan | 1.0 | 1.4 |
| Thailand | 0.1 | 0.3 |
| **EM Asia** | **4.4** | **7.2** |
| Czech Republic | 0.1 | 0.0 |
| Greece | 0.0 | 0.0 |
| Hungary | 0.1 | 0.0 |
| Poland | 0.1 | 0.2 |
| Russia | 0.3 | 0.4 |
| Turkey | 0.1 | 0.1 |
| **EM Europe** | **0.5** | **0.7** |
| Brazil | 0.4 | 0.8 |
| Cayman Islands | 0.0 | 0.0 |
| Chile | 0.1 | 0.1 |
| Colombia | 0.7 | 0.0 |
| Mexico | 0.4 | 0.3 |
| Peru | 0.0 | 0.0 |
| Virgin Islands | 0.0 | 0.0 |
| **EM Latin America** | **1.6** | **1.3** |
| Egypt | 0.0 | 0.0 |
| Qatar | 0.0 | 0.1 |
| South Africa | 0.3 | 0.8 |
| United Arab Emirates | 0.1 | 0.1 |
| **EM Mid East+Africa** | **0.5** | **1.0** |
| **Emerging Markets** | **7.0** | **10.2** |
| **Frontier Markets** | **0.1** | **0.0** |
| Cash | 0.2 | 0.0 |
| Other | 0.3 | 0.1 |
| **Total** | **100.0** | **100.0** |

# Surplus Cash Fixed Income Portfolio Characteristics

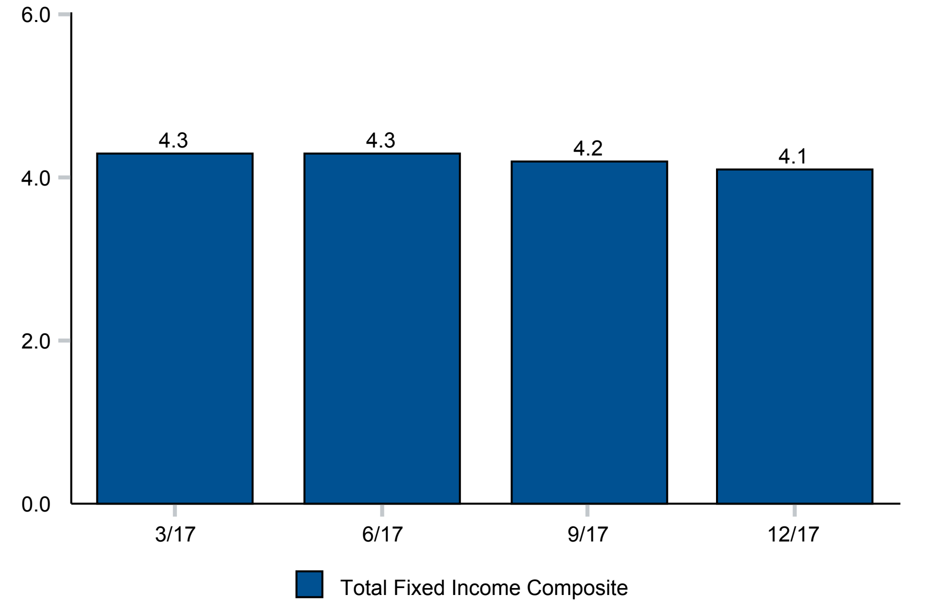
## Surplus Cash Fixed Income Composite vs. Total Fixed Income Benchmark - Surplus

As of December 31, 2017

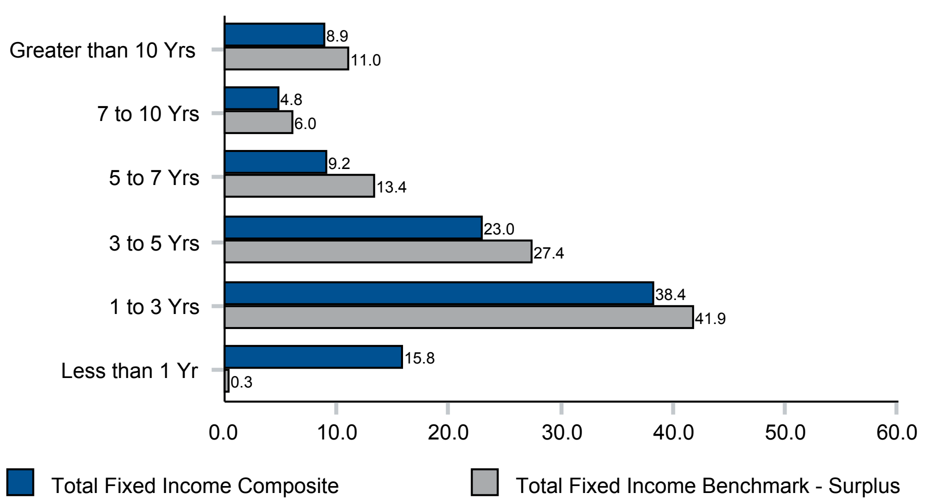
### Sector Allocations




### Total Fixed Income Duration




### Yield Curve Positioning




### Portfolio Characteristics

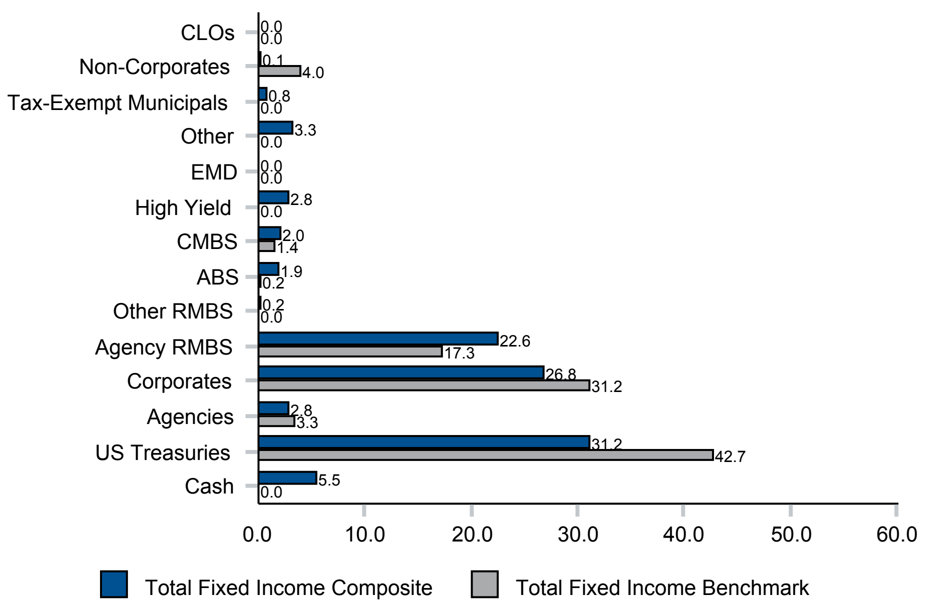
| | Portfolio | Benchmark |
|---|---|---|
| Yield | 2.7 | 2.6 |
| Duration | 4.1 | 5.0 |
| Avg. Quality | AA | AA+ |

# Cash Balance Plan Fixed Income Portfolio Characteristics

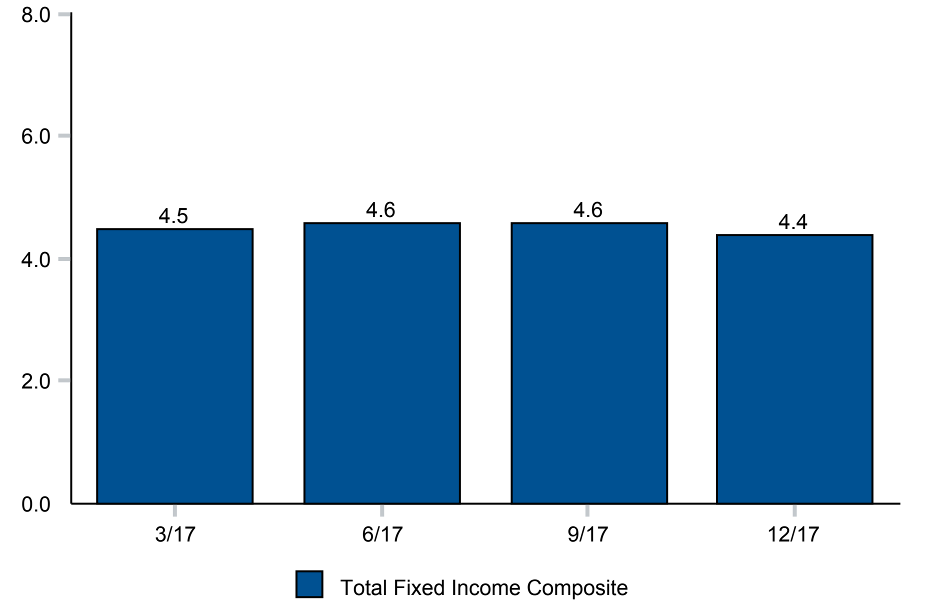
## Cash Balance Fixed Income Composite vs. Total Fixed Income Benchmark

As of December 31, 2017

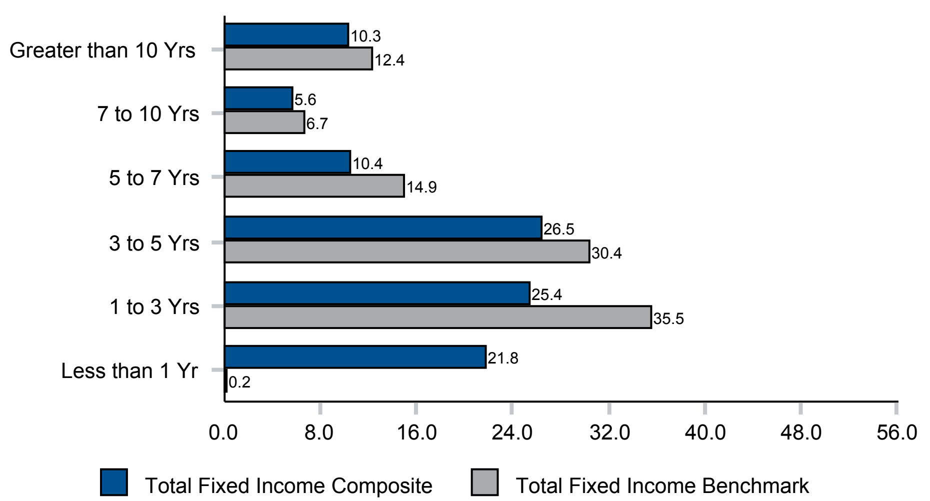
### Sector Allocations




### Total Fixed Income Duration




### Yield Curve Positioning




### Portfolio Characteristics

| | Portfolio | Benchmark |
|---|---|---|
| Yield | 2.7 | 2.6 |
| Duration | 4.4 | 5.3 |
| Avg. Quality | AA | AA+ |

# Direct Hedge Fund Portfolio

# Surplus Cash Hedge Fund Portfolio Executive Summary

**Portfolio Update - Fourth Quarter 2017**

The *Hedge Fund Portfolio* (the "Portfolio") returned +3.3% during the fourth quarter, outperforming the HFRI Fund of Funds Composite Index by +1.3%. Each of the Portfolio's four strategies delivered positive absolute returns, with the Macro, Credit and Equity Long / Short strategies performing significantly better than their respective underlying reference index (by +1.7%, +1.2%, and +0.6%, respectively). The Relative Value strategy underperformed its underlying reference index due to changes in the portfolio over the quarter.

| Strategy | Q4 Overall Performance | 12-month Absolute Performance | Strategy Commentary | Manager Performance Q4 Contributors/Detractors | | |
|---|---|---|---|---|---|---|
| **Equity Long / Short** | + | + | The equity long/short managers performed positively during the quarter, with industrial, technology, healthcare and consumer discretionary positions driving performance within portfolios. As was the case last quarter, Japan-focused fund *Indus* delivered the largest returns on the back of strong stock selection and a supportive Japanese equity market. | + | Indus<br>CapeView 2x<br>Tiger Eye | +6.8%<br>+6.2%<br>+4.9% |
| | | | | - | | |
| **Credit** | + | + | *Chatham* rose on good performance from some of its large bond positions, while *York* had successful positions in telecom and oil companies. *DK*'s performance was boosted by further proceeds related to the Lehman Brothers liquidation. Despite muted credit markets, managers see attractive pockets of opportunities in the credit space. | + | Chatham<br>York<br>DK | +5.0%<br>+2.8%<br>+2.0% |
| | | | | - | | |
| **Macro** | + | + | Systematic macro manager *BP Transtrend* had a very strong quarter driven by trading in equity and commodity markets. Developed markets discretionary manager *Stone Milliner* experienced losses in FX and equity markets. | + | BP Transtrend<br>Moore<br>Emso | +13.6%<br>+1.9%<br>+0.6% |
| | | | | - | Stone Milliner<br>*Brevan Howard** | -2.1%<br>-1.0% |
| **Relative Value** | + | + | The year-to-date rebound for *BlackRock 32* took a modest setback during the quarter given some negative idiosyncratic results across signals. | + | *Fir Tree** | +3.7% |
| | | | | - | *Pine River**<br>BlackRock 32 | -1.1%<br>-0.1% |

** Redemption in progress*

**Investment Activity**

Redemptions already in progress and proceeds received are summarized in the table below:

| Fund | Strategy | Redemption details | Redemption Status | Redemption Proceeds |
|---|---|---|---|---|
| **Brevan Howard Multi-Strategy Fund Limited** | Macro | Redemption submitted starting on March 31, 2017. Takes four quarters to get out (25% investor level gate). | Completed | *The fourth and last cash flow ($1.6 million) arrived in January 2018.* |
| **Luxor Capital Partners Offshore, Ltd.** | Equity | Redemption submitted for June 30, 2017. | In progress | *Partial proceeds of $0.07 million received from the SPV during the quarter. Remaining amount continues to be held into liquidating special purpose vehicle (no timeline available) or held back until completion of annual audit in early 2018.* |
| **Pine River Fund Ltd.** | Relative Value | Redemption submitted starting on December 31, 2016. Pine River has suspended redemptions and is currently liquidating the Pine River fund. | In progress | *Distributions from the liquidation were received in October, November and December. Other distributions are expected in the next few months.* |
| **Fir Tree International Value Fund (USTE), L.P.** | Relative Value | Redemption for second investment were requested as of November 30, 2017. | In progress | *Proceeds for the second investment tranche ($1.2 million) were received in December 2017. Remaining amount relates to non-marketable positions which will be sold over time and a small amount held back until completion of annual audit in early 2018.* |
| **Marathon Special Opportunity Fund Ltd.** | Credit | Redemption submitted for June 30, 2017. | In progress | *Proceeds of $5.1 million received in August 2017. Remaining proceeds held back until completion of annual audit in early 2018.* |
| **ESG Cross Border Equity Offshore Fund, Ltd.** | Equity | Redemption submitted for June 30, 2017. | In progress | *Proceeds ($4.0 million) received in July 2017. Remaining proceeds held back until completion of annual audit in early 2018.* |

The proceeds were reinvested in the following funds:

| Fund | Strategy | Subscription Amount | Notes |
|---|---|---|---|
| **October 1, 2017** | | | |
| | | | |
| **November 1, 2017** | | | |
| **Bloom Tree Offshore Fund Ltd.** | Long / Short Equity | $2 million | Additional allocation. |
| **Indus Japan Fund Ltd.** | Long / Short Equity | $2 million | Additional allocation. |
| **Tiger Eye Fund, Ltd.** | Long / Short Equity | $2.2 million | Additional allocation. |
| **Renaissance Institutional Diversified Global Equities Onshore Fund L.P. (RIDGE)** | Relative Value | $9 million | New allocation. |
| **December 1, 2017** | | | |
| | | | |

**<u>Recommendations or Action Items</u>**
As further cash flows come in, Pavilion is working with El Camino management to approve and implement any required changes.

# Direct Hedge Fund Portfolio Asset Allocation & Performance

As of December 31, 2017

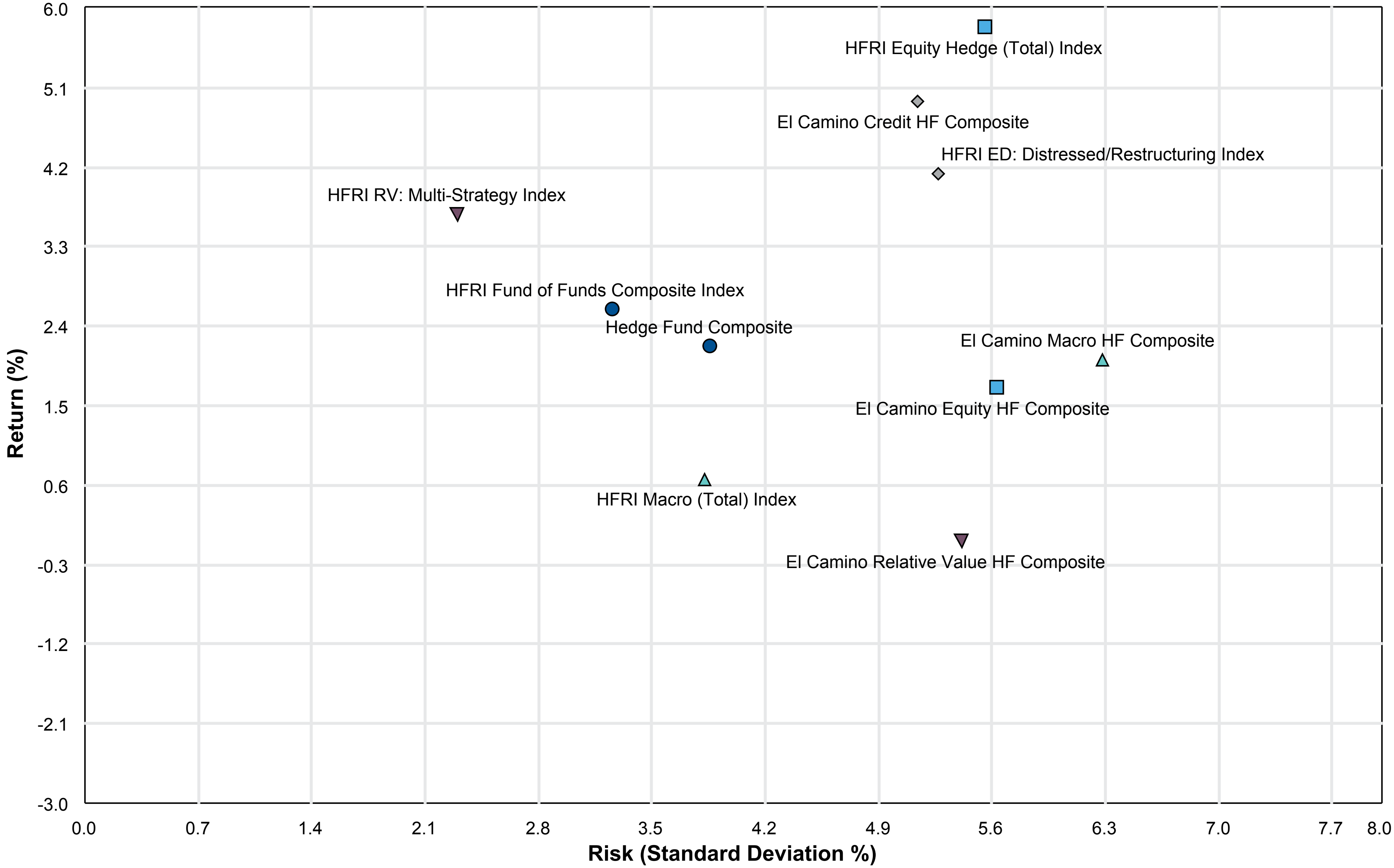
| | Allocation | | Performance(%) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Market Value ($) | % | Quarter | Year To Date | Fiscal YTD | 1 Year | 3 Years | Since Invested | Inception Period |
| **Hedge Fund Composite** | **124,656,614** | **100.0** | **3.3** | **7.2** | **6.1** | **7.2** | **2.2** | **3.1** | **4y 8m** |
| HFRI Fund of Funds Composite Index | | | 2.0 | 7.7 | 4.3 | 7.7 | 2.6 | 3.4 | |
| El Camino HF Composite Benchmark | | | 2.4 | 7.8 | 4.4 | 7.8 | 4.0 | 4.1 | |
| **Equity HF Composite** | **43,884,688** | **35.2** | **4.0** | **12.1** | **7.7** | **12.1** | **1.7** | **2.8** | **4y 8m** |
| HFRI Equity Hedge (Total) Index | | | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 5.9 | |
| **Credit HF Composite** | **30,995,460** | **24.9** | **3.2** | **9.9** | **6.1** | **9.9** | **4.9** | **5.9** | **4y 8m** |
| HFRI ED: Distressed/Restructuring Index | | | 2.0 | 6.7 | 3.5 | 6.7 | 4.1 | 4.0 | |
| **Macro HF Composite** | **34,147,240** | **27.4** | **4.1** | **0.1** | **5.3** | **0.1** | **2.0** | **2.1** | **4y 8m** |
| HFRI Macro (Total) Index | | | 2.4 | 2.2 | 3.0 | 2.2 | 0.7 | 1.1 | |
| **Relative Value HF Composite** | **15,629,226** | **12.5** | **0.3** | **4.5** | **3.9** | **4.5** | **0.0** | **2.0** | **4y 8m** |
| HFRI RV: Multi-Strategy Index | | | 1.0 | 4.0 | 1.6 | 4.0 | 3.7 | 3.7 | |

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)

3 Years Ending December 31, 2017




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 December 31, 2017

| | 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 |
|---|---|---|---|---|---|---|---|---|
| **Total Portfolio** | | | | | | | | |
| Hedge Fund Composite | 3.1 | 3.7 | -9.5 | 4.9 | -5.7 | 0.8 | 1.2 | 4y 8m |
| HFRI Fund of Funds Composite Index | 3.4 | 3.2 | -7.6 | 3.7 | -4.2 | 1.0 | 1.4 | |
| **Equity Long/Short** | | | | | | | | |
| El Camino Equity HF Composite | 2.8 | 5.1 | -14.3 | 5.7 | -8.1 | 0.5 | 0.7 | 4y 8m |
| HFRI Equity Hedge (Total) Index | 5.9 | 5.3 | -10.3 | 6.0 | -6.3 | 1.1 | 1.7 | |
| **Credit** | | | | | | | | |
| El Camino Credit HF Composite | 5.9 | 5.4 | -18.5 | 7.0 | -6.6 | 1.0 | 1.7 | 4y 8m |
| HFRI ED: Distressed/Restructuring Index | 4.0 | 5.0 | -17.5 | 7.4 | -6.4 | 0.8 | 1.2 | |
| **Macro** | | | | | | | | |
| El Camino Macro HF Composite | 2.1 | 6.1 | -7.4 | 7.9 | -4.8 | 0.3 | 0.5 | 4y 8m |
| HFRI Macro (Total) Index | 1.1 | 3.7 | -4.4 | 5.1 | -3.5 | 0.2 | 0.4 | |
| **Relative Value** | | | | | | | | |
| El Camino Relative Value HF Composite | 2.0 | 4.8 | -13.8 | 5.3 | -8.1 | 0.4 | 0.5 | 4y 8m |
| HFRI RV: Multi-Strategy Index | 3.7 | 2.2 | -4.2 | 2.9 | -2.4 | 1.6 | 2.9 | |

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 December 31, 2017

| Manager | Asset Class/Type | Total Assets ($, mil.) | Percent of Total | Target Allocation | Weighting Relative to Target |
|---|---|---|---|---|---|
| **Equity Hedge Funds** | | **$ 43.9** | **35.2%** | **40.0%** | **- 4.8%** |
| ESG | Emerging Market Equity | $ 0.1 | 0.1% | | |
| Luxor | Event Driven Equity | $ 1.4 | 1.1% | | |
| CapeView 1x | European Equity | $ 6.1 | 4.9% | | |
| CapeView 2x | European Equity | $ 3.6 | 2.9% | | |
| Bloom Tree | Global Equity | $ 7.2 | 5.8% | | |
| Marshall Wace Eureka | Global Equity | $ 9.7 | 7.8% | | |
| Tiger Eye | US Equity | $ 7.4 | 5.9% | | |
| Indus Japan | Japanese Equity | $ 8.4 | 6.7% | | |
| **Credit Hedge Funds** | | **$ 31.0** | **24.9%** | **20.0%** | **+ 4.9%** |
| Davidson Kempner | Distressed Credit | $ 10.3 | 8.2% | | |
| York | Multi-Strategy Credit | $ 10.7 | 8.6% | | |
| Marathon | Multi-Strategy Credit | $ 0.3 | 0.2% | | |
| Chatham Asset | High Yield | $ 9.8 | 7.8% | | |
| **Macro Hedge Funds** | | **$ 34.1** | **27.4%** | **20.0%** | **+ 7.4%** |
| BP Transtrend | Systematic Macro | $ 10.6 | 8.5% | | |
| Brevan Howard | Discretionary Macro | $ 1.6 | 1.3% | | |
| Moore | Discretionary Macro | $ 6.5 | 5.2% | | |
| Stone Milliner | Discretionary Macro | $ 5.0 | 4.0% | | |
| EMSO Saguaro | Discretionary Macro | $ 10.5 | 8.4% | | |
| **Relative Value Hedge Funds** | | **$ 15.6** | **12.5%** | **20.0%** | **- 7.5%** |
| BlackRock 32 Capital | Quantitative Market Neutral | $ 5.7 | 4.6% | | |
| Fir Tree | Multi-Strategy | $ 0.8 | 0.6% | | |
| Pine River | Multi-Strategy | $ 0.2 | 0.2% | | |
| Renaissance RIDGE | Multi-Strategy | $ 8.9 | 7.1% | | |
| **Total Hedge Fund Portfolio** | | **$124.7** | **100.0%** | | |

*Totals may not add due to rounding.

# Direct Hedge Fund Performance Summary

As of December 31, 2017

| | Quarter | Year To Date | Fiscal YTD | 1 Year | 3 Years | 5 Years | Since Invested | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | Inception Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Portfolio** | | | | | | | | | | | | | | |
| Hedge Fund Composite | 3.3 | 7.2 | 6.1 | 7.2 | 2.2 | - | 3.1 | 1.0 | -1.6 | 2.2 | - | - | - | 4y 8m |
| HFRI Fund of Funds Composite Index | 2.0 | 7.7 | 4.3 | 7.7 | 2.6 | 4.0 | 3.4 | 0.5 | -0.3 | 3.4 | 9.0 | 4.8 | -5.7 | |
| El Camino HF Composite Benchmark | 2.4 | 7.8 | 4.4 | 7.8 | 4.0 | 4.8 | 4.1 | 6.7 | -2.1 | 2.2 | 9.9 | 6.6 | -5.0 | |
| **Equity Long/Short** | | | | | | | | | | | | | | |
| Equity HF Composite | 4.0 | 12.1 | 7.7 | 12.1 | 1.7 | - | 2.8 | -8.0 | 2.0 | -0.4 | - | - | - | 4y 8m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 5.9 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |
| Bloom Tree Offshore Fund, Ltd. | 1.2 | 8.6 | 0.9 | 8.6 | 3.6 | 5.2 | 4.2 | -3.8 | 6.3 | 3.0 | 12.8 | 13.7 | 23.7 | 3y 9m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 4.8 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |
| CapeView Azri Fund Limited | 2.8 | 7.6 | 5.8 | 7.6 | 2.7 | 4.8 | 4.0 | -8.3 | 9.8 | 4.6 | 11.4 | 5.8 | 1.3 | 4y 6m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 6.2 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |
| CapeView Azri 2X Fund | 6.2 | 16.2 | 12.8 | 16.2 | 5.9 | 10.2 | 8.6 | -15.9 | 21.6 | 9.8 | 24.4 | 12.7 | 4.3 | 4y 6m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 6.2 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |
| Indus Japan Fund Ltd. | 6.8 | 21.6 | 15.4 | 21.6 | 4.6 | 12.1 | 5.8 | -7.5 | 1.8 | 6.3 | 45.0 | 8.1 | -1.6 | 4y 1m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 5.0 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |
| Marshall Wace Eureka Fund Class B2 | 3.7 | 12.0 | 5.9 | 12.0 | 8.2 | 10.6 | 5.1 | 1.3 | 11.7 | 8.1 | 21.1 | 7.0 | 9.8 | 0y 5m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 5.5 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |
| Tiger Eye Fund, Ltd. | 4.9 | 17.9 | 9.6 | 17.9 | 3.2 | 9.4 | 3.8 | -5.0 | -2.0 | 3.9 | 37.7 | 17.7 | 5.6 | 3y 9m |
| HFRI Equity Hedge (Total) Index | 3.4 | 13.3 | 7.0 | 13.3 | 5.8 | 6.6 | 4.8 | 5.5 | -1.0 | 1.8 | 14.3 | 7.4 | -8.4 | |

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 December 31, 2017

| | Quarter | Year To Date | Fiscal YTD | 1 Year | 3 Years | 5 Years | Since Invested | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | Inception Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Credit** | | | | | | | | | | | | | | |
| Credit HF Composite | 3.2 | 9.9 | 6.1 | 9.9 | 4.9 | - | 5.9 | 14.7 | -8.2 | 2.8 | - | - | - | 4y 8m |
| *HFRI ED: Distressed/Restructuring Index* | *2.0* | *6.7* | *3.5* | *6.7* | *4.1* | *4.9* | *4.0* | *15.1* | *-8.1* | *-1.4* | *14.0* | *10.1* | *-1.8* | |
| Chatham Asset High Yield Offshore Fund, Ltd | 5.0 | 13.5 | 7.7 | 13.5 | 14.2 | 12.1 | 6.3 | 24.3 | 5.6 | 5.5 | 12.5 | 11.5 | -6.0 | 0y 5m |
| HFRI ED: Distressed/Restructuring Index | 2.0 | 6.7 | 3.5 | 6.7 | 4.1 | 4.9 | 2.7 | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 | -1.8 | |
| DK Distressed Opportunities International (Cayman) Ltd. | 2.0 | 9.5 | 4.0 | 9.5 | 7.6 | 9.4 | 8.1 | 21.4 | -6.2 | 3.2 | 21.7 | 13.5 | -2.4 | 4y 8m |
| HFRI ED: Distressed/Restructuring Index | 2.0 | 6.7 | 3.5 | 6.7 | 4.1 | 4.9 | 4.0 | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 | -1.8 | |
| York Credit Opportunities Unit Trust | 2.8 | 12.5 | 7.6 | 12.5 | 2.5 | 5.2 | 4.1 | 4.1 | -7.9 | 3.4 | 15.6 | 18.9 | -1.8 | 4y 8m |
| HFRI ED: Distressed/Restructuring Index | 2.0 | 6.7 | 3.5 | 6.7 | 4.1 | 4.9 | 4.0 | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 | -1.8 | |
| **Macro** | | | | | | | | | | | | | | |
| Macro HF Composite | 4.1 | 0.1 | 5.3 | 0.1 | 2.0 | - | 2.1 | 5.0 | 1.0 | 7.7 | - | - | - | 4y 8m |
| HFRI Macro (Total) Index | 2.4 | 2.2 | 3.0 | 2.2 | 0.7 | 1.4 | 1.1 | 1.0 | -1.3 | 5.6 | -0.4 | -0.1 | -4.2 | |
| BP Transtrend Diversified Fund LLC | 13.6 | 1.4 | 13.1 | 1.4 | 2.7 | 5.3 | 4.6 | 8.2 | -1.1 | 18.9 | 0.6 | 1.2 | -11.3 | 4y 8m |
| HFRI Macro (Total) Index | 2.4 | 2.2 | 3.0 | 2.2 | 0.7 | 1.4 | 1.1 | 1.0 | -1.3 | 5.6 | -0.4 | -0.1 | -4.2 | |
| EMSO Saguaro, Ltd. | 0.6 | 7.7 | 3.3 | 7.7 | 8.0 | 5.8 | 2.6 | 10.2 | 6.2 | 2.6 | 2.7 | 17.1 | - | 0y 5m |
| HFRI Macro (Total) Index | 2.4 | 2.2 | 3.0 | 2.2 | 0.7 | 1.4 | 2.4 | 1.0 | -1.3 | 5.6 | -0.4 | -0.1 | -4.2 | |
| Moore Macro Managers Fund Ltd. | 1.9 | 0.6 | 3.0 | 0.6 | 1.2 | 4.4 | 2.2 | 0.0 | 3.1 | 5.4 | 13.4 | 8.9 | -2.6 | 3y 9m |
| HFRI Macro (Total) Index | 2.4 | 2.2 | 3.0 | 2.2 | 0.7 | 1.4 | 2.1 | 1.0 | -1.3 | 5.6 | -0.4 | -0.1 | -4.2 | |
| Stone Milliner Macro Fund Inc. | -2.1 | -5.5 | -2.2 | -5.5 | 1.6 | 5.9 | 0.5 | 4.9 | 5.7 | 14.3 | 11.2 | 8.1 | -1.6 | 2y 10m |
| HFRI Macro (Total) Index | 2.4 | 2.2 | 3.0 | 2.2 | 0.7 | 1.4 | -0.2 | 1.0 | -1.3 | 5.6 | -0.4 | -0.1 | -4.2 | |

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 December 31, 2017

| | Quarter | Year To Date | Fiscal YTD | 1 Year | 3 Years | 5 Years | Since Invested | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | Inception Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Relative Value** | | | | | | | | | | | | | | |
| Relative Value HF Composite | 0.3 | 4.5 | 3.9 | 4.5 | 0.0 | - | 2.0 | -0.4 | -4.0 | 1.6 | - | - | - | 4y 8m |
| HFRI RV: Multi-Strategy Index | 1.0 | 4.0 | 1.6 | 4.0 | 3.7 | 4.4 | 3.7 | 6.4 | 0.7 | 3.4 | 7.9 | 8.2 | -2.4 | |
| (BlackRock) The 32 Capital Fund, Ltd. | -0.1 | 7.4 | 4.3 | 7.4 | 1.1 | 2.0 | 3.0 | -11.4 | 8.6 | -0.3 | 7.1 | 8.9 | 21.1 | 1y 5m |
| HFRI EH: Equity Market Neutral Index | 2.1 | 5.0 | 4.2 | 5.0 | 3.8 | 4.2 | 4.4 | 2.2 | 4.3 | 3.1 | 6.5 | 3.0 | -2.1 | |
| Renaissance RIDGE | 2.4 | 12.4 | 1.2 | 12.4 | 17.0 | 15.1 | -1.1 | 13.3 | 25.6 | 17.0 | 7.7 | 5.1 | 41.2 | 0y 2m |
| HFRI EH: Equity Market Neutral Index | 2.1 | 5.0 | 4.2 | 5.0 | 3.8 | 4.2 | 1.0 | 2.2 | 4.3 | 3.1 | 6.5 | 3.0 | -2.1 | |

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 December 31, 2017

## 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 December 31, 2017

**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 December 31, 2017

### 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 December 31, 2017

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.

# Investment Committee Scorecard – Glossary of Terms

As of December 31, 2017

| Key Performance Indicator | Definition / Explanation |
|---|---|
| **Investment Performance** | |
| Surplus cash balance (millions)<br>Surplus cash return | Investment performance for the Surplus Cash portfolio was 10 bps behind the benchmark for the quarter with a +2.6% return. The portfolio has outgained its benchmark by 10 bps per annum since inception (Nov. 1, 2012) with a return of +6.0% 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 $871.9 million, significantly higher than the beginning of the quarter due to strong investment performance and cash inflows from operations. The fiscal year 2018 plan has a projected balance at fiscal year end of $926.1 million. |
| Cash balance plan balance (millions)<br>Cash balance plan return | The Cash Balance Plan's performance lagged its benchmark by 30 bps for the quarter with a return of +3.0%, but has outperformed its benchmark since inception. The since inception annualized return stands at +8.4%, 50 basis points ahead of its benchmark per year. The assets within the Cash Balance Plan ended the quarter at $259.1 million. The expected amount for fiscal year 2018 is $257.1 million. |
| 403(b) plan balance (millions) | The 403(b) balance has continued to rise given stong equity markets and now stands at $441.7 million, an increase of $30.5 million or 7.4% over the September 30, 2017 value. |
| **Risk vs. Return** | |
| Surplus cash 3-year Sharpe ratio<br>3-year return<br>3-year standard deviation<br>Cash balance 3-year Sharpe ratio<br>3-year return<br>3-year standard deviation | 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.<br><br>Sharpe ratio = (actual return - risk free rate) / standard deviation<br><br>The Surplus Cash portfolio's 3-year Sharpe ratio was slightly below that of its benchmark, but more than double the expected Sharpe ratio modeled. This was more so due to very little volatility over the period with returns similar to what was modeled. The Cash Balance Plan's 3-year Sharpe ratio exceeded modeling expectations and was slightly below its benchmark. Both accounts have demonstrated strong risk-adjusted returns since inception. |
| **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 as the private real estate managers are fully invested. |
| **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 accounts are in the threshold for alert status. Active managers have performed well over the last several quarters; however, have struggled over the 3 and 5 year periods placing both plans in alert 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 December 31, 2017

| 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. It 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, th 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. |

## Important Information – Peer Universe Change

Over the past year, Pavilion Advisory Group Inc. conducted a study to determine the most appropriate investment manager peer universes to use for the preparation of performance and manager search reports for clients. We analyzed a variety of options focusing on the following qualities:

- Robustness of Market Segment Universes
  - *The universe provider must offer an ample number of universe categories to select from, and universes must be large enough to constitute a proper sample size.*
- Institutional Quality Mandates
  - *Ensure that universes are a proper representation of our clients' opportunity set.*
- Alignment
  - *Universes should be accessible for timely manager evaluation, screening and performance evaluation.*
- Net of Investment Manager Fee Universe Availability
  - *Peer ranks should reflect the impact of management fees.*

**Solution: eVestment Net of Fee Universes**

- Robust third-party database, widely used by investment industry for manager research and well-populated by managers
- High membership counts versus other net-only universe options such as Investment Metrics or Lipper
- Institutionally focused universes consist of separate account composites, institutional pooled fund vehicles and mutual funds – universes do not include listings for multiple share classes
- Relative to mutual fund-only universes, eVestment peer groups may lead to less favorable rankings for client managers due to lower average fees of the underlying universe constituents

*We believe eVestment is the right solution for our clients at this time, however, it is not perfect. As with any peer group universe, there are some strategies that will not fit exactly into any one category. In these cases, Pavilion has closely examined portfolio characteristics, and selected the group we believe represents the right fit. In the preparation of performance and manager search reports for clients, Pavilion relies on the use of third parties. While we believe our sources to be reliable, we cannot be liable for third-party errors or omissions.*

# Disclosures

This report contains confidential and proprietary information and is intended for the exclusive use of the parties to whom it is provided. Facts and information provided in this report are believed to be accurate at the time of preparation. However, certain information in this report has been provided to Pavilion Advisory Group Inc. (“Pavilion”) by third parties. Although we believe the third-party sources used to prepare this information are reliable, Pavilion shall not be liable for any errors or as to the accuracy of the information and takes no responsibility to update this information.

This performance report is not a custodial statement or statement of record. You should receive custodial statements or other statement(s) of record directly from your custodian or applicable managers.

Performance returns for period longer than one year are annualized. Returns are shown net of investment manager fees assessed by third party managers or funds, as applicable, unless otherwise denoted and generally include the effect of all cash flows (e.g., earnings, distributions). In addition, accounts may incur other transactions costs such as brokerage commissions, custodial costs and other expenses which are not denoted in this report and may not be reflected in the performance returns. Mutual fund returns assume reinvestment of all distributions at net asset value (NAV) and deduction of fund expenses. Report totals may not sum due to rounding. It is important to note that performance results do not reflect the deduction of any investment advisory fees you pay to Pavilion, therefore, performance results would be reduced by these investment advisory fees. Note, however, certain client reports may reflect the deduction of Pavilion’s investment advisory fee. Information about Pavilion’s investment advisory fees is available in the firm’s Form ADV Part 2A, available upon request.

Generally, the client inception period represents the first full month of performance of the account. Any returns shown prior to the client inception period are obtained directly from the manager or based upon the performance of the investment product. Performance data prior to the consulting relationship with Pavilion may be sourced from prior consultant(s), if applicable.

When administrator valuations for the last month of the reported period are not available prior to report production, Pavilion may derive market values and performance based on manager provided estimates for that investment product. Alternatively, Pavilion may use carry forward market values from the prior month. Performance and market values are updated if/when the statement is received from the manager/administrator and may be different than the values in the initial report. Performance and market value estimates are denoted with [CE] (current estimate). Private equity holding results typically lag by 45 to 180 days after the report period end due to statement availability, therefore may not be included in the report.

# Disclosures

In the course of Pavilion's performance reconciliation process, Pavilion may uncover significant pricing differences between your investment managers and the values of the custodian on a security by security basis and may adjust the custodian valuation, if the manager's price is closer to a third party pricing source (FactSet, Bloomberg, Bondedge). If a third party price is unavailable, Pavilion uses the more conservative price. For other identified valuation errors, Pavilion alerts the custodian about any issues and will report as representative a market value for the portfolio as possible. You should carefully review your custodial statements or other statement(s) of record from the manager and report any discrepancies to your qualified custodian or applicable manager.

This disclosure is intended to capture and explain Pavilion's process for performance reporting. Due to specific client requests, accommodations or other circumstances, the actual process may vary from this description.

Past performance is no indication of future results. This document may include certain forward-looking statement or opinions that are based on current estimates and forecasts. Actual results could differ materially. Investing in securities products involves risk, including possible loss of principal. You should carefully review and consider the applicable prospectus or other offering documents prior to making any investment.

Pavilion Advisory Group Inc. is an investment adviser registered with the U.S. Securities and Exchange Commission.  www.pavilioncorp.com

# Candidate Summary – International Value Search

| Candidates | | | |
|---|---|---|---|
| | **Boston Partners** | **Causeway** | **Pyrford** |
| Investment Style | Capital Preservation, Non-Traditional Value | High Quality, Moderate Tracking Error | Total Return, Benchmark Agnostic |
| Expense Ratio[1] | 0.80% | 0.89% | 0.79% |
| Vehicle Type[1] | Collective Trust | Mutual Fund (CIVIX) | Mutual Fund (BISGX) |
| Liquidity | Daily | Daily | Daily |

| Characteristics | | | |
|---|---|---|---|
| | **Boston Partners** | **Causeway** | **Pyrford** |
| Firm AUM | $99,240 million | $58,964 million | $10,492 million |
| Strategy AUM | $1,336 million | $28,699 million | $4,373 million |
| Team / Star System | Team | Team | Team |
| Portfolio Mgrs / Analysts | 2 / 27 | 8 / 14 | 7 / 2 |
| Current # of Holdings | 104 | 58 | 70 |
| Security Selection | Bottom Up | Bottom Up | Combination |
| Average Annual Turnover | 75% - 125% | 35% – 55% | 20% – 35% |

## Recommended Candidate

### Causeway

- Causeway's actively managed, value-focused strategy has a strong and consistent track record as well as a strong success rate for outperforming in most market environments.
- Causeway tends to focus on higher quality companies and has historically provided good downside protection in turbulent markets. The investment process is comprised of three stages: quantitative screening and initial analysis, fundamental research, and portfolio construction. Quantitative screens narrow the universe of investment candidates by applying market capitalization and valuation screens. Then, fundamental research is performed, which generally includes company specific research, company visits, and interviews of suppliers, customers, competitors, industry analysts, and experts. The team believes that companies derive their value from the contribution of yield and profitable re-investment of earnings back into the company. They consider whether a company has value characteristics relative to the market such as low price-to-earnings, high yield, low price-to-book value, low price-to-cash flow and financial strength.
- The team believes risk is best measured by the volatility of a portfolio's returns, not its dispersion from the benchmark. They believe investors are rewarded over the long term by a reduction in volatility and their goal is to construct a portfolio that provides consistent long-term, risk-adjusted returns.
- The portfolio managers have worked together for many years and average over 20 years of industry experience. We believe the culture of the team is very collaborative and view the team's shared history as a competitive advantage to the other candidates.
- In our view, the relatively broad employee ownership is favorable. With each senior investment professional holding equity in the company, we believe the interests of employees and clients are aligned.
- The strategy caps its emerging markets exposure at 10% and in this region will only invest in South Korea making it a good balance to the existing emerging markets exposure.

| Through 12/31/2017 | Annualized Performance – Net of Fees (% Return) | | | | | Calendar Year Performance – Net of Fees (% Return) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **One Year** | **Three Years** | **Five Years** | **Seven Years** | **Ten Years** | **2016** | **2015** | **2014** | **2013** | **2012** | **2011** | **2010** | **2009** | **2008** |
| Boston Partners | 25.1 | 8.6 | 9.7 | 8.2 | - | -0.2 | 2.5 | -4.6 | 30.2 | 17.5 | -7.1 | 9.6 | 26.6 | - |
| Causeway | 27.4 | 7.5 | 8.2 | 7.2 | 3.6 | 0.2 | -2.8 | -5.5 | 26.5 | 23.5 | -11.0 | 12.9 | 36.5 | -43.5 |
| Pyrford | 18.9 | 5.5 | 6.6 | 6.6 | 3.9 | 2.6 | -3.6 | 0.8 | 16.3 | 16.3 | -2.5 | 8.6 | 30.5 | -33.4 |
| *MSCI EAFE Value* | *21.4* | *6.4* | *6.9* | *5.4* | *1.1* | *5.0* | *-5.7* | *-5.4* | *23.0* | *17.7* | *-12.2* | *3.2* | *34.2* | *-44.1* |
| *MSCI ACWI ex US (Net)* | *27.2* | *7.8* | *6.8* | *4.9* | *1.8* | *4.5* | *-5.7* | *-3.9* | *15.3* | *16.8* | *-13.7* | *11.2* | *41.4* | *-45.5* |

Performance Notes:

- All returns shown net of all fees. Boston Partners returns represent the Boston Partners International Value Equity composite. Causeway returns represent the Causeway International Value Equity composite. Pyrford returns represent the Pyrford International Stock Fund composite.

[1] Actual vehicle type utilized and corresponding expense ratio may differ due to asset size and plan type, ie. ERISA vs. non-ERISA.

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Pavilion Advisory Group®

# International Value Equity Manager Search

Northern Cross

Boston Partners Global Investors, Inc.

Causeway Capital Management LLC

Pyrford International Ltd

Prepared for:

## EL CAMINO HOSPITAL

First Quarter 2018

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# Executive Summary

**The following managers are included in this search:**

| | | |
|---|---|---|
| Northern Cross | Harbor International Equity | Boston, Massachusetts |
| Boston Partners Global Investors, Inc. | Boston Partners International Equity | Boston, Massachusetts |
| Causeway Capital Management LLC | Causeway International Value Equity | Los Angeles, California |
| Pyrford International Ltd | International Equity | London, England |

**Below are brief summaries of the search candidates.**

## Northern Cross

■ **Philosophy:** The Northern Cross investment philosophy, as established by former Portfolio Manager Hakan Castegren, focuses on investing in quality companies with long-term catalysts, resulting in consistency and sustainability of individual stock performance. It is an investment philosophy that requires a long-term investment horizon because it depends on long-term margin expansion of the underlying companies.

■ **Process:** The investment team seeks to thoroughly understand the businesses it owns by conducting on the ground, fundamental research and using a long-standing network of regional intelligence gained over the years. Stock selection is bottom-up based on factors such as margin expansion, pricing power, cost reduction, cash flow yield, price-to-earnings and price-to-book ratios. This strategy tends to have a large cap value bias.

■ **Performance:** This team's focus on long-term returns will result in a portfolio that differs significantly from the MSCI EAFE Index and style benchmark, resulting in a high tracking error portfolio. The portfolio performs well in a variety of market environments, but the value bias will lead to trailing returns in high growth markets. Historically, Northern Cross adds value in up markets and protects capital in down markets.

## Boston Partners Global Investors, Inc.

■ **Philosophy:** Boston Partners adheres to three primary tenets that govern its equity investment philosophy: a value discipline, a characteristics-based investment approach, and preservation of capital. Boston Partners executes this philosophy at the individual stock selection level by looking for three financial characteristics: undervalued securities with sound business fundamentals and positive business momentum.

■ **Process:** The investment team employs a bottom-up research approach that incorporates a blend of quantitative and fundamental inputs. A quantitative scoring screen identifies companies with desired valuation, momentum, and fundamental attributes, yielding a composite score for each prospective securities.  Stocks that meet the requirements are subject to fundamental research where the team seeks securities with low price-to-earnings, low price-to-book value, and low price-to-cash flow ratios. The firm will not invest in securities merely because they are perceived to be inexpensive relative to the market. Instead, Boston Partners looks for undervalued companies with sound business fundamentals that exhibit positive business momentum or catalyst (i.e.-improving profit margins) that will translate into future earnings improvements. The firm tries to avoid companies that are "cheap" and have no prospect for growth.

■ **Performance:** Differentiating this strategy from its peers is its tendency to invest in non-traditional value sectors, such as Information Technology, which has allowed it to perform well when growth outperforms value. Despite this somewhat unique dynamic, the strategy maintains a relatively low tracking error. Historically, the portfolio has kept pace in up markets and excelled in down markets, which is a testament to the team's focus on preserving capital.

### Causeway Capital Management LLC

■ **Philosophy:** The Causeway International Value Equity product is an actively managed, value-focused strategy that attempts to exploit market inefficiencies by conducting fundamental, bottom-up analysis. Causeway believes that stock value is a function of dividend yield and prudent reinvestment of retained earnings. They apply a two-year investment horizon because the market takes a long time to realize a stock's actual value.

■ **Process:** Portfolio Managers and Research Analysts conduct fundamental research. The team uses internal and external information feeds such as Bloomberg, FactSet, and WorldScope to focus on company-specific research. Portfolio Managers and Research Analysts speak with company management and interview third parties (e.g., suppliers and competitors) to validate the team's investment assumptions. They rank stocks on expected returns adjusted for risk and liquidity. They will sell a stock as its price rises and becomes less attractive on a price vs. intrinsic value, or they identify a better opportunity. Causeway will also sell a stock on portfolio diversification guidelines or a stock’s fundamentals deteriorate. Discussions with management are part of the bottom-up due diligence process and management contact is required before a security can be included in the portfolio.

■ **Performance:** Causeway does not make an effort to eliminate active bets against the benchmark but does have strict risk controls in place. Causeway tends to focus on higher quality companies and has historically provided downside protection in turbulent markets. The manager is most appropriate for clients who are comfortable with moderate tracking error.

### Pyrford International Ltd

■ **Philosophy:** Pyrford employs a total return, benchmark agnostic investment philosophy. Its approach is based on a combination of top-down country level analysis combined with bottom-up fundamental due diligence. As a total return strategy, the team is attracted to, and prefers investing in, companies exhibiting high dividend yields. This portfolio should be considered a core product, but has a value tilt.

■ **Process:** Pyrford’s bottom-up fundamental due diligence includes an assessment of the company’s expected earnings and total return using the same formula that is employed at the country level: dividend yield plus long-term earnings growth per share. An important component of this analysis is a disaggregation of a company’s return on equity, as the researcher attempts to determine the nature of a company’s growth, the quality of earnings, and the probability of sustaining those current trends. The analyst is tasked with coming up with conservative five-year forward total return forecasts.

■ **Performance:** We have identified few institutional caliber investment managers that, like Pyrford, combine a true top-down overlay with bottom-up fundamental analysis. Further, we are attracted to the strategy’s focus on dividend yield as our work has shown this is a better pond to be fishing in. The portfolio should be expected to have an overall dividend yield above the benchmark and exhibits excellent downside protection.

## Candidate Summary

*as of December 31, 2017*

| | Northern Cross | Boston Partners | Causeway | Pyrford |
|---|---|---|---|---|
| **Investment Style** | High Tracking Error, Value Bias | Capital Preservation, Non-Traditional Value | High Quality, Moderate Tracking Error | Combination of Top-Down and Bottom-Up, Dividend Yield |
| **Firm Ownership** | 100% Employee Owned | 100% Parent Owned | 100% Employee Owned | 100% Parent Owned |
| **Firm Assets (millions)** | $33,202 | $99,240 | $58,964 | $10,492 |
| **Product Assets (millions)** | $33,202 | $1,336 | $28,699 | $4,373 |
| **Decision Making Process** | Team System | Team System | Team System | Team System |
| **# of Portfolio Managers / Average Experience** | 3 / 25 | 2 / 20 | 8 / 23 | 7 / 17 |
| **# of Research Analysts / Average Experience** | 3 / 10 | 27 / 15 | 14 / 8 | 2 / 3 |
| **Maximum Security / Sector Weight** | 7% / 25% by Industry | 5% / 25% by Industry | 5% / 25% by Industry | 5% / + 20% of the Index |
| **Current / Average / Maximum Cash Weight** | 1.5% / 3.0% / 10.0% | 3.0% / 1.0% / 10.0% | 2.1% / 2.0% / 10.0% | 4.1% / 3.0% / 5.0% |
| **Current / Average / Maximum Emerging Markets Weight** | 9.6% / 8.0% / 20.0% | 8.2% / 1.2% / 20.0% | 10.9% / 4.5% / 10.0%[1] | 6.8% / 6.0% / 20.0% |
| **Current # of Holdings / % Top 10 Holdings** | 69 / 33.3% | 104 / 20.5% | 58 / 31.2% | 70 / 23.3% |
| **Market Cap Range at Purchase (millions)** | > $5 Million | > $250 Million | > $1 Billion | > $1 Billion in Asia Pacific<br>> $2 Billion in Europe |
| **Average Annual Turnover Range** | 5% - 15% | 75% - 125% | 35% - 55% | 20% - 35% |
| **Stance on Hedging** | None | None | For Defensive Purposes Only | Currencies can be Hedged |

[1] Direct emerging markets exposure is limited to 10%, but Causeway will only invest in South Korea and China within this region.

## Fee Summary

| | Investment Vehicle | Fee Schedule | | Minimum Investment | Redemption Fees | Vehicle Assets |
|---|---|---|---|---|---|---|
| **Northern Cross** | Harbor International Equity Fund<br>*- HAINX* | Expense Ratio | 0.72% | $50,000 | None | $29.6 Billion |
| **Boston Partners** | John Hancock Disciplined Value International Fund R6<br>*- JDIUX* | Expense Ratio | 0.88% | $1,000,000 | None | $1.1 Billion |
| | Boston Partners International Equity<br>*- Collective Trust*<br>*Daily Liquidity* | Expense Ratio | 0.80%[1] | $1,000,000 | None | $13.4 Million |
| **Causeway** | Causeway International Value Mutual Fund I Class<br>*- CIVIX* | Expense Ratio | 0.89% | $1,000,000 | 2% if sold within 60 days[2] | $9 Billion |
| **Pyrford** | BMO International Stock Fund<br>*Commingled Vehicle*<br>*(ERISA Only)*<br>*Monthly Liquidity* | First $25 Million<br>Next $75 Million<br>Next $100 Million<br>Balance | 0.70%<br>0.60%<br>0.50%<br>0.45% | $5,000,000 | None[3] | $547 Million |
| | Pyrford International Stock Fund R6 Class<br>*- BISGX* | Expense Ratio | 0.79% | $1,000,000 | None | $704 Million |

Mutual fund expense ratios are likely to vary over time based on the operating expenses of the fund.

[1] The expense ratio includes a 0.70% Management Fee and a 0.10% Operating Expense. The Total Fee is capped at 0.80% until the fund is at $200 million in assets under management, then expenses float.

[2] Causeway is open to discuss waiving that redemption fee for Pavilion clients based on frequent trading policies.

[3] Clients may be subject to Anti-Dilution Levy if the aggregate net outflow is greater than 5% of the Fund's Assets Under Management.

# Performance Review

## Calendar Year Historical Performance - Net of Fees

*Years Ended December 31*

| | 2017 | | 2016 | | 2015 | | 2014 | | 2013 | | 2012 | | 2011 | | 2010 | | 2009 | | 2008 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Northern Cross** | 22.9 | *65* | 0.2 | *88* | -3.8 | *63* | -6.8 | *70* | 16.8 | *83* | 20.9 | *28* | -11.1 | *35* | 12.0 | *43* | 38.6 | *30* | -42.7 | *51* |
| **Boston Partners** | 25.1 | *47* | -0.2 | *91* | 2.5 | *17* | -4.6 | *47* | 30.2 | *10* | 17.5 | *63* | -7.1 | *12* | 9.6 | *53* | 26.6 | *78* | -- | -- |
| **Causeway** | 27.4 | *27* | 0.2 | *88* | -2.8 | *52* | -5.5 | *57* | 26.5 | *32* | 23.5 | *14* | -11.0 | *33* | 12.9 | *38* | 36.5 | *40* | -43.5 | *58* |
| **Pyrford** | 18.9 | *89* | 2.6 | *63* | -3.6 | *61* | 0.8 | *8* | 16.3 | *84* | 16.3 | *76* | -2.5 | *4* | 8.6 | *59* | 30.5 | *62* | -33.4 | *10* |
| **MSCI EAFE Value** | 21.4 | *73* | 5.0 | *45* | -5.7 | *75* | -5.4 | *57* | 23.0 | *51* | 17.7 | *58* | -12.2 | *49* | 3.2 | *91* | 34.2 | *51* | -44.1 | *62* |
| **MSCI ACWI xUS Value** | 22.7 | *67* | 8.9 | *17* | -10.1 | *93* | -5.1 | *54* | 15.0 | *87* | 17.0 | *66* | -13.2 | *59* | 7.8 | *65* | 44.3 | *22* | -45.5 | *71* |
| **Universe Median** | 24.7 | *50* | 4.3 | *50* | -2.6 | *50* | -4.8 | *50* | 23.2 | *50* | 18.1 | *50* | -12.2 | *50* | 10.2 | *50* | 34.7 | *50* | -42.4 | *50* |
| # of Observations | 114 | | 126 | | 126 | | 126 | | 124 | | 120 | | 117 | | 114 | | 113 | | 100 | |

## Annualized Historical Performance – Net of Fees

*Periods Ended December 31, 2017*

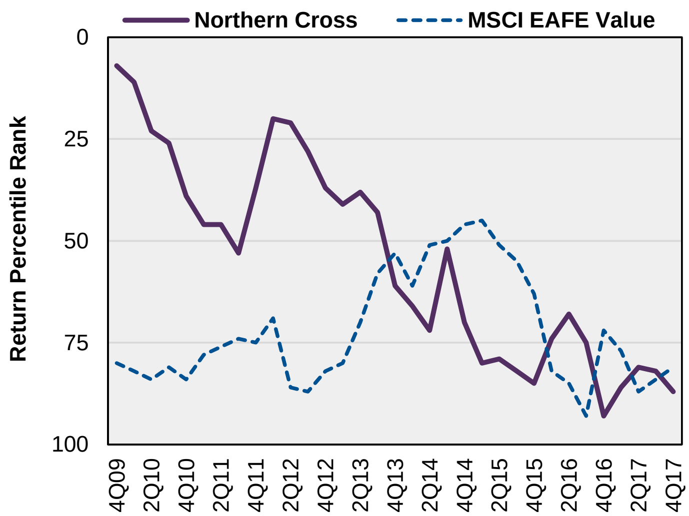
| | 1 Year | | 3 Year | | 5 Year | | 7 Year | | 10 Year | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Northern Cross** | 22.9 | *65* | 5.8 | *87* | 5.2 | *95* | 4.8 | *84* | 2.1 | *66* |
| **Boston Partners** | 25.1 | *47* | 8.6 | *45* | 9.7 | *33* | 8.2 | *25* | -- | -- |
| **Causeway** | 27.4 | *27* | 7.5 | *60* | 8.2 | *51* | 7.2 | *39* | 3.6 | *36* |
| **Pyrford** | 18.9 | *89* | 5.5 | *90* | 6.6 | *84* | 6.6 | *46* | 3.9 | *34* |
| **MSCI EAFE Value** | 21.4 | *73* | 6.4 | *81* | 6.9 | *74* | 5.4 | *80* | 1.1 | *86* |
| **MSCI ACWI xUS Value** | 22.7 | *67* | 6.3 | *81* | 5.6 | *94* | 4.2 | *92* | 1.2 | *86* |
| **Universe Median** | 24.7 | *50* | 8.2 | *50* | 8.3 | *50* | 6.3 | *50* | 2.7 | *50* |
| # of Observations | 114 | | 105 | | 94 | | 85 | | 67 | |

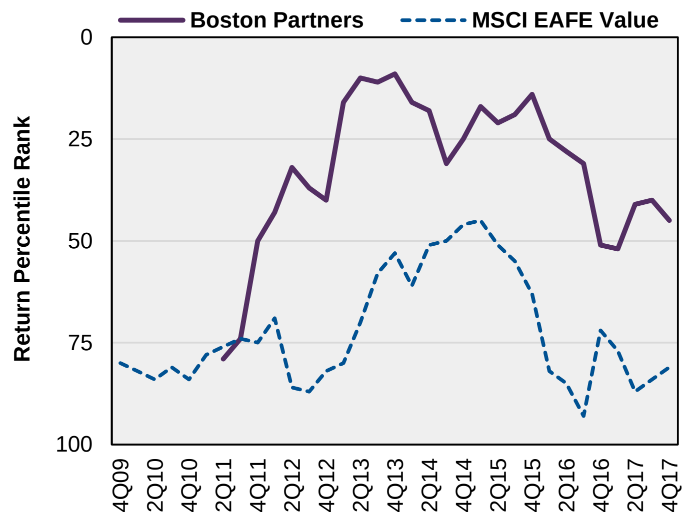
See Notes to Performance for important information regarding performance.

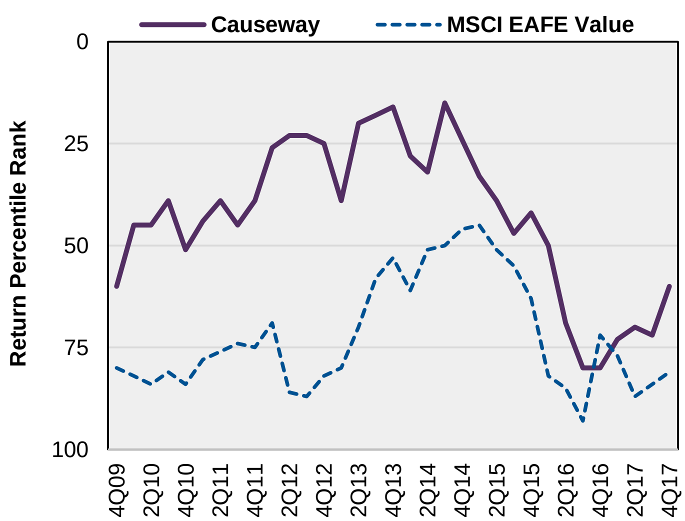
Note: Rankings appear next to the return in colored italics. For managers, rankings are red if they are worse than the primary benchmark's ranking and green if they are better than the primary benchmark's ranking. Returns are ranked in the eVestment International Value universe. All returns are net of fees based on the mandate size. Rankings are based on net of fees performance to be consistent with the ranking methodology in the eVestment Universe. In order to ensure statistical significance, rankings are only shown for time periods with at least 50 observations in the universe.

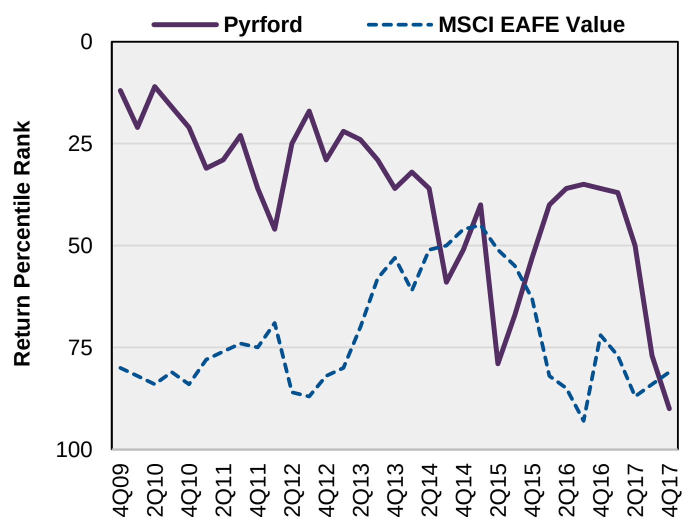
## Rolling Three-Year Universe Rankings - Net of Fees

| % of Obs. in Quartile: | Northern Cross | Boston Partners | Causeway | Pyrford | MSCI EAFE Value |
|---|---|---|---|---|---|
| First (0-25) | 15% | 44% | 24% | 30% | 0% |
| Second (26-50) | 30% | 41% | 48% | 48% | 9% |
| Third (51-75) | 18% | 7% | 15% | 12% | 27% |
| Fourth (76-100) | 36% | 7% | 12% | 9% | 64% |



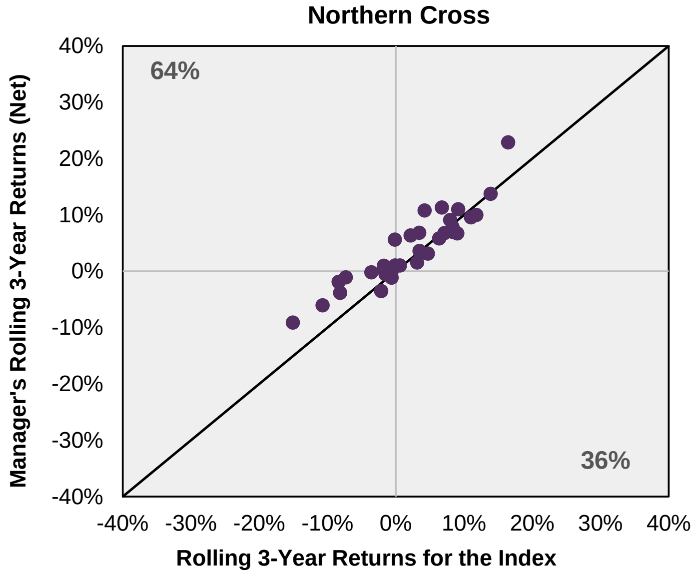



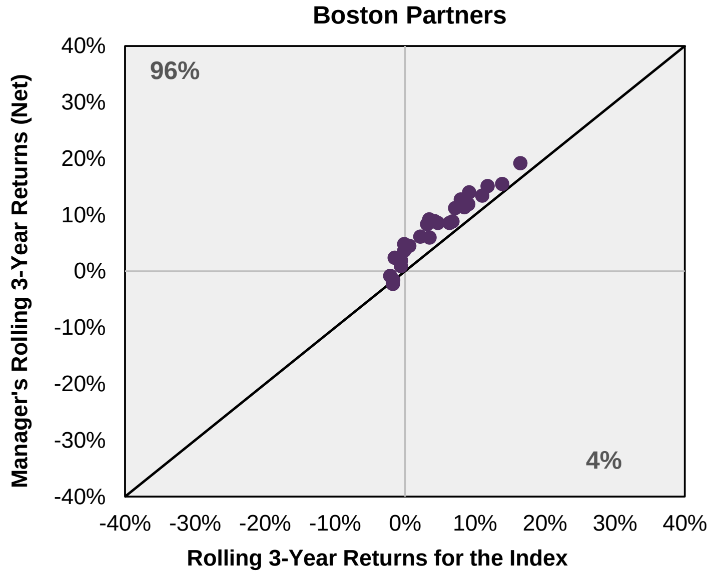



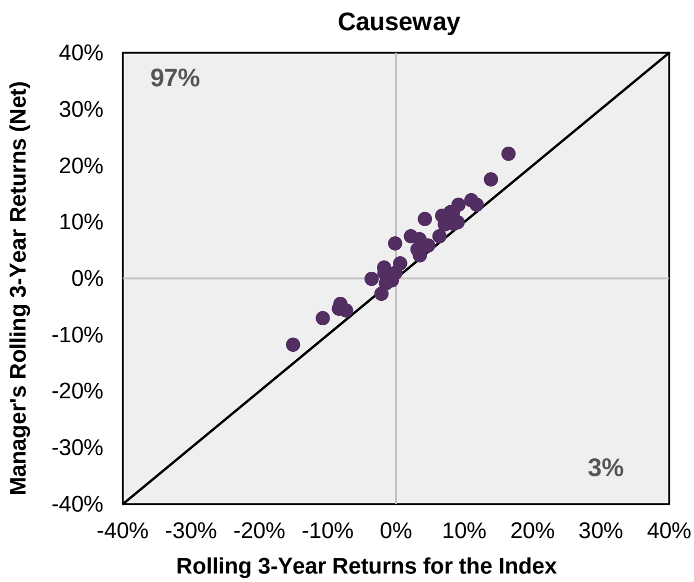



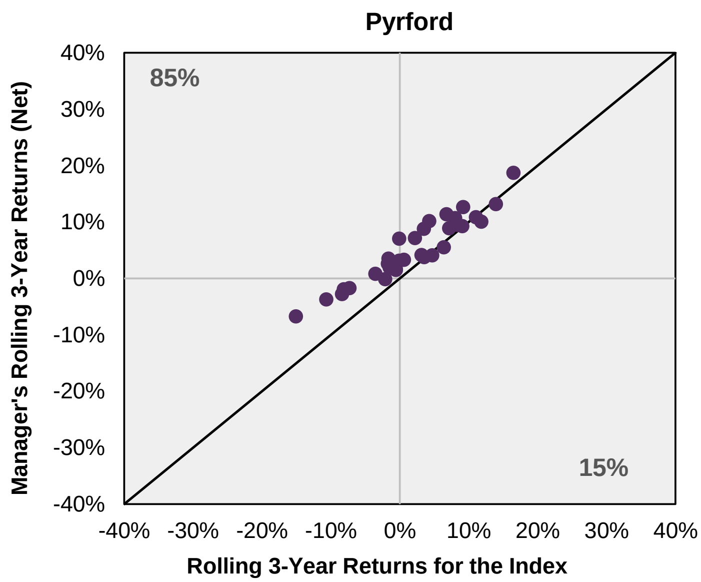
## Rolling Three-Year Annualized Returns - Net of Fees
**(Quarterly Data)**

*Percentage indicates percent of observations above or below the benchmark*



### Rolling Three-Year Excess Return Market Analysis - Net of Fees

*Over the Ten-Year Period Ended December 31, 2017*

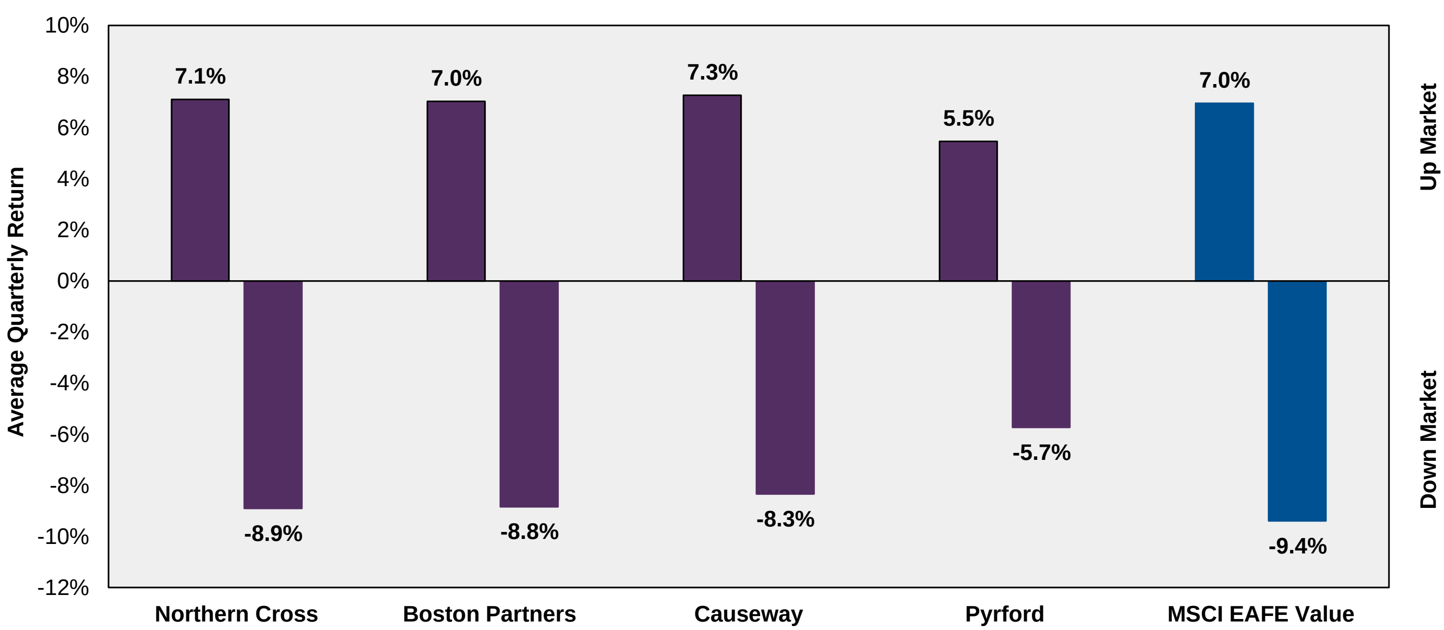
| | Northern Cross | | Boston Partners | | Causeway | | Pyrford | |
|---|---|---|---|---|---|---|---|---|
| | Avg. ER | Batting Avg | Avg. ER | Batting Avg | Avg. ER | Batting Avg | Avg. ER | Batting Avg |
| **Down Market (<0%)** | 2.8% | 11 / 13 | 2.2% | 7 / 8 | 2.5% | 12 / 13 | 4.7% | 13 / 13 |
| **Low Return Market (0 - 7%)** | 1.7% | 6 / 9 | 3.8% | 9 / 9 | 2.9% | 9 / 9 | 2.6% | 7 / 9 |
| **High Return Market (7% - 14%)** | -0.6% | 2 / 9 | 3.4% | 9 / 9 | 2.6% | 9 / 9 | 0.9% | 6 / 9 |
| **Speculative Market (> 14%)** | 6.4% | 1 / 1 | 2.7% | 1 / 1 | 5.6% | 1 / 1 | 2.2% | 1 / 1 |

### Average Quarterly Up/Down Market Analysis – Net of Fees

*Previous 40 Quarters Ending December 31, 2017*

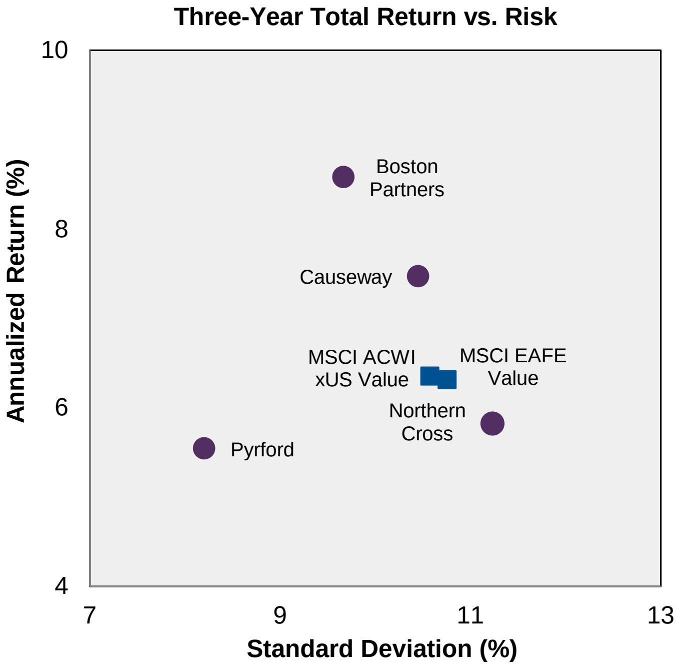
*(25 Up Quarters / 15 Down Quarters, as measured by the MSCI EAFE Value Index)*

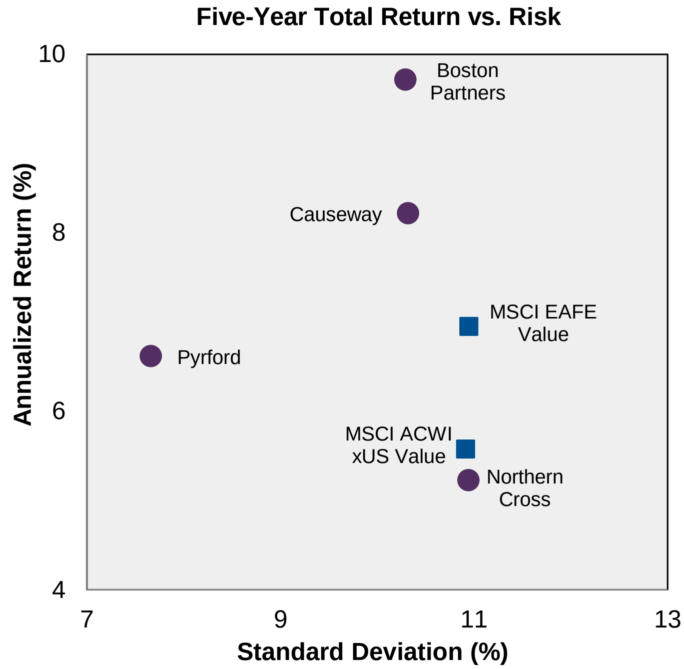
| | Northern Cross | | Boston Partners | | Causeway | | Pyrford | |
|---|---|---|---|---|---|---|---|---|
| | Up | Down | Up | Down | Up | Down | Up | Down |
| **Success Rate vs Index** | 48% | 53% | 56% | 77% | 64% | 67% | 40% | 93% |
| **Avg. Excess Return** | 0.1% | 0.5% | 0.1% | 0.9% | 0.3% | 1.1% | -1.5% | 3.7% |



## Best/Worst Rolling Period Excess Returns - Net of Fees

| vs MSCI EAFE Value | | Northern Cross | | Boston Partners | | Causeway | | Pyrford | |
|---|---|---|---|---|---|---|---|---|---|
| 1 Quarter | Best | 5.3% | (12/09) | 4.5% | (03/13) | 5.5% | (03/12) | 6.6% | (06/10) |
| | Worst | -8.5% | (12/16) | -6.7% | (06/09) | -4.5% | (06/09) | -8.4% | (06/09) |
| 1 Year | Best | 10.7% | (09/10) | 8.5% | (09/15) | 10.5% | (09/12) | 12.5% | (06/16) |
| | Worst | -7.5% | (03/17) | -11.7% | (09/09) | -4.8% | (12/16) | -13.1% | (06/17) |
| Annualized 3 Year | Best | 6.6% | (06/12) | 5.8% | (03/13) | 6.3% | (09/12) | 7.2% | (09/12) |
| | Worst | -2.3% | (03/15) | -0.5% | (06/11) | -0.6% | (12/16) | -1.7% | (06/15) |



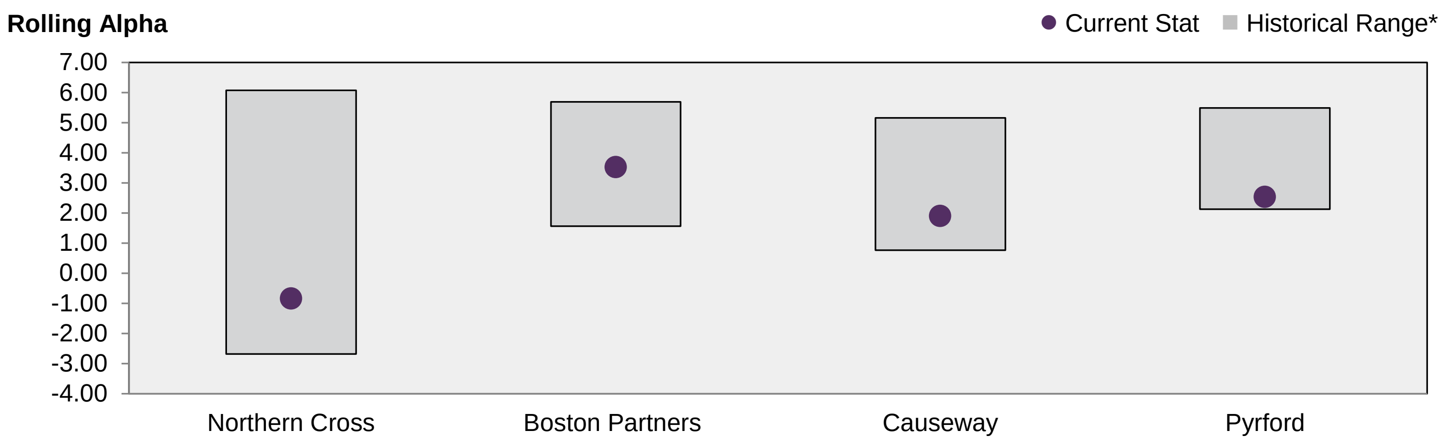

## Risk / Return Statistics - Net of Fees

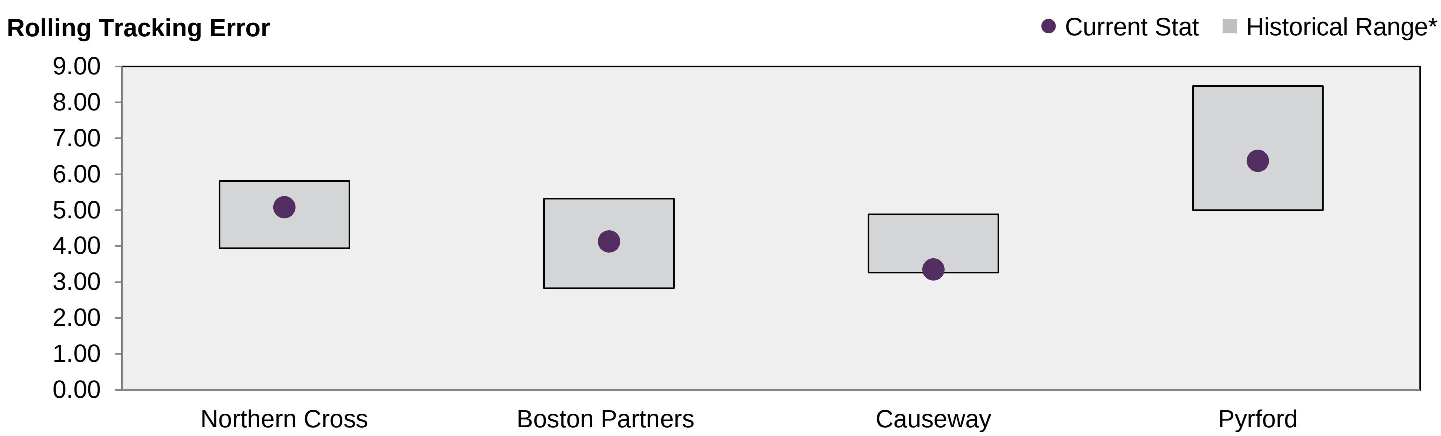
| Five Years vs MSCI EAFE Value | Northern Cross | Boston Partners | Causeway | Pyrford | MSCI EAFE Value |
|---|---|---|---|---|---|
| Alpha | -0.85 | 3.52 | 1.90 | 2.53 | N/A |
| Beta | 0.89 | 0.87 | 0.90 | 0.58 | N/A |
| Excess Return | -1.72 | 2.76 | 1.27 | -0.33 | N/A |
| Tracking Error | 5.07 | 4.12 | 3.34 | 6.37 | N/A |
| Information Ratio | -0.34 | 0.67 | 0.38 | -0.05 | N/A |
| Std. Deviation | 10.95 | 10.29 | 10.32 | 7.66 | 10.95 |
| Sharpe Ratio | 0.45 | 0.92 | 0.77 | 0.83 | 0.61 |
| Up/Down Capture | 76% / 91% | 88% / 77% | 87% / 84% | 61% / 68% | N/A |

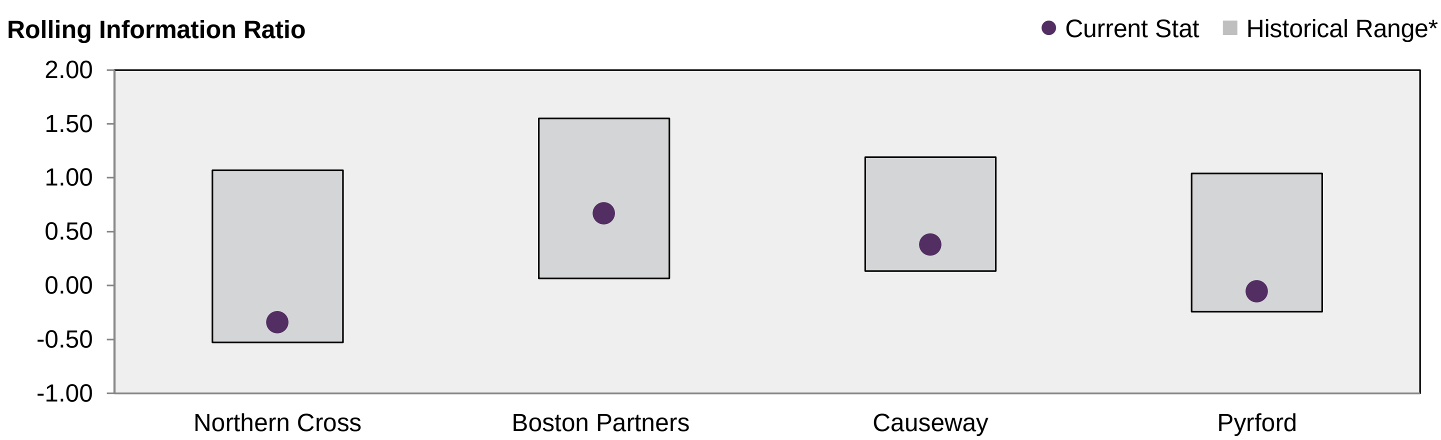
## Rolling Risk Statistic Range - Net of Fees

**(Quarterly Data)**

*Rolling Five Years Ending December 31, 2017*



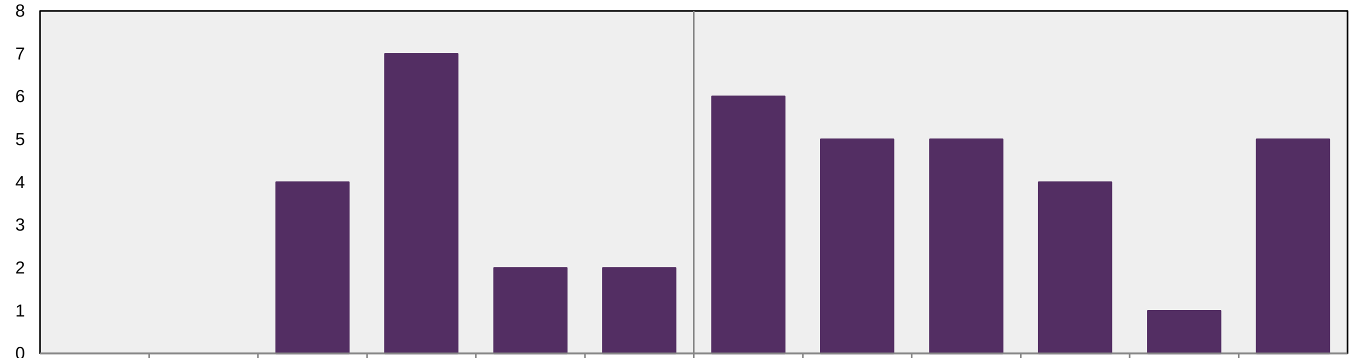




* These charts depict the current risk statistic within the context of its historical range. Our intent is to mitigate end-point sensitivity inherent in the statistics. The bar represents the range of the designated rolling risk statistic created by adding and subtracting two standard deviations from the average rolling risk statistic over the past ten years or since inception, whichever is shorter. Approximately 95% of observations should fall within this range.

## Consistency of Excess Returns - Net of Fees
### Northern Cross vs. MSCI EAFE Value Index

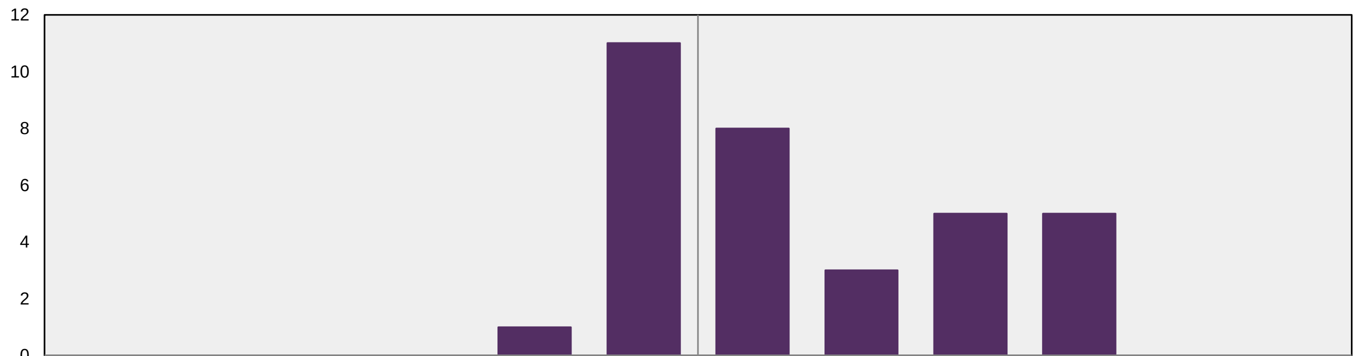
**Rolling 4-Quarter (One-Year) Periods. 41 Observations.** **Success Rate: 63.4%**



| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 4 | 7 | 2 | 2 | 6 | 5 | 5 | 4 | 1 | 5 |

Annualized Relative Performance)

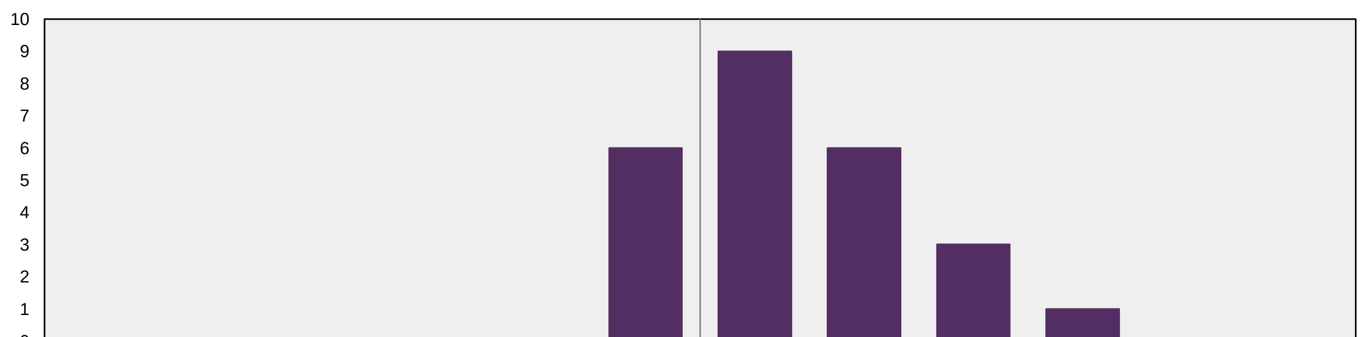
**Rolling 12-Quarter (Three-Year) Periods. 33 Observations.** **Success Rate: 63.6%**



| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 1 | 11 | 8 | 3 | 5 | 5 | 0 | 0 |

Annualized Relative Performance

**Rolling 20-Quarter (Five-Year) Periods. 25 Observations.** **Success Rate: 76.0%**

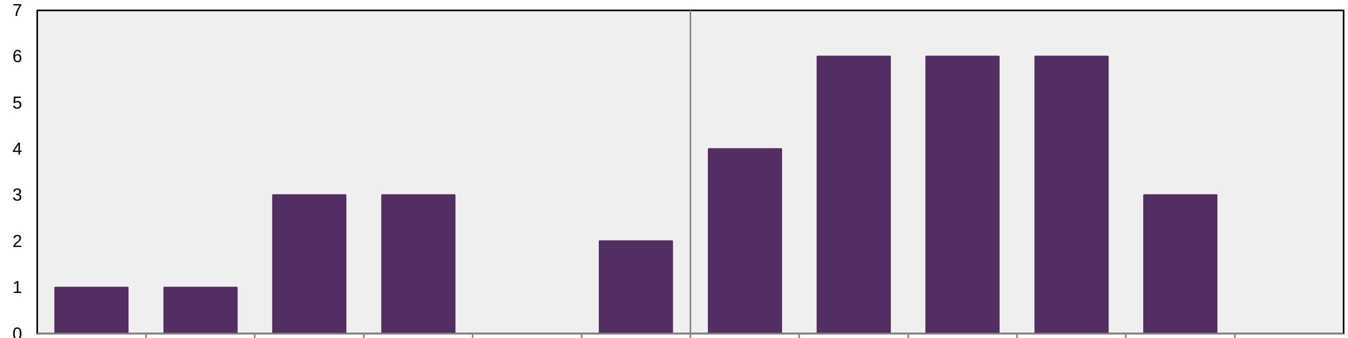


| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 6 | 9 | 6 | 3 | 1 | 0 | 0 |

Annualized Relative Performance

## Consistency of Excess Returns - Net of Fees
### Boston Partners vs. MSCI EAFE Value Index

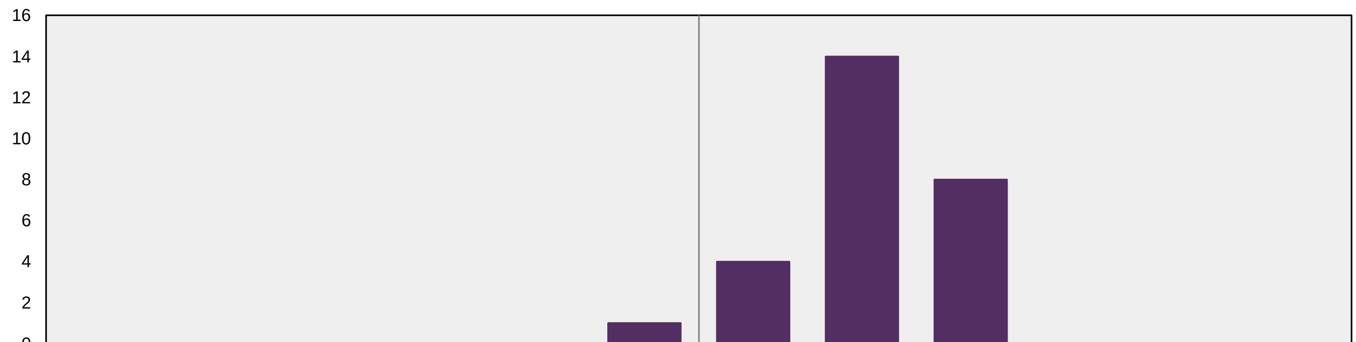
**Rolling 4-Quarter (One-Year) Periods. 35 Observations.** **Success Rate: 71.4%**



| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 1 | 1 | 3 | 3 | 0 | 2 | 4 | 6 | 6 | 6 | 3 | 0 |

**Annualized Relative Performance)**

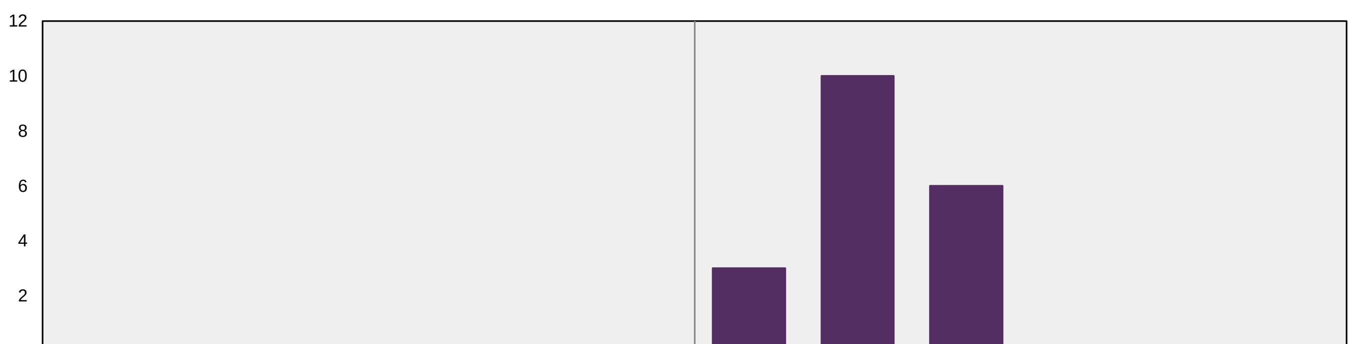
**Rolling 12-Quarter (Three-Year) Periods. 27 Observations.** **Success Rate: 96.3%**



| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 14 | 8 | 0 | 0 | 0 |

**Annualized Relative Performance**

**Rolling 20-Quarter (Five-Year) Periods. 19 Observations.** **Success Rate: 100.0%**

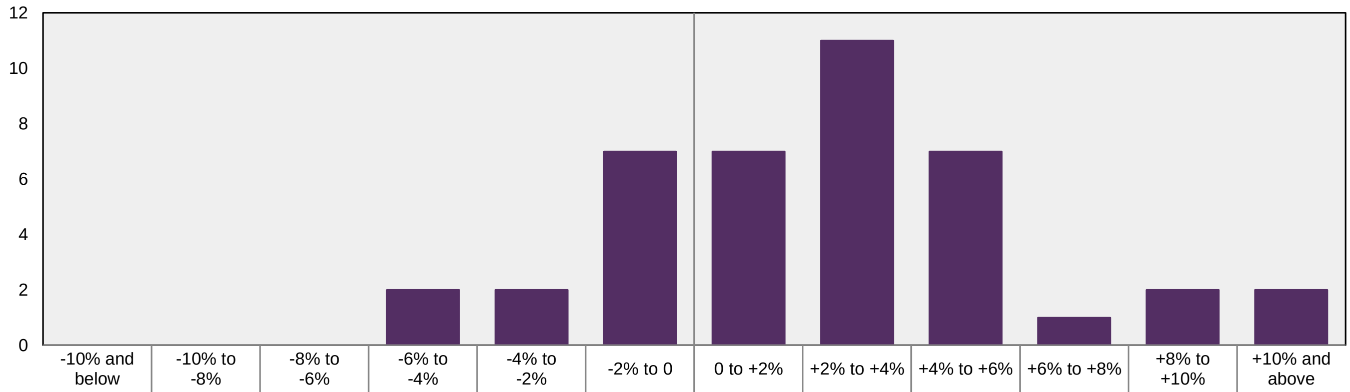


| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 6 | 0 | 0 | 0 |

**Annualized Relative Performance**

## Consistency of Excess Returns - Net of Fees
### Causeway vs. MSCI EAFE Value Index

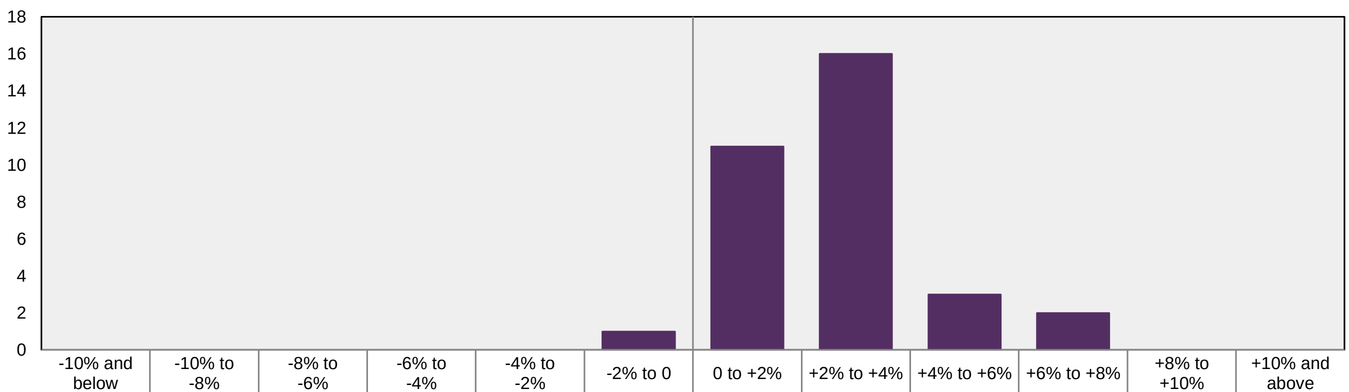
**Rolling 4-Quarter (One-Year) Periods. 41 Observations.** **Success Rate: 73.2%**



| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 2 | 2 | 7 | 7 | 11 | 7 | 1 | 2 | 2 |

**Annualized Relative Performance**

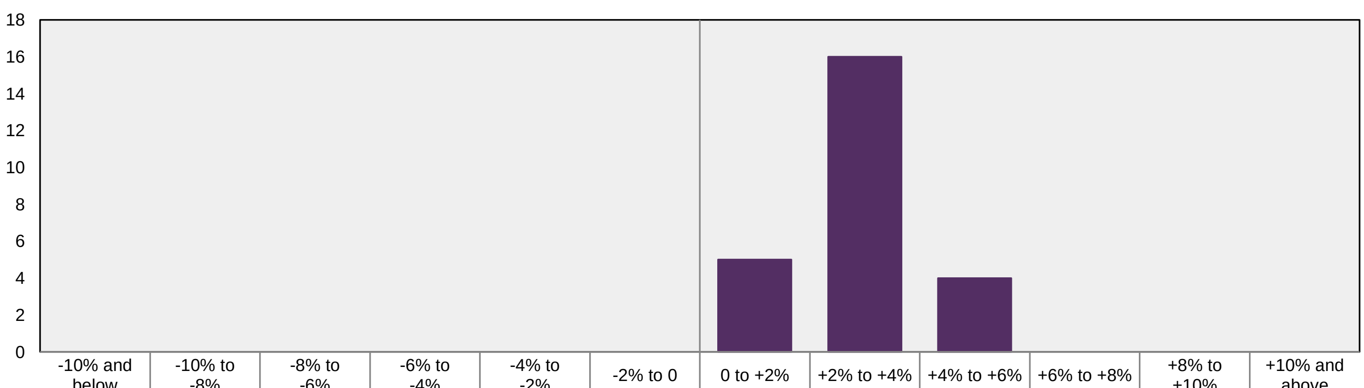
**Rolling 12-Quarter (Three-Year) Periods. 33 Observations.** **Success Rate: 97.0%**



| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 16 | 3 | 2 | 0 | 0 |

**Annualized Relative Performance**

**Rolling 20-Quarter (Five-Year) Periods. 25 Observations.** **Success Rate: 100.0%**



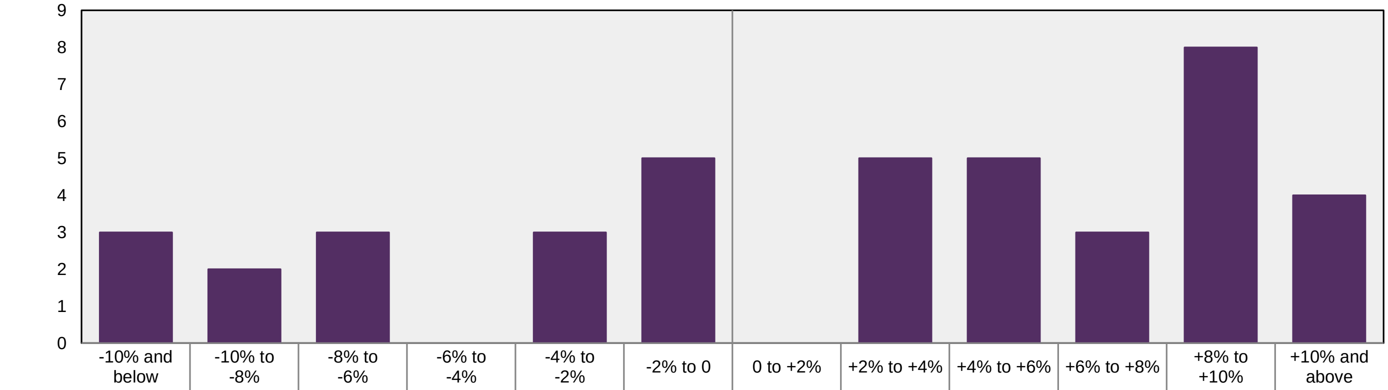
| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 16 | 4 | 0 | 0 | 0 |

**Annualized Relative Performance**

## Consistency of Excess Returns - Net of Fees

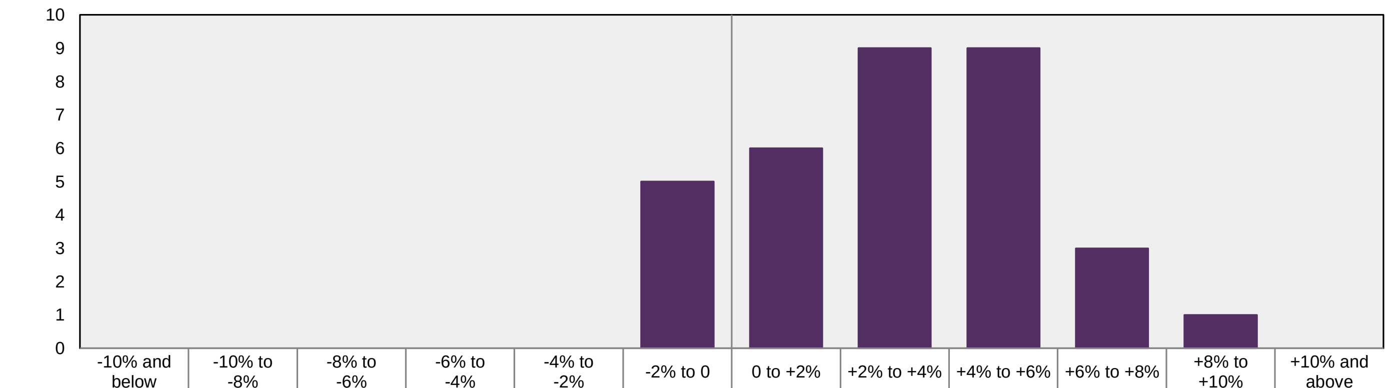
### Pyrford vs. MSCI EAFE Value Index

**Rolling 4-Quarter (One-Year) Periods. 41 Observations.** **Success Rate: 61.0%**



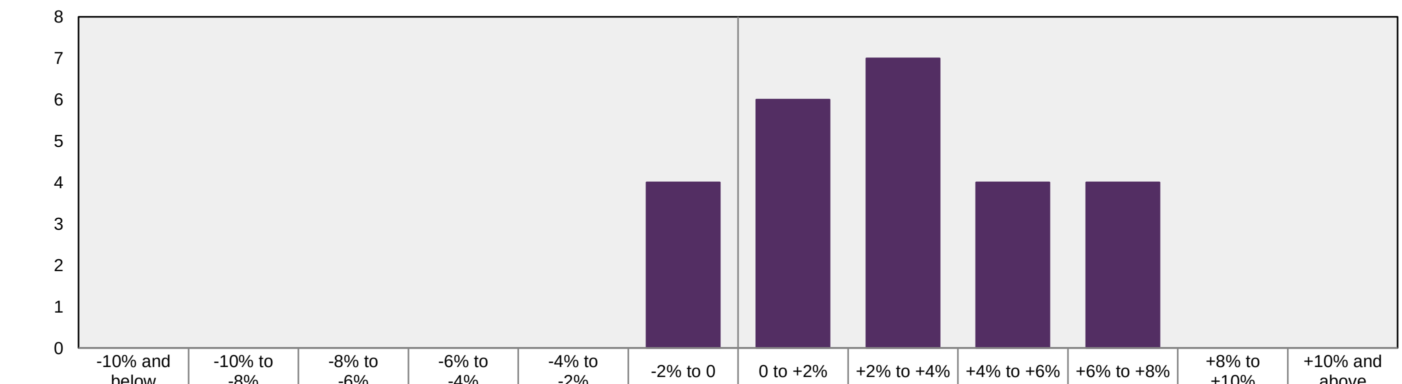

| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 3 | 2 | 3 | 0 | 3 | 5 | 0 | 5 | 5 | 3 | 8 | 4 |

**Rolling 12-Quarter (Three-Year) Periods. 33 Observations.** **Success Rate: 84.8%**




| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 9 | 9 | 3 | 1 | 0 |

**Rolling 20-Quarter (Five-Year) Periods. 25 Observations.** **Success Rate: 84.0%**




| | -10% and below | -10% to -8% | -8% to -6% | -6% to -4% | -4% to -2% | -2% to 0 | 0 to +2% | +2% to +4% | +4% to +6% | +6% to +8% | +8% to +10% | +10% and above |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # of Obs | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 7 | 4 | 4 | 0 | 0 |

# Portfolio Holdings Review

*Holdings data as of December 31, 2017 or most recent available*

## Portfolio Characteristics

| | Northern Cross | Boston Partners | Causeway | Pyrford | MSCI EAFE Value |
|---|---|---|---|---|---|
| **Wtd. Avg. Market Cap** | $71,008 | $47,039 | $79,655 | $69,788 | $71,948 |
| **Median Market Cap** | $34,111 | $16,156 | $45,048 | $25,136 | $11,168 |
| **Dividend Yield** | 2.2% | 2.5% | 2.9% | 3.4% | 3.8% |
| **Price/Earnings (Trailing)** | 20.6x | 16.7x | 16.4x | 19.1x | 13.5x |
| **Price/Book** | 2.2x | 1.7x | 1.7x | 2.5x | 1.3x |

## Market Capitalization Range

| | Northern Cross | Boston Partners | Causeway | Pyrford | MSCI EAFE Value |
|---|---|---|---|---|---|
| **Greater than $50 Billion** | 46.3% | 27.6% | 53.1% | 37.6% | 47.5% |
| **$15B to $50 Billion** | 38.8% | 29.8% | 34.6% | 28.3% | 32.2% |
| **$5B to $15 Billion** | 10.0% | 16.4% | 8.9% | 19.8% | 17.0% |
| **$2B to $5 Billion** | 2.1% | 18.2% | 3.3% | 8.0% | 3.3% |
| **Less than $2 Billion** | 0.0% | 7.3% | 0.0% | 1.6% | 0.0% |

## Sector Weightings

| | Northern Cross | Boston Partners | Causeway | Pyrford | MSCI EAFE Value |
|---|---|---|---|---|---|
| **Consumer Discretionary** | **21.0%** | 7.5% | 10.4% | 2.4% | **11.0%** |
| **Consumer Staples** | **15.2%** | 11.7% | 5.6% | **13.7%** | 3.7% |
| **Energy** | 4.6% | 7.5% | 9.7% | 9.2% | 9.2% |
| **Financials** | 15.0% | **17.1%** | **17.4%** | 9.1% | **34.8%** |
| **Healthcare** | **16.8%** | 9.1% | **11.5%** | 10.1% | 6.8% |
| **Industrials** | 9.9% | **12.8%** | **17.7%** | **21.2%** | **10.0%** |
| **Information Technology** | 6.5% | **16.7%** | 7.3% | 6.0% | 1.7% |
| **Materials** | 4.6% | 12.5% | 8.4% | 5.6% | 6.2% |
| **Real Estate** | 3.2% | 0.0% | 0.2% | 0.0% | 5.1% |
| **Telecom Services** | 0.5% | 3.6% | 9.2% | **11.9%** | 6.5% |
| **Utilities** | 0.0% | 1.0% | 2.6% | 6.1% | 5.0% |
| *% in Top 3 Sectors* | *53.0%* | *46.6%* | *46.6%* | *46.8%* | *55.8%* |
| *% in Top 10 Holdings* | *33.3%* | *20.5%* | *31.2%* | *23.3%* | *18.7%* |

# Portfolio Holdings Review

*Holdings data as of December 31, 2017 or most recent available*

## Regional Weightings

| | Northern Cross | Boston Partners | Causeway | Pyrford | MSCI EAFE Value |
|---|---|---|---|---|---|
| **Asia / Pacific ex Japan** | 0.1% | 6.3% | 0.3% | 17.7% | 11.6% |
| **Emerging Markets** | 9.6% | 8.2% | 10.9% | 9.0% | 0.0% |
| *Africa* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* |
| *Asia / Pacific* | *3.1%* | *6.7%* | *10.9%* | *9.0%* | *0.0%* |
| *Central & East. Europe* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* |
| *Latin America* | *6.4%* | *1.5%* | *0.0%* | *0.0%* | *0.0%* |
| *Middle East* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* |
| **Europe (Eurozone)** | 34.1% | 25.2% | 22.2% | 21.4% | 32.8% |
| **Europe (Non-Eurozone)** | 14.3% | 7.2% | 13.0% | 20.7% | 10.8% |
| **Japan** | 10.5% | 23.7% | 14.0% | 9.5% | 24.2% |
| **North America** | 14.8% | 6.1% | 7.6% | 0.0% | 0.0% |
| *United States* | *14.5%* | *5.2%* | *0.0%* | *0.0%* | *0.0%* |
| **United Kingdom** | 13.9% | 22.6% | 32.1% | 17.0% | 20.5% |

# Top 10 Holdings Summary

*Holdings data as of December 31, 2017 or most recent available*

| Northern Cross | |
|---|---|
| Las Vegas Sands Corp. | **7.0%** |
| Schlumberger NV | **3.9%** |
| Wynn Resorts, Limited | **3.6%** |
| Vivendi SA | **3.2%** |
| Alibaba Group Holding Ltd. Sponsored ADR | **3.1%** |
| Fanuc Corporation | **2.7%** |
| Bayer AG | **2.6%** |
| Reckitt Benckiser Group plc | **2.4%** |
| Heineken NV | **2.4%** |
| Shire PLC | **2.3%** |

| Boston Partners | |
|---|---|
| Royal Dutch Shell Plc Class A | **2.9%** |
| Roche Holding Ltd Genusssch. | **2.3%** |
| Flex Ltd. | **2.1%** |
| Vodafone Group Plc | **2.1%** |
| WH Group Ltd. (HK) | **2.1%** |
| Equiniti Group Plc | **2.0%** |
| Total SA | **1.9%** |
| Fuji Electric Co., Ltd. | **1.8%** |
| Nomad Foods Ltd. | **1.7%** |
| AXA SA | **1.7%** |

| Causeway | |
|---|---|
| Volkswagen AG Pref | **4.9%** |
| British American Tobacco p.l.c. | **3.4%** |
| Barclays PLC | **3.4%** |
| Royal Dutch Shell Plc Class B | **2.9%** |
| BP p.l.c. | **2.9%** |
| Schneider Electric SE | **2.9%** |
| ABB Ltd. | **2.8%** |
| BASF SE | **2.7%** |
| China Mobile Limited | **2.7%** |
| Linde AG TEMP | **2.5%** |

| Pyrford | |
|---|---|
| Roche Holding Ltd Genusssch. | **3.3%** |
| Nestle S.A. | **3.3%** |
| Novartis AG | **2.6%** |
| Brambles Limited | **2.4%** |
| Woolworths Group Ltd | **2.2%** |
| Woodside Petroleum Ltd | **2.0%** |
| British American Tobacco p.l.c. | **2.0%** |
| Telenor ASA | **1.9%** |
| Atlas Copco AB Class A | **1.8%** |
| Japan Tobacco Inc. | **1.8%** |

# Search Process Summary

Our due diligence on a manager entails a comprehensive qualitative analysis of the organization, investment team, investment approach, and the portfolio. In addition, we conduct thorough quantitative analysis of the strategy's return patterns, risk patterns, and portfolio holdings. The search for talented managers can be sourced by any of the following means:

**Idea Generation:**

**Screens Using Multiple Databases**

- Firm offers an appropriate vehicle to gain exposure to the asset class
- Total assets under management greater than $200 million
- Investment team has at least five years of history managing similar portfolios
- Ad hoc screens

**Other Investment Managers**

- Firms may offer insights on peers

**Pavilion Clients**

- New and existing clients may have relationships with or knowledge of investment managers

**General Industry Contacts/Industry Periodicals/Other Publications**

- Often identify a manager worth pursuing
- Help in tracking management teams that leave to start their own firm, or are lifted out by a competing firm

Firms/products are assessed through a series of manager interviews, on-site visits, portfolio reviews, reference checks, etc. Factors that we consider include:

- Controlled growth of client base and assets under management
- Research capabilities and depth of resources
- Background and experience of senior professionals
- Incentives and compensation structures encouraging teamwork
- Ownership and organizational structure enhancing stability
- Consistency and continuity of management team
- Account retention
- Ability to communicate effectively
- Competitive fees and expenses
- Commitment to high quality client service

# Explanation of Exhibits

**Performance Comparison Tables:**

These exhibits present the managers' returns and percentile rankings of those returns for various periods. The first number in each cell represents the manager's return for the given period. Returns are annualized if the period is longer than one year. The second number (in italics) represents the percentile ranking of the return versus the manager's peers. The universe in which the returns are ranked is identified in the note below the charts. In our system, a ranking of 1 is best and 99 is worst.

**Return Statistics**

Alpha: A measure of risk-adjusted performance. A large alpha indicates that a portfolio has performed better than would be predicted given its beta (volatility).

Beta: A measure of volatility, or systematic risk, of a portfolio in comparison to the market as a whole. A beta above 1 is more volatile than the overall market, while a beta below 1 is less volatile.

Excess Return: Return in excess of a market measure such as an index or benchmark.

Tracking Error: The annualized standard deviation of the monthly return difference between the portfolio and the benchmark.

Information Ratio: Measures the portfolio’s risk-adjusted performance relative to the benchmark. The portfolio return minus the benchmark return divided by the standard deviation of the difference in quarterly returns between the portfolio and the benchmark (tracking error) represents this measure of risk-adjusted performance.

Sharpe Ratio: Measures the portfolio’s risk-adjusted performance relative to a risk-free rate. The portfolio return minus the 3-Month T-Bill's return divided by the standard deviation of the portfolio's quarterly returns represents this measure of risk-adjusted performance.

Up/Down Capture: Up and down markets are defined by whether the benchmark's return was positive or negative in any given quarter. The first number shown represents the manager's cumulative return, including compounding, as a percentage of the benchmark’s return in periods in which the benchmark experienced a positive return. The second number shown represents the manager's cumulative return, including compounding, as a percentage of the benchmark’s return in periods in which the benchmark experienced a negative return.

**Best/Worst Rolling Period Excess Returns**

This exhibit compares each manager to the benchmark, and displays the best and worst relative performance over a one-quarter, one-year, and three-year annualized period. The number in bold type represents each manager’s relative outperformance (in black) and underperformance (in red) for that interval. The month and year ending that period of outperformance or underperformance are noted in parenthesis.

**Risk/Return Analysis:**

This exhibit presents the managers' returns versus the relative volatility experienced in generating those returns. The symbols on the graph represent the return (vertical axis) and risk (horizontal axis) for each manager and benchmark. Risk is measured as the standard deviation of quarterly returns. The best risk-adjusted returns plot in the upper left quadrant, while the worst risk-adjusted returns that plot in the lower right quadrant.

**Consistency of Excess Returns**

This exhibit presents the manager returns relative to the index over 12-, 36-, and 60-month rolling time frames. The bars represent the number of those periods that the manager returns fell within each group of relative performance. Relative performance is presented in basis points, or 100ths of a percent.

# Notes to Performance

All returns are shown net of fees unless otherwise noted.

**Northern Cross:** Returns and holdings both represent the Harbor International Equity mutual fund, *(HAINX).*

**Boston Partners:** Returns represent the Boston Partners International Equity composite. Holdings represent the Jhancock Disciplined Value International R6 - share class mutual fund, *(JDIUX).*

**Causeway:** Returns represent the Causeway International Value Equity composite. Holdings represent the Causeway International Value I - share class mutual fund, *(CIVIX).*

**Pyrford:** Returns represent the Pyrford International Stock Fund composite. Holdings represent the Pyrford International Stock Fund R6 Class mutual fund, *(BISGX).*

## Candidate Profiles

**Boston Partners Global Investors, Inc.**
***Boston Partners International Equity***

**Pavilion Product Rating: Approved**

**28 State Street, Boston, Massachusetts 02109**
Contact: Jon Davis, 213-687-1667, JDavis@boston-partners.com

### FIRM BACKGROUND

Boston Partners Global Investors, Inc. ("Boston Partners") is an Investment Adviser established in 1995. Boston Partners provides fundamental research based value equity investments. The value strategies include all-cap value, global, international, small-cap, equity long/short, and small/micro-cap equity. In addition to Boston Partners value equity strategies, the Boston Partners brand includes WPG Partners small & micro cap value strategies and Redwood Equity volatility strategy. Since 2003, Boston Partners is a wholly owned subsidiary of Robeco Group a global investment management company headquartered in Rotterdam, the Netherlands. In 2013 ORIX Corporation of Japan purchased control of Robeco Group.

As of December 31, 2017

| Total Firm Assets: $99,240mm | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boston Partners International Equity | | | | | | |
| | Current | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| **Assets:** | $1,336mm | $629mm | $264mm | $34mm | $20mm | $18mm | $6mm |
| **# of Clients:** | 8 | 6 | 6 | 3 | 2 | 2 | 1 |

***Evaluation:***

- Almost all of the assets in this strategy are in the JHancock Mutual Funds. Assets have started to gain traction over recent years and should be monitored going forward.
- We are comfortable with the ORIX transaction that happened in 2013, as we believe that ORIX has been appropriately hands-off in the day-to-day management of the firm.

### TEAM

- **Chris Hart, CFA, Portfolio Manager.** Mr. Hart is a Portfolio Manager on the firm's global and international equity products. Prior to this, he was an Assistant Portfolio Manager on the firm's small cap value products. Before joining Boston Partners, Mr. Hart was a Research Analyst covering various industries at Fidelity Investments. Mr. Hart received a B.A. in Finance from Clemson University.
- **Joshua Jones, CFA, Associate Portfolio Manager/Research Analyst**. Mr. Jones is an Associate Portfolio Manager on the firm's Global Equity strategy. He also acts as a global generalist research analyst specializing in the Energy, Metals and Mining sectors. Prior to joining Boston Partners, Mr. Jones was a Consulting Associate at Cambridge Associates. He received a B.A. in Economics from Bowdoin College in 2004.
- **Joshua White, CFA, Research Analyst**. Mr. White is a Research Analyst focusing on the Consumer Durables, Chemicals, Packaging, and General Manufacturing sectors of the market. He also acts as a global generalist. Mr. White received a B.A. in Mathematics from Middlebury College.

***Compensation Structure:***

All investment professionals receive a compensation package comprised of a base salary, discretionary bonus, and long-term incentives. Bonuses for key investment professionals are typically based on a combination of the following criteria with an overweighting towards performance:

1. Individual Performance: An evaluation of the professional's contribution based on the expectations established at the beginning of each year.
2. Product Investment Performance: The excess return on the individual's investment products.
3. Investment Team Performance: The financial results of the investment group.
4. Firm-wide Performance: The overall financial performance of the firm.

For investment professionals, Boston Partners offers a profit participation plan where participants receive the equivalent of an equity stake in the firm. The incentive plan provides for the issuance of restricted shares and options that vest over multi-year periods.

***Personnel Structure:***

| Total Firm: 152 | | | | | Boston Partners International Equity: 29 |
|---|---|---|---|---|---|
| | Role Breakdown (& Avg. Years Experience) | | | | |
| | Portfolio Management | Research Analysts | Trading | Marketing/Client Service | Other |
| **Product:** | 2 (20) | 27 (15) | -- (--) | -- (--) | -- (--) |
| **Total Firm:** | 15 (25) | 33 (16) | 7 (--) | 22 (--) | 75 (--) |

***Evaluation:***

- Boston Partners has a large and experienced investment team. The team consists of quantitative, generalists, as well as global industry specialists. These individuals are primarily located at the firm's Boston office.
- The compensation structure at Boston Partners properly aligns the interests of the investment team with clients.

## PHILOSOPHY, STRATEGY, PROCESS

Boston Partners adheres to three primary tenets that govern its equity investment philosophy: a value discipline, a characteristics-based investment approach, and preservation of capital. Boston Partners executes this philosophy at the individual stock selection level by looking for three financial characteristics: undervalued securities with sound business fundamentals and positive business momentum.

The investment team employs a bottom-up research approach that incorporates a blend of quantitative and fundamental inputs. A quantitative scoring screen identifies companies with desired valuation, momentum, and fundamental attributes, yielding a composite score for each prospective securities. Stocks that meet the requirements are subject to fundamental research where the team seeks securities with low price-to-earnings, low price-to-book value, and low price-to-cash flow ratios. The firm will not invest in securities merely because they are perceived to be inexpensive relative to the market. Instead, Boston Partners looks for undervalued companies with sound business fundamentals that exhibit positive business momentum or catalyst (i.e.-improving profit margins) that will translate into future earnings improvements. The firm tries to avoid companies that are "cheap" and have no prospect for growth. The team seeks to determine the investment candidates that meet the valuation and fundamental criteria as well as have an identifiable catalyst that will drive its stock price to its fair value. Boston Partners places a heavy emphasis on the preservation of capital. They weight each position by the degree of upside potential, the team's conviction level, and the trading liquidity. Furthermore, the team monitors risk via the Northfield multi-factor risk model, which helps them evaluate intentional and unintentional bets.

The final strategy holds between 70 to 120 securities. Each positions market cap at purchase must be above $250m. Single holdings are limited to 5% of the portfolio. Sector weightings are a residual effect of the security selection process, though limited to 25% in any one industry. The team may invest up to 20% in emerging markets. The maximum cash position is 10%. Annual turnover ranges from 75% to 125%. The strategy does not engage in currency hedging.

***Evaluation:***

- The portfolio has consistently generated alpha across a variety of market environments, which we believe speaks to its disciplined and repeatable approach.
- Historically, the portfolio has kept pace in up markets and excelled in down markets, which is a testament to the team's focus on preserving capital.
- Differentiating this strategy from its peers is its tendency to invest in non-traditional value sectors, such as Information Technology, which has allowed it to perform well when growth outperforms value. Despite this somewhat unique dynamic, the strategy maintains a relatively low tracking error.

**Causeway Capital Management LLC**
***Causeway International Value Equity***

**Pavilion Product Rating: Approved**

**11111 Santa Monica Boulevard, Suite 1550, Los Angeles, CA 90025**
Contact: Kevin Moutes, 310-231-6116, moutes@causewaycap.com

## FIRM BACKGROUND

Causeway Capital Management LLC, an international investment management firm located in Los Angeles, CA, was founded in June of 2001. Causeway manages international, emerging market, and global equity investments for a client base vastly composed of institutional clients including corporations, endowments, public funds, and Taft-Hartley plans. Causeway is a 100% employee-owned, with over a quarter of its employees, including all senior investment professionals, holding equity in the firm. In November 2012, employees purchased the remaining 10% of Causeway that was still owned by five partners of Evercore, a New York-based private equity firm. This ownership stake had previously been as high as 20%.

As of December 31, 2017

| Total Firm Assets: $58,964mm | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Causeway International Value Equity | | | | |
| | Current | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| **Assets:** | $28,699mm | $23,282mm | $23,291mm | $21,624mm | $18,838mm | $11,384mm | $8,808mm |
| **# of Clients:** | 86 | 87 | 93 | 84 | 77 | 70 | 62 |

***Evaluation:***

- We view the relatively broad employee ownership favorably. With each senior investment professional holding equity in the company, we believe the interests of employees and clients are aligned.

## TEAM

- **Harry Hartford, President, Portfolio Manager**. Mr. Hartford has been with Causeway since its inception in 2001. He is responsible for the global Financials and Materials sectors. Prior to Causeway, Mr. Hartford was a Managing Director and Portfolio Manager with Hotchkis and Wiley, where he generated investment ideas for international and global equity products with Sarah Ketterer, James Doyle, Jonathan Eng, and Kevin Durkin. Before working in the investment industry, Mr. Hartford taught economics at Oklahoma State University. Mr. Hartford graduated with honors with a B.A. in Economics from the University of Dublin, Trinity College, and earned an M.S.c. in Economics from Oklahoma State University.
- **Sarah Ketterer, CEO, Portfolio Manager**. Ms. Ketterer has been with Causeway since its inception in 2001. She is responsible for the global Financials and Healthcare sectors. Prior to working for Causeway, Ms. Ketterer worked for Hotchkis and Wiley. At Hotchkis and Wiley, Ms. Ketterer was a Managing Director and co-head of the firm's International and Global Value Equity team. Ms. Ketterer graduated from Stanford University with a B.A. in Economics and Political Science. Ms. Ketterer graduated with a M.B.A. from the Amos Tuck School at Dartmouth College.
- **James Doyle, Portfolio Manager**. Mr. Doyle has been with Causeway since its inception in 2001. He is responsible for the global Consumer Discretionary, Financials, and Information Technology sectors. Prior to Causeway, Mr. Doyle worked for Hotchkis and Wiley, where he served as Vice President and Head of Investment Research for the International and Global Value team. Mr. Doyle graduated from Northwestern University with a B.A. in economics and earned a M.B.A. at the Wharton School, University of Pennsylvania.
- **Jonathan Eng, Portfolio Manager**. Mr. Eng joined Causeway in 2002 as a Portfolio Manager and is responsible for the global Consumer Discretionary, Industrials, and Materials sectors. Before joining Causeway, Mr. Eng was an Equity Research Associate for Hotchkis and Wiley. Mr. Eng earned a B.A. in History and Economics from Brandeis University and a M.B.A. from the Anderson Graduate School of Management at UCLA.

***Compensation Structure:***

Portfolio Managers/Research Analysts earn a base salary, an incentive-based cash bonus, and, over time, are granted equity ownership. We believe that expanding equity ownership beyond a few senior professionals is a positive characteristic of Causeway and view the incentive-based bonus favorably, as it rewards professionals on a results-oriented basis.

***Personnel Structure:***

| Total Firm: 87 | | | | Causeway International Value Equity: 22 | |
|---|---|---|---|---|---|
| Role Breakdown (& Avg. Years Experience) | | | | | |
| | Portfolio Management | Research Analysts | Trading | Marketing/Client Service | Other |
| **Product:** | 8 (23) | 14 (8) | -- (--) | -- (--) | -- (--) |
| **Total Firm:** | 11 (--) | 20 (--) | 2 (--) | 16 (--) | 37 (--) |

*Portfolio Managers also act as Research Analysts.*

***Evaluation:***

- The portfolio managers have worked together for many years, and average over 20 years of industry experience. We believe the culture of the team is very collaborative, and view the team's shared history as a competitive advantage to its peers.
- We believe Causeway's compensation structure aligns the interests of the investment team with clients.

## PHILOSOPHY, STRATEGY, PROCESS

The Causeway International Value Equity product is an actively managed, value-focused strategy that attempts to exploit market inefficiencies by conducting fundamental, bottom-up analysis. Causeway believes that stock value is a function of dividend yield and prudent reinvestment of retained earnings. They apply a two-year investment horizon because the market takes a long time to realize a stock's actual value.

Causeway's creates a customized investment universe that consists of companies with a market capitalization larger than $1 billion in the MSCI EAFE Index or Canada and South Korea. The investible universe encompasses approximately 3,400 stocks. Causeway screens the universe to identify companies with dividend yields above the local market average and earnings yield, that on a risk-adjusted basis, exceeds the 10-year government bond yield. The team screens the remaining stocks on price to cash flow and earnings revisions, attempting to isolate undervalued companies in a position to improve. Approximately 400 companies pass the screen. These stocks are evaluated based on their financial strength and industry competition. The most attractive 250 stocks undergo fundamental analysis.

Portfolio Managers and Research Analysts conduct fundamental research. The team uses internal and external information feeds such as Bloomberg, FactSet, and Worldscope to focus on company-specific research. Portfolio Managers and Research Analysts speak with company management and interview third parties (e.g., suppliers and competitors) to validate the team's investment assumptions. They rank stocks on expected returns adjusted for risk and liquidity. They will sell a stock as its price rises and becomes less attractive on a price vs. intrinsic value, or they identify a better opportunity. Causeway will also sell a stock on portfolio diversification guidelines or a stock's fundamentals deteriorate.

The Portfolio Managers select 50-80 stocks for the portfolio with country, industry, and security weightings a residual of the bottom-up process. The portfolio limits country exposure to 30% and industry exposure to 25%. Individual positions will not exceed 5% and will not exceed 10% of the outstanding shares. Cash is limited to 10% and typically accounts for less than 5%. Annual turnover typically ranges from 35% - 55%. Direct emerging markets exposure is limited to 10%, but Causeway will only invest in South Korea and China in this region. Causeway may hedge currency for defensive purposes only.

***Evaluation:***

- Causeway does not make an effort to eliminate active bets against the benchmark but does have strict risk controls in place. Causeway tends to focus on higher quality companies and has historically provided downside protection in turbulent markets. The manager is most appropriate for clients who are comfortable with moderate tracking error.
- Causeway is attracted to companies with higher dividend yields, which we believe will be particularly compelling in a low-return market environment.
- We believe Causeway's differentiates their process versus peers by combining bottom-up fundamental analysis with the structure of a qualitative model. Causeway's proprietary assumptions and forecasts, which they derive from fundamental due diligence, are incorporated into the firm's ranking model so the team can systematically evaluate the opportunity set in a structured manner.

**Pyrford International Ltd**
***International Equity***

**Pavilion Product Rating: Approved**

**79 Grosvenor Street, London, W1K 3JU, United Kingdom**
Contact: Holly Garteiz, holly.garteiz@bmo.com

## FIRM BACKGROUND

Pyrford International Ltd. was formed in 1982 as the in-house investment manager for Elders IXL Group. In 1985, the organization started managing assets outside of Elders. The firm became independent in 1991, as a result of a management-led buyout. In December 2007, Bank of Montreal Capital Markets Limited, a company within the Bank of Montreal Financial Group ("BMO"), acquired a 100% interest in Pyrford International. Today, the firm offers International, Global, European and Asian equity strategies as well as balanced and Shariah compliant products.

As of December 31, 2017

| **Total Firm Assets: $10,492mm** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | **International Equity** | | | |
| | Current | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| **Assets:** | $4,373mm | $3,407mm | $5,090mm | $4,875mm | $3,916mm | $2,478mm | $1,545mm |
| **# of Clients:** | 44 | 43 | 52 | 50 | 48 | 44 | 39 |

***Evaluation:***

- In our view, the ownership structure is not ideal. We prefer organizations with significant employee ownership and generally shy away from bank-owned investment managers. Nevertheless, we believe BMO does not interfere with Pyrford's investment operations and has proven to be a solid partner. One of the benefits of being under the BMO umbrella is that Pyrford uses their back office and has access to BMO's distribution channels.
- Because of the lack of equity ownership and the completion of the three-year payout from BMO, we believe that the risk of future investment staff turnover at Pyrford is somewhat higher than the typical manager we recommend. That said, we believe the strength of this differentiated philosophy and process is more than sufficient to offset this risk. We continue to monitor changes to the firm and investment team on an ongoing basis.

## TEAM

- **Tony Cousins, CFA, Chief Executive Officer & Chief Investment Officer.** Mr. Cousins joined Pyrford in 1989 and had served as Head of UK/Europe research until 2009 when he relinquished that role to become co-CIO. As CIO, he now plays an important role in overall investment strategy. Prior to joining Pyrford, Mr. Cousins worked for Daiwa International Capital Management as an Equity Portfolio Manager. He has a Bachelor of Arts and Master of Arts from Cambridge University.
- **Daniel McDonagh, CFA, Head of Portfolio Management, UK/Europe.** Mr. McDonagh joined Pyrford in 1997. Prior to being promoted to Head of Portfolio Management for the UK and Europe in 2009, he served as a Research Analyst and Portfolio Manager on that same team. Mr. McDonagh has a Bachelor's degree in Politics and Economics from Oxford University.
- **Paul Simons, CFA, Head of Portfolio Management, Asia/Pacific.** Mr. Simons joined Pyrford in 1996. Prior to being named Head of Portfolio Management for Asia/Pacific in 2008, he served as a portfolio manager for that same team. Mr. Simons has a Bachelor's degree in Geography and a Master of Arts from Oxford University.

***Compensation Structure:***

Compensation consists of a base salary and a performance bonus based on the individual's contributions to the portfolio. The formula for each investment professional is commensurate with their level of portfolio responsibility and seniority. In February 2010, longer-term incentives were added to the compensation system. The eligible pool is modified according to Pyrford's overall performance as well as individual performance targets. Phantom BMO common stock is issued with a 3-year cliff vesting. Senior personnel are also eligible for Sustained Growth Awards (SGAs), based directly on Pyrford's 3-year performance versus absolute and relative performance metrics; SGAs cliff vest after three years. Both the Phantom Equity and SGA are forfeited if the employee leaves within the 3-year period.

***Personnel Structure:***

| Total Firm: 36 | | | | | International Equity: 9 |
|---|---|---|---|---|---|
| Role Breakdown (& Avg. Years Experience) | | | | | |
| | Portfolio Management | Research Analysts | Trading | Marketing/Client Service | Other |
| **Product:** | 7 (17) | 2 (3) | -- (--) | -- (--) | -- (--) |
| **Total Firm:** | 9 (17) | 3 (3) | 2 (21) | 5 (18) | 2 (40) |

*Portfolio Managers also act as Research Analysts.*

***Evaluation:***

- We are impressed with the investment acumen of Mr. Cousins and the other portfolio managers and regional heads.
- We view favorably the longer-term incentives which are a significant component of each individual's overall compensation and serves as a reasonable retention tool.

## PHILOSOPHY, STRATEGY, PROCESS

Pyrford employs a total return, benchmark agnostic investment philosophy. Its approach is based on a combination of top-down country level analysis combined with bottom-up fundamental due diligence. As a total return strategy, the team is attracted to, and prefers investing in, companies exhibiting high dividend yields. This portfolio should be considered a core product, but has a value tilt.

Pyrford's process is led by its Investment Strategy Committee ("ISC"), which includes Tony Cousins and the regional heads. Based on the formula of current dividend yield plus long-term earnings growth per share, the ISC determines the perceived value of a country's equity market based on a five-year total return forecast. Final country allocations are made based on a comparison of relative market valuations, expected corporate earnings growth, and economic forecasts. These inputs are used in Pyrford's Equity Valuation Matrix, which contains a "value indicator" for each market. Pyrford expects to generate half its value-add from regional and country allocation decisions. Once the country weights are determined, the regional teams are responsible for actual stock selection, though all stocks are discussed at the ISC level.

Pyrford's bottom-up fundamental due diligence includes an assessment of the company's expected earnings and total return using the same formula that is employed at the country level: dividend yield plus long-term earnings growth per share. An important component of this analysis is a disaggregation of a company's return on equity, as the researcher attempts to determine the nature of a company's growth, the quality of earnings, and the probability of sustaining those current trends. The analyst is tasked with coming up with conservative five-year forward total return forecasts. To do this, the analyst constructs a "Stock Sheet", which includes a historical and projected financial model, where inputs for the historical model are extracted directly from company reports. Discussions with management are part of the bottom-up due diligence process and management contact is required before a security can be included in the portfolio. Annual company visits are required as long as that stock is held in client portfolios. Stocks may be sold from the portfolio based on valuation, deterioration in fundamentals, reduction in country weight, or more attractive investment opportunities are identified. Pyrford does not use traditional valuation metrics like price-to-earnings; if the company's share price rises to an extent that the sum of its dividend yield and forecasted long-term earnings growth per share falls below that of the country or alternative stocks within the country, it is likely to be sold.

The portfolio will typically hold 75 – 100 individual securities, with the largest position size limited to 5% of the portfolio. The minimum market capitalization eligible for purchase is $1 billion in Asia Pacific and $2 billion in Europe. Each investable country has a maximum allocation assigned to it. The current maximum allocation to the Emerging Markets is 20%, with investments restricted to Indonesia, Malaysia, South Korea, Taiwan, and Thailand. The maximum sector weighting is the benchmark sector weight plus 20 percentage points, while the minimum sector weight is zero. Portfolio turnover has typically ranged between 20% and 35%. Cash is limited to 5%.

Currency hedges are initiated when a currency becomes 25% overvalued versus the portfolio base currency (U.S. Dollar) on a Purchasing Power Parity (PPP) basis. In these situations, Pyrford will hedge the entire currency exposure for that particular country, as their primary focus is on absolute capital protection. Hedges are removed when the currency falls to a 5% overvaluation level.

***Evaluation:***

- We have identified few institutional caliber investment managers that, like Pyrford, combine a true top-down overlay with bottom-up fundamental analysis. Further, we are attracted to the strategy’s focus on dividend yield as our work has shown this is a better pond to be fishing in. The portfolio should be expected to have an overall dividend yield above the benchmark.
- The portfolio exhibits excellent downside protection, but is not likely to keep up during sharp market rallies.

# Investment Program Performance Analysis

## El Camino Hospital
## Surplus Cash Portfolio

March 2018

Pavilion Advisory Group Inc.
227 W. Monroe Street, Suite 2020
Chicago, IL 60606
Phone:  312-798-3200
Fax:  312-902-1984
www.pavilioncorp.com

PAVILION

# Executive Summary

- 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%).

# Evaluation Summary

<table>
<tr><th colspan="2">Surplus Cash ex District</th><th colspan="2">Cash Balance Plan</th></tr>
<tr><th>Objective</th><th>Evaluation</th><th>Objective</th><th>Evaluation</th></tr>
<tr><td>Preservation of Capital</td><td>Over the 5y 3m period since inception the portfolio has experienced limited drawdowns with the maximum drawdown of -5.8% peak-to-trough and the worst quarterly return -4.0%.</td><td rowspan="2">Preservation of Capital in Real Terms with Focus on Meeting Future Benefit Payments</td><td rowspan="2">The portfolio has returned +8.9% per annum since inception, +7.5% ahead of CPI. The portfolio has met all monthly benefit payment needs and has ~79% daily liquidity, ~9% monthly, ~6% semi-annually, and ~6% illiquid.</td></tr>
<tr><td>Capital Growth</td><td>The portfolio has returned +6.4% per annum since inception, +0.7% ahead of the expected return modeled. Assets have grown from ~$494 million as of 12/31/2013 to ~$895 million as of 1/31/2018 inclusive of net cash flows of ~$181 million.</td></tr>
<tr><td>Maintenance of Liquidity</td><td>~80% of the portfolio is daily liquid, ~9% monthly, ~5% quarterly, ~3% annually, and ~3% illiquid. Any liquidity demands have been met in adequate time as desired.</td><td rowspan="2">Obtaining Maximum Return within Reasonable and Acceptable Level of Risk</td><td rowspan="2">The portfolio has returned +8.9% per annum since inception, +2.8% ahead of the expected return modeled. Risk as measured by standard deviation has been 5.4% annualized since inception, 3.3% below expectations.</td></tr>
<tr><td>Avoidance of Inappropriate Concentration of Investments</td><td>As of 9/30/2012, 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%). As of 1/31/18, the portfolio now consists of ~27 core managers covering over 15 various strategies ranging from Short and Intermediate-Duration Fixed Income, U.S., International, and Emerging Market Equities, to a number of Hedge Fund strategies and Private Real Estate strategies.</td></tr>
</table>

# Surplus Cash ex District Performance History

## Net of Fee Returns for Periods Ended January 31, 2018

| Composite | 1 Year | 3 Years | 5 Years | Since Inception | Inception Period |
|---|---|---|---|---|---|
| **Surplus Cash ex District** | **13.3** | **6.4** | **6.2** | **6.4** | **5y 3m** |
| Pre-Pavilion Benchmark | 3.6 | 2.5 | 3.3 | 3.4 | |
| Policy Benchmark | 12.4 | 6.2 | 6.1 | 6.2 | |
| **Total Domestic Equity** | **25.7** | **13.7** | **14.9** | **15.8** | **5y 3m** |
| Total Domestic Equity Benchmark | 24.3 | 14.1 | 15.3 | 16.2 | |
| **Total International Equity** | **29.0** | **10.7** | **7.1** | **8.5** | **5y 3m** |
| Total International Equity Benchmark | 29.7 | 9.9 | 7.1 | 8.7 | |
| **Total Fixed Income** | **2.1** | **1.6** | **2.0** | **2.0** | **5y 3m** |
| Total Fixed Income Benchmark | 1.7 | 1.0 | 1.7 | 1.6 | |
| **Total Alternatives** | **8.9** | **4.4** | **--** | **5.0** | **4y 9m** |
| Total Alternatives Benchmark | 8.3 | 4.7 | -- | 5.1 | |

**Commentary:**

- The Surplus Cash ex District has posted very strong returns at the total fund level, exceeding the Pre-Pavilion Benchmark by 3.0% and the Policy Benchmark by 0.2% per annum since inception.
- Each composite has generated positive absolute returns since inception. While the Domestic Equity, International Equity, and Alternatives composites have trailed their respective benchmarks, the Fixed Income composite has outperformed its benchmark and has had a greater impact on overall results.
- The Alternatives composite has yet to be updated for Walton Street's 4th quarter 2017 performance results, a period where the real estate benchmark returned +1.8%.

# Surplus Cash ex District Performance History

## Net of Fee Calendar Year Returns

| | Jan 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|---|---|
| Surplus Cash ex District | 2.6 | 11.8 | 5.2 | -0.2 | 4.4 | 8.8 | 6.6 |
| *Pre-Pavilion Benchmark* | *-0.2* | *4.1* | *4.3* | *0.2* | *5.5* | *3.4* | *5.3* |
| **Relative Performance** | **+2.8** | **+7.7** | **+0.9** | **-0.4** | **-1.1** | **+5.4** | **+1.3** |

| | Jan 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|---|---|
| Surplus Cash ex District | 2.6 | 11.8 | 5.2 | -0.2 | 4.4 | 8.8 | 6.6 |
| *Policy Benchmark* | *2.0* | *11.5* | *5.6* | *-0.1* | *5.3* | *7.5* | *6.0* |
| **Relative Performance** | **+0.6** | **+0.3** | **-0.4** | **-0.1** | **-0.9** | **+1.3** | **+0.6** |

**>+0.3% = Green; +0.3% to -0.3% = Black; <-0.3% = Red**

**Commentary:**

- Over the course of the past 5 calendar years, the Surplus Cash ex District portfolio has outperformed the Pre-Pavilion Benchmark in 3 of those years or 60% of the time. During periods when the fund has underperformed, it has been by a much smaller margin (-1.1% max) than in the periods where it has outperformed (+7.7% max).
- Over the course of the past 5 calendar years, the Surplus Cash ex District portfolio has outperformed the Policy Benchmark in 2 of those years or 40% of the time. During periods when the fund has underperformed, it has been by a smaller margin (-0.9% max) than in the periods where it has outperformed (+1.3% max).

# Cash Balance Plan Performance History

## Net of Fee Returns for Periods Ended January 31, 2018

| Composite | 1 Year | 3 Years | 5 Years | Since Inception | Inception Period |
|---|---|---|---|---|---|
| **Cash Balance Plan** | **16.4** | **8.1** | **8.4** | **8.9** | **5y 3m** |
| Pre-Pavilion Benchmark | 11.0 | 7.4 | 8.9 | 9.4 | |
| Policy Benchmark | 14.9 | 7.6 | 7.8 | 8.3 | |
| **Total Domestic Equity** | **26.3** | **13.5** | **15.0** | **15.8** | **5y 3m** |
| Total Domestic Equity Benchmark | 24.7 | 14.2 | 15.5 | 16.3 | |
| **Total International Equity** | **28.7** | **10.1** | **6.8** | **8.3** | **5y 3m** |
| Total International Equity Benchmark | 29.7 | 9.9 | 7.1 | 8.7 | |
| **Total Fixed Income** | **2.5** | **1.7** | **2.2** | **2.2** | **5y 3m** |
| Total Fixed Income Benchmark | 1.7 | 1.0 | 1.7 | 1.5 | |
| **Total Alternatives** | **9.8** | **6.7** | **8.6** | **8.7** | **5y 3m** |
| Total Alternatives Benchmark | 8.1 | 5.2 | 6.0 | 6.4 | |

**Commentary:**

- The Cash Balance Plan has posted very strong absolute returns at the total fund level, exceeding the Policy Benchmark by 0.6% per annum since inception; however, the Plan has lagged the less diversified Pre-Pavilion Benchmark (60% Russell 1000 Value and 40% Barclays U.S. Aggregate) by 0.5% per annum since inception.
- Each composite has generated positive absolute returns since inception. While the Domestic Equity and International Equity composites have trailed their respective benchmarks, the Fixed Income and Alternatives composites have outperformed their benchmarks by wider margins.
- The Alternatives composite has yet to be updated for Walton Street's 4th quarter 2017 performance results, a period where the real estate benchmark returned +1.8%.

# Cash Balance Plan Performance History

## Net of Fee Calendar Year Returns

| | Jan 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|---|---|
| Cash Balance Plan | 3.4 | 14.5 | 4.9 | 1.1 | 5.6 | 15.8 | 17.0 |
| *Pre-Pavilion Benchmark* | *1.9* | *9.6* | *11.4* | *-1.9* | *10.5* | *17.7* | *12.2* |
| **Relative Performance** | **+1.5** | **+4.9** | **-6.5** | **+3.0** | **-4.9** | **-1.9** | **+4.8** |

| | Jan 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|---|---|
| Cash Balance Plan | 3.4 | 14.5 | 4.9 | 1.1 | 5.6 | 15.8 | 17.0 |
| *Policy Benchmark* | *2.6* | *13.5* | *6.5* | *0.1* | *5.7* | *13.8* | *12.7* |
| **Relative Performance** | **+0.8** | **+1.0** | **-1.6** | **+1.0** | **-0.1** | **+2.0** | **+4.3** |

**>+0.3% = Green; +0.3% to -0.3% = Black; <-0.3% = Red**

**Commentary:**

- Over the course of the past 5 calendar years, the Cash Balance Plan has outperformed the Pre-Pavilion Benchmark in 2 of those years or 40% of the time. During periods when the fund has underperformed, it has been by a greater margin (-6.5% max) than in the periods where it has outperformed (+4.9% max) as the new allocation is more diversified than the Pre-Pavilion benchmark, making it more difficult to keep pace in strong equity markets. 2017 was an aberration, given that the Pre-Pavilion benchmark equity allocation was value oriented, which lagged growth by 17% in 2017.
- Over the course of the past 5 calendar years, the Cash Balance Plan has outperformed the Policy Benchmark in 3 of those years or 60% of the time. During periods when the fund has underperformed, it has been by a smaller margin (-1.6% max) than in the periods where it has outperformed (+2.0% max).

# Risk Statistics

## Net of Fee Returns for Period Ended January 31, 2018

| | 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 |
|---|---|---|---|---|---|---|---|---|---|
| **Total Surplus Cash ex District** | **6.4** | **4.0** | **95.7** | **100.2** | **-4.0** | **4.8** | **1.5** | **2.7** | **5y 3m** |
| Surplus Cash Total Benchmark | 6.2 | 4.0 | 100.0 | 100.0 | -3.8 | 4.6 | 1.5 | 2.6 | |
| **Total Surplus Cash ex District** | **6.4** | **4.0** | **76.7** | **154.2** | **-4.0** | **4.8** | **1.5** | **2.7** | **5y 3m** |
| Pre-Pavilion Surplus Cash Total Benchmark | 3.4 | 2.0 | 100.0 | 100.0 | -1.4 | 2.6 | 1.5 | 2.8 | |
| **Total Surplus Cash ex District** | **6.4** | **4.0** | **64.0** | **79.5** | **-4.0** | **4.8** | **1.5** | **2.7** | **5y 3m** |
| 50% Vanguard Total World Stock / 50% Vanguard Total Bond[1] | 7.2 | 5.1 | 100.0 | 100.0 | -4.5 | 6.1 | 1.3 | 2.4 | |
| **Total Cash Balance Plan** | **8.9** | **5.4** | **99.7** | **105.0** | **-4.8** | **7.2** | **1.6** | **3.0** | **5y 3m** |
| Cash Balance Plan Total Benchmark | 8.3 | 5.1 | 100.0 | 100.0 | -4.5 | 6.5 | 1.5 | 2.8 | |
| **Total Cash Balance Plan** | **8.9** | **5.4** | **75.4** | **88.5** | **-4.8** | **7.2** | **1.6** | **3.0** | **5y 3m** |
| Pre-Pavilion Cash Balance Plan Total Benchmark | 9.4 | 5.7 | 100.0 | 100.0 | -4.7 | 7.2 | 1.6 | 3.0 | |
| **Total Cash Balance Plan** | **8.9** | **5.4** | **70.2** | **93.3** | **-4.8** | **7.2** | **1.6** | **3.0** | **5y 3m** |
| 60% Vanguard Total World Stock / 40% Vanguard Total Bond[2] | 8.3 | 6.0 | 100.0 | 100.0 | -5.2 | 7.1 | 1.3 | 2.4 | |

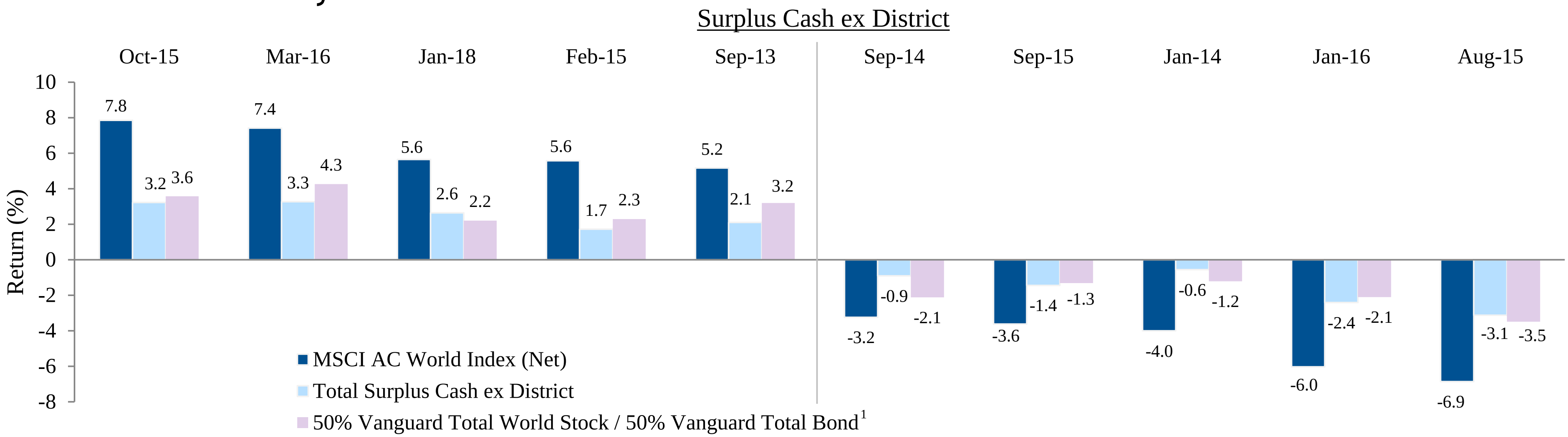
**Commentary:**

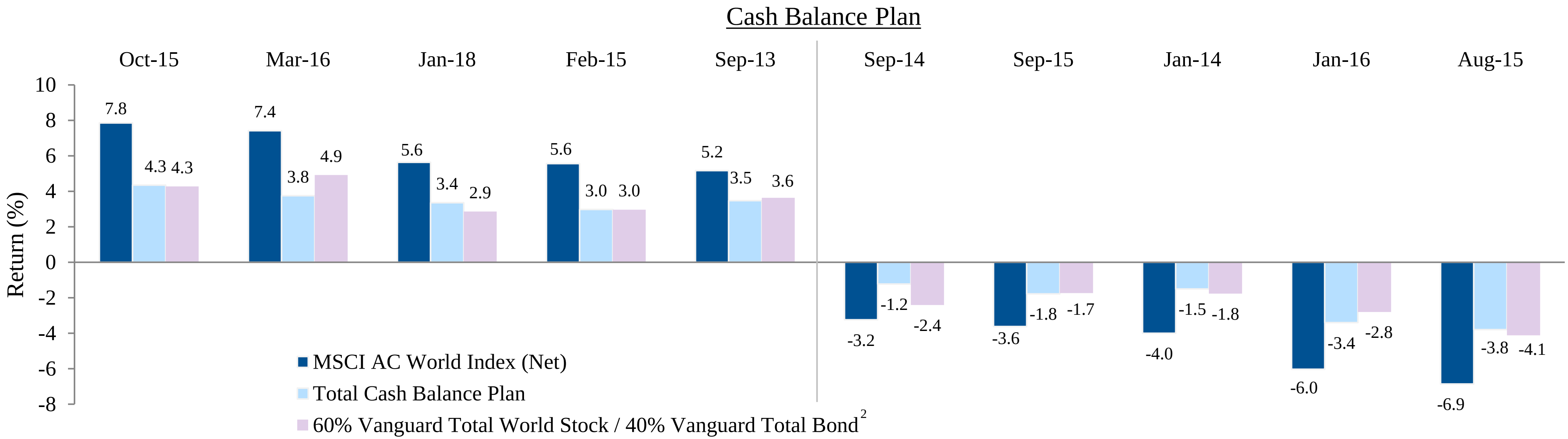
- The Surplus Cash ex District portfolio has outpaced both the Policy Benchmark and Pre-Pavilion Benchmark since inception. The portfolio has trailed the 50% Vanguard Total World Stock / 50% Vanguard Total Bond portfolio (an investable passive portfolio) by approximately 80 basis points; however, experienced lower volatility (4.0% vs. 5.1% standard deviation), performed better in down markets (captured 64.0% of down market), and had more attractive risk-adjusted returns (Sharpe Ratio of 1.5 vs. 1.3).
- The Cash Balance Plan has outpaced both the Policy Benchmark and 60% Vanguard Total World Stock / 40% Vanguard Total Bond portfolio since inception. The portfolio has trailed the Pre-Pavilion Benchmark by 50 basis points; however, experienced lower volatility (5.4% vs. 5.7% standard deviation), performed better in down markets (captured 75.4% of down market), and had similar risk-adjusted returns (both had Sharpe Ratio of 1.6). The Cash Balance Plan is much better diversified than the Pre-Pavilion portfolio as it has introduced a variety of asset classes, investment styles, and asset managers in comparison to the previous single manager portfolio.

[1] 50% Vanguard Total World Stock Index Fund Institutional (VTWIX) / 50% Vanguard Total Bond Market Index Fund Institutional (VBTIX)
[2] 60% Vanguard Total World Stock Index Fund Institutional (VTWIX) / 40% Vanguard Total Bond Market Index Fund Institutional (VBTIX)

# Performance During Equity Up Markets / Down Markets

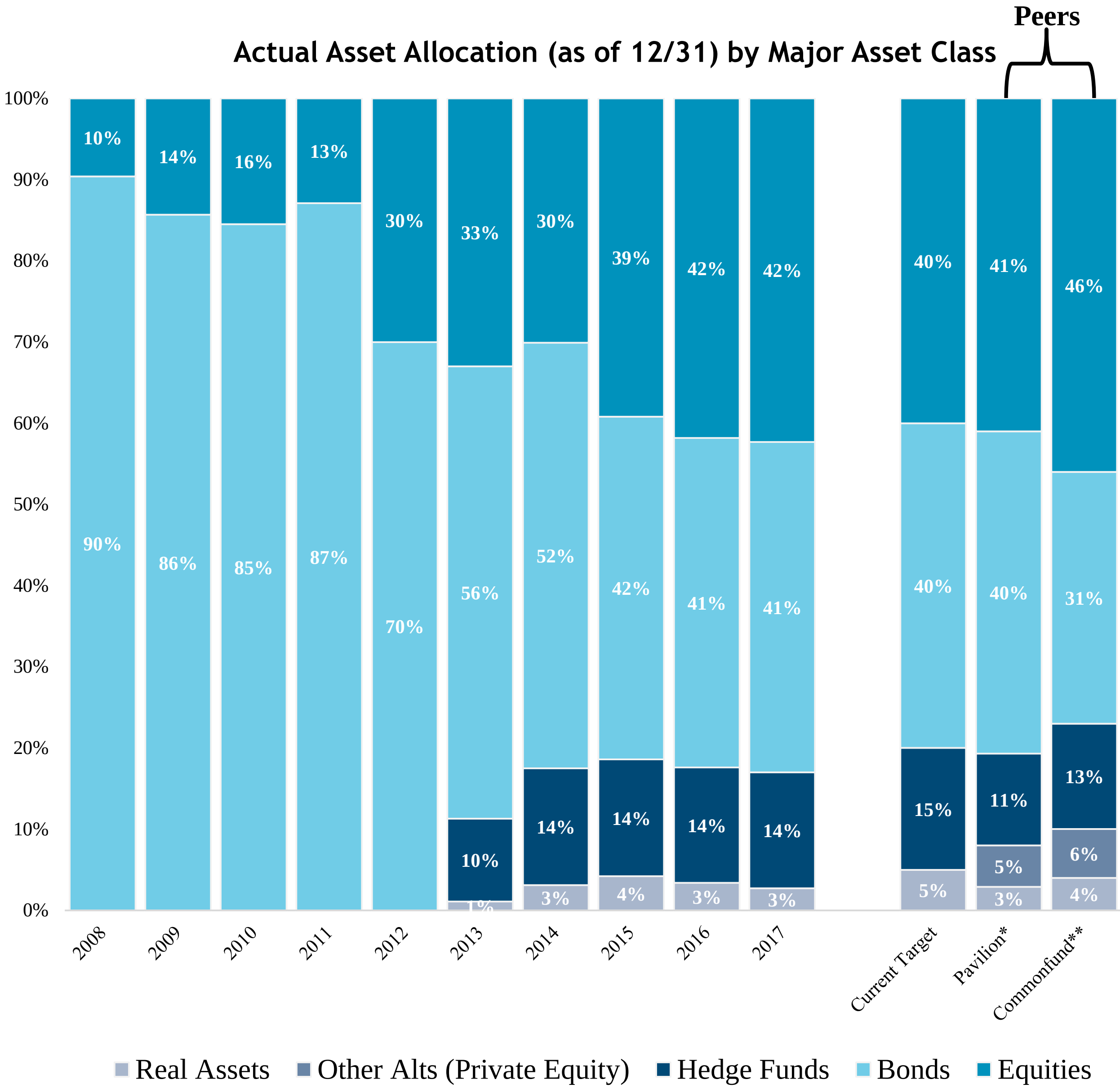
## Net of Fee Monthly Returns




[1] 50% Vanguard Total World Stock Index Fund Institutional (VTWIX) / 50% Vanguard Total Bond Market Index Fund Institutional (VBTIX)
[2] 60% Vanguard Total World Stock Index Fund Institutional (VTWIX) / 40% Vanguard Total Bond Market Index Fund Institutional (VBTIX)

# Historical Asset Allocation (Surplus Cash ex District)




- Pavilion Advisory Group began implementing its recommended portfolio as of November 1, 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.
- The current asset allocation is similar to that of the Pavilion Healthcare Peer Group average.
- Relative to the Commonfund Study, the current allocation is overweight Fixed Income at the expense of Equities and Alternatives.
- All major asset classes remain broadly diversified across various strategies and sub-sectors.

* Represents the average target allocation of Pavilion clients (12 total) with $450 million to $1 billion in total assets.
** Represents the Commonfund Benchmark Study of Healthcare Organizations, assets $501 mm - $1 B.



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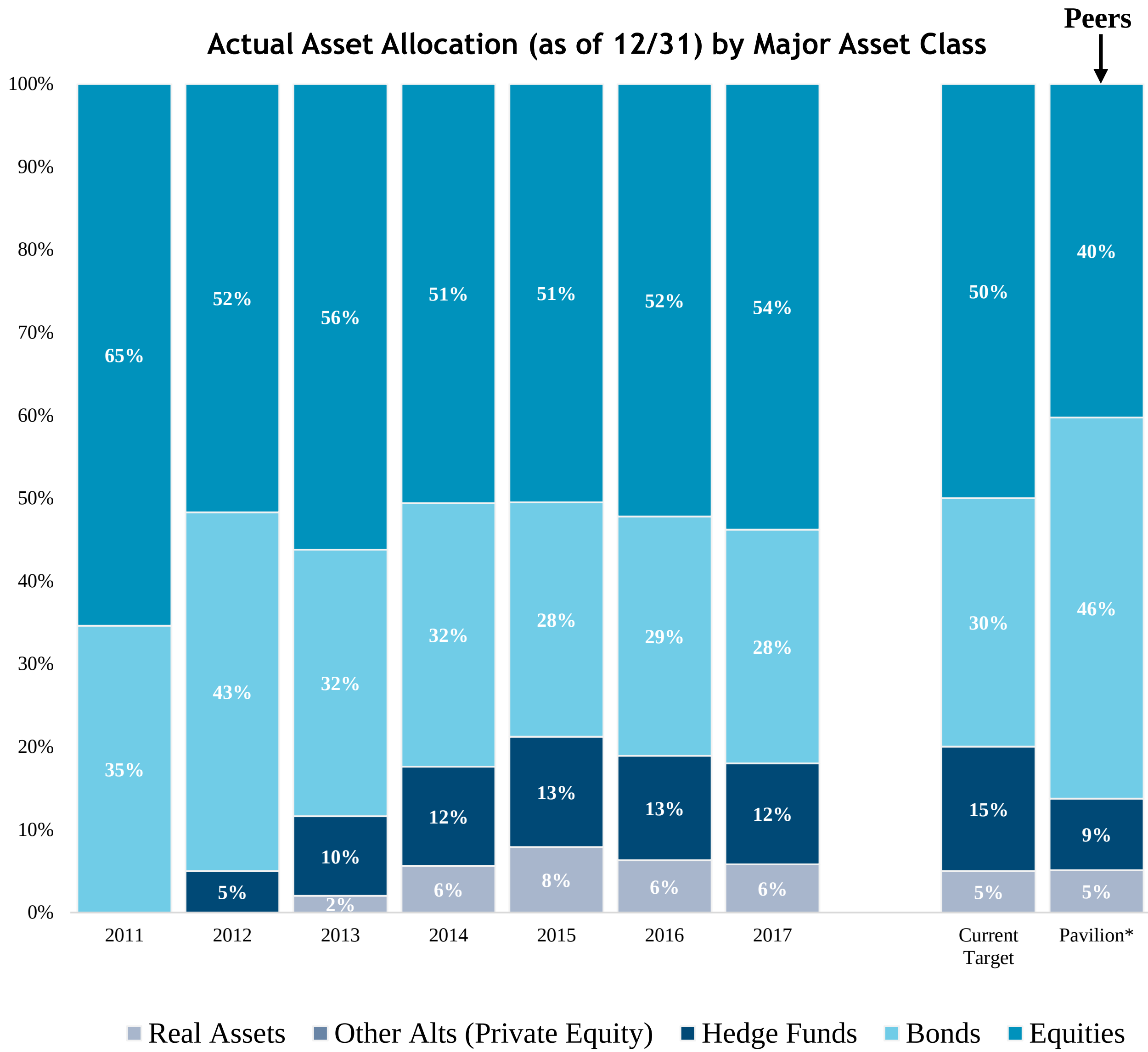
# Historical Asset Allocation (Cash Balance Plan)




- Pavilion Advisory Group began implementing its recommended portfolio as of November 1, 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.
- The current asset allocation is more aggressive than the BNY Mellon Trust Universe average as the Cash Balance Plan remains an active plan, whereas many peers have frozen or closed their plans, decreasing their liability duration.
- All major asset classes remain broadly diversified across various strategies and sub-sectors.

* Represents the average asset allocation of Corporate Plans with assets between $100 and $500 million within the BNY Mellon Trust universe. As of 12/31/17, sample size is 158 plans.



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# Asset Allocation Review – Healthcare Enterprise Risk Modeling

## El Camino Hospital
## Surplus Cash Portfolio

March 2018

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# Executive Summary

# Background

- The following slides present Pavilion's assessment of El Camino Hospital's risk tolerance and liquidity needs as part of our Healthcare Enterprise Risk Modeling ("HERM") exercise. Using El Camino Hospital's Long Range Financial Plan, the analysis incorporates the overall risks and financial situation of the organization into the review of the Surplus Cash Portfolio asset allocation.
- Considerations throughout the analysis include the following:
  - The organization ended Fiscal Year 2017 with significant cash reserves after issuing nearly $300 million in debt.
  - The Unrestricted Cash balance will decrease annually over the next eight years as the organization makes significant capital investments and pays down debt.
  - El Camino Hospital is committed to maintaining Days Cash on Hand ("DCOH") above the Moody's A1 Peer Median of 242 days and will alter its capital spending plans to accomplish this. That being said, the organization's current and projected financial position far exceeds that of its peers.
  - It is imperative that liquidity needs be considered with the significant capital investments planned in the coming years. DCOH is projected to fall below the Moody's peer median in 2023.
  - The Current asset allocation targets are consistent with Pavilion's market outlook. **Based on El Camino Hospital's future liquidity needs, Pavilion recommends maintaining the current asset allocation.**

| Asset Class | Current Policy Target |
|---|---|
| U.S. Equities | 25% |
| International Equities | 15% |
| **Total Equity** | **40%** |
| | |
| Market Duration | 30% |
| Short Duration | 10% |
| **Total Fixed Income** | **40%** |
| | |
| Hedge Funds | -- |
| Real Estate | -- |
| **Total Alternatives** | **20%** |

# Review of El Camino Hospital's Financial Standing and Projections

# Financial Comparison vs. Moody's A1 Peers (2016 Medians)

= ECH 2027 Projection

| | Min | *Negative vs. Peers* | Median | *Positive vs. Peers* | Max | FY 2017 Actual | Effect on Risk Tolerance |
|---|---|---|---|---|---|---|---|
| Operating Margin (%) | | | 4.1% | 6.6% | | 13.1% | Positive |
| EBITDA Margin (%) | | | 10.7% | 17.8% | | 18.9% | Positive |
| Days Cash on Hand | | 234.5 | 242.1 | | | 597.6 | Neutral |
| Annual Debt Service Coverage | | | 6.4x | 8.5x | | 94.7x | Positive |
| Debt-to-Capitalization (%) | | | 29.6% | 19.1% | | 31.9% | Neutral |

*Sources: Moody's Not-for-profit and public healthcare medians*
*El Camino Hospital Long Range Financial Plan – January 2018*

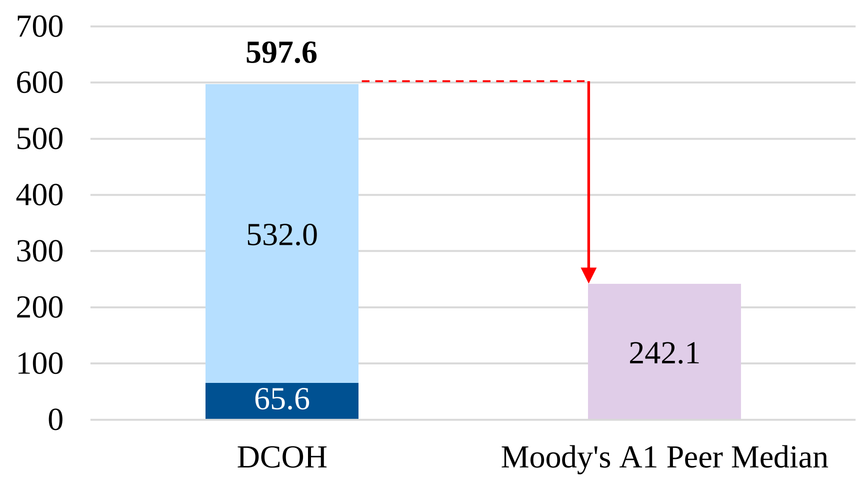
# Current Days Cash on Hand
## Fiscal Year ended 2017 (June 30)

| $ in millions | Market Value | Expense Per Day | DCOH |
|---|---|---|---|
| Cash & Cash Equivalents | $125.6 | | |
| Board Designated Funds | $420.5 | | |
| Assets Limited to Use | $597.2 | | |
| **Total** | **$1,143.3** | **$1.9** | **597.6** |

- El Camino Hospital ended Fiscal Year 2017 with 598 Days Cash on Hand.
- This is a historically large cash balance, primarily driven by recent debt issuance of which proceeds will be utilized for capital expenditures in coming years.
- The organization has an objective to maintain at least 242 DCOH (Moody's A1 median).

| | Cash ($ million) | Days Cash |
|---|---|---|
| Long-Term Investments (Portfolio) | $1,017.7 | 532.0 |
| Cash & Short-Term Investments | $125.6 | 65.6 |
| **Total Unrestricted** | **$1,143.3** | **597.6** |
| Moody's A1 Peer Median | | 242.1 |
| **DCOH Cushion** | | **355.5** |
| Note: 1 Day's Cash on Hand | $1.9 | |

**DCOH Downside Limit**



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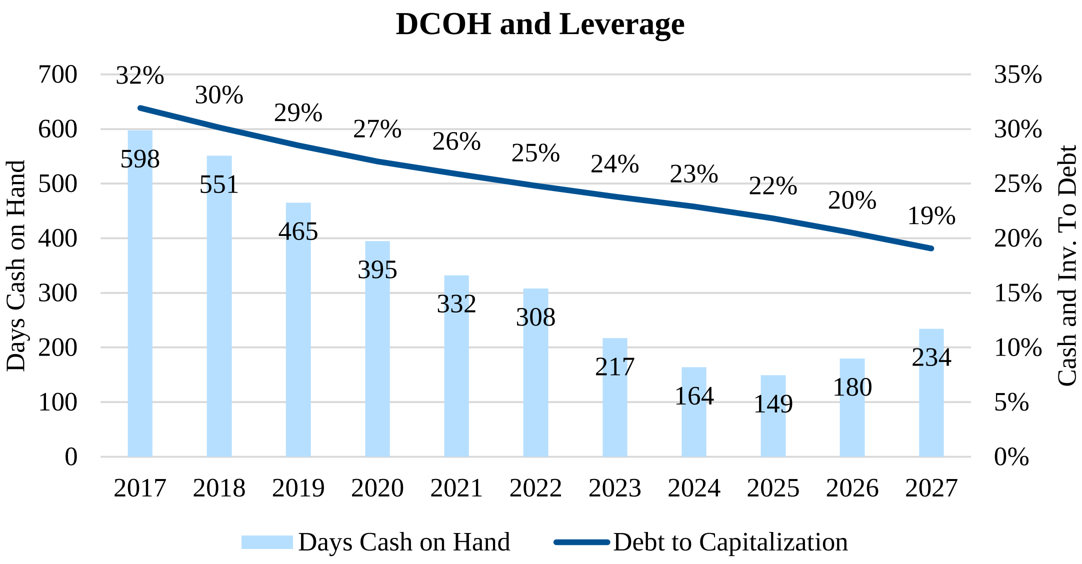
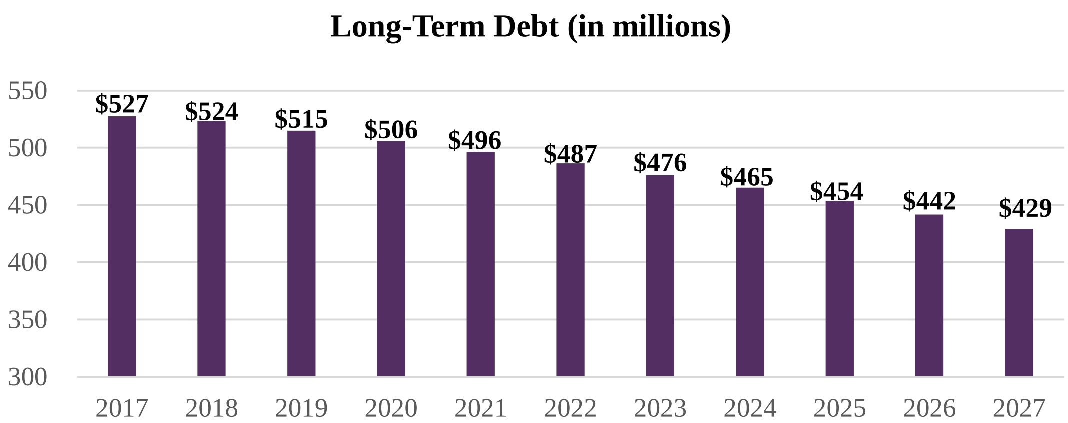
# Financial & Operating Projections




## Observation

- Reliance on debt is projected to decline over the next 10 years. This debt extinguishment, coupled with expected capital expenditures, will reduce Days Cash on Hand (DCOH).
- El Camino Hospital will maintain at least 242 DCOH (Moody's A1 median) by altering capital plans.
- Projections assume 4% annualized return on investments.

## Effect on Investment Strategy

- Liquidity will be important as the organization pays off debt and invests in capital improvements.
- Volatility of investment results may place stress on El Camino Hospital, particularly if investment drawdowns coincide with periods of cash flow needs.

# Financial & Operating Projections

**Projected Cash Flows ($millions)**

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2018-2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating activities | 134.1 | 149.7 | 151.1 | 145.1 | 150.3 | 153.0 | 159.9 | 173.3 | 211.3 | 248.1 | 1,675.8 |
| Investing activities | -182.6 | -233.0 | -238.0 | -226.0 | -166.5 | -347.0 | -271.0 | -147.0 | -58.0 | -27.0 | -1,896.1 |
| Financing activities | -10.9 | -16.6 | -26.4 | -12.9 | -9.4 | -9.9 | -10.4 | -10.9 | -11.5 | -12.0 | -130.9 |
| **Change in Cash** | **-59.4** | **-99.8** | **-113.3** | **-93.8** | **-25.6** | **-203.9** | **-121.5** | **15.3** | **141.8** | **209.0** | **-351.2** |
| **Cash Flow to Debt** | **27.2%** | **29.3%** | **30.4%** | **29.8%** | **31.5%** | **32.7%** | **34.8%** | **42.3%** | **51.0%** | **58.7%** | **--** |

| Observation | Effect on Investment Strategy |
|---|---|
| ▪ Total Cash Flows are projected to be negative through 2024 and positive thereafter.<br>▪ In early years, cash flows are negatively impacted by significant capital investment, which is projected to slow down after 2025, coinciding with improved cash flows from operations. | ▪ While investment portfolio gains may help soften the blow of negative cash flows, the organization is financially stable and can withstand operating losses without taking extra risk in the investment portfolio. |

# Pavilion's Current Market Views

# Current Views and Recommendations: Spring Cleaning

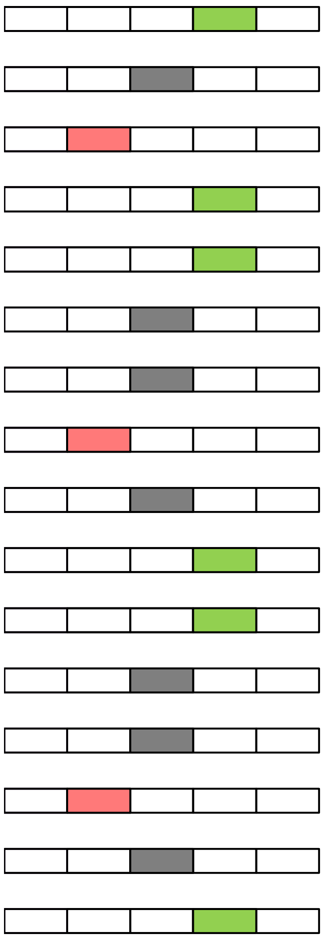
Prepare for a shift to a higher volatility regime:

- Ensure adequate liquidity sources
- Ensure appropriate diversification – diversification is likely to provide more important benefits than has been the case since the equity market bottom in March of 2009

| Recommendation | Implication |
|---|---|
| Ensure the availability of adequate liquidity | Sufficient liquidity should be available in portfolio sleeves such that timely rebalancing can be undertaken to manage risk, capture diversification benefits, and take advantage of tactical opportunities from market dislocations. |
| Build in a portfolio stabilizer through fixed income | Higher quality fixed income provides diversification and downside protection relative to equities and equity substitutes in the event of a volatility regime shift. |
| Maintain U.S./Emerging Markets equity barbell | Overweight U.S. and emerging market equities and underweight developed ex-U.S. equities. This provides maximum exposure to global growth while managing overall equity portfolio volatility. |
| Evaluate equity portfolio structure | Up/down market risks have shifted. Evaluate allocations to index funds, types of index funds used, as well as the types of active managers in the investment program with the goal of reducing exposure to the momentum factor and managing overall equity portfolio beta. |
| Reduce corporate credit spread duration exposure | Credit spreads are priced to perfection providing little protection against any spread widening which is likely to occur in the event of an increase in volatility. |
| Evaluate alternative strategies | Consider alternative strategies that may provide positive performance during a higher volatility regime or equity market downturn. |

# Asset Class Outlooks

**Near-Term View**



| | LT Return* | Qualitative Assessment |
|---|---|---|
| US Large Cap Equity | 6.5% | ▪ Overweight U.S. and emerging market equities while underweighting developed ex-U.S. equities. This provides maximum exposure to global growth while managing overall equity portfolio volatility and reducing currency risk.<br>▪ Up/down market risks have shifted. Evaluate allocations to index funds, types of index funds used, as well as the types of active managers in the investment program with the goal of reducing exposure to the momentum factor and controlling overall equity portfolio beta. |
| US Small Cap Equity | 7.5% | |
| International Equity | 6.9% | |
| Emerging Markets | 8.1% | |
| Private Equity | 9.8% | |
| Long/Short Equity | 4.7% | |
| Bonds – Core (US) | 2.9% | ▪ Despite low yield levels, high quality fixed income continues to provide investors with diversification benefits. Diversification benefits appear to be particularly pronounced in the securitized markets tied to U.S. housing and the consumer.<br>▪ Improving global growth combined with attractive relative yields have made emerging market debt an appealing investment with upside potential from currency moves. As with other spread product, however, historically narrow spreads should give pause to investors for whom equity investments are an option.<br>▪ 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. |
| Bonds – Core (Non-Dollar) | 2.7% | |
| Bonds – Spread Sectors | 3.5% | |
| Bonds – Emerging Markets | 4.3% | |
| Long/Short Fixed Income | 4.5% | |
| Distressed | 7.5% | |
| Diversified Hedge Funds | 4.7/5.0% | ▪ Opportunities exist for nimble, specialized multi-strategy and diversifying strategies. |
| Real Assets – Commodities | 5.0% | ▪ Inflationary risks remain muted. To become a more elevated risk, the emergence of stronger growth likely is required. As a result, investors should receive near-term inflation protection from equity positions.<br>▪ Strategies with income and some sensitivity to inflation, however, offer opportunities. |
| Real Assets – Real Estate | 6.0% | |
| Real Assets – Infrastructure | 5.9% | |

***Represents 2018 PAG Asset Allocation Assumptions published in January 2018**

# Asset Allocation Analysis

# Asset Allocation Scenarios

| | Current Policy[1] | Add Private Equity | More Conservative |
|---|---|---|---|
| U.S. Large-Cap | 20.0% | 18.0% | 18.0% |
| U.S. Small-Cap | 5.0% | 4.0% | 4.0% |
| International | 12.0% | 10.0% | 10.0% |
| Emerging Markets | 3.0% | 3.0% | 3.0% |
| **Total Equity** | **40.0%** | **35.0%** | **35.0%** |
| Market Duration | 30.0% | 27.5% | 35.0% |
| Short Duration | 10.0% | 10.0% | 10.0% |
| **Total Fixed Income** | **40.0%** | **37.5%** | **45.0%** |
| Hedge Funds | 15.0% | 12.5% | 15.0% |
| Real Estate | 5.0% | 5.0% | 5.0% |
| Private Equity | 0.0% | 10.0% | 0.0% |
| **Total Alternatives** | **20.0%** | **27.5%** | **20.0%** |

| | | | |
|---|---|---|---|
| Expected Return | 5.3% | 5.9% | 5.1% |
| Standard Deviation (1-Yr) | 6.7% | 8.3% | 5.9% |
| Sharpe Ratio ($R_F$=2%) | 0.43 | 0.41 | 0.45 |
| Beta to Global Equity | 0.40 | 0.51 | 0.36 |
| 1-Year VaR (95%) | -5.7% | -7.8% | -4.7% |
| 1-Year VaR (99%) | -10.2% | -13.4% | -8.7% |

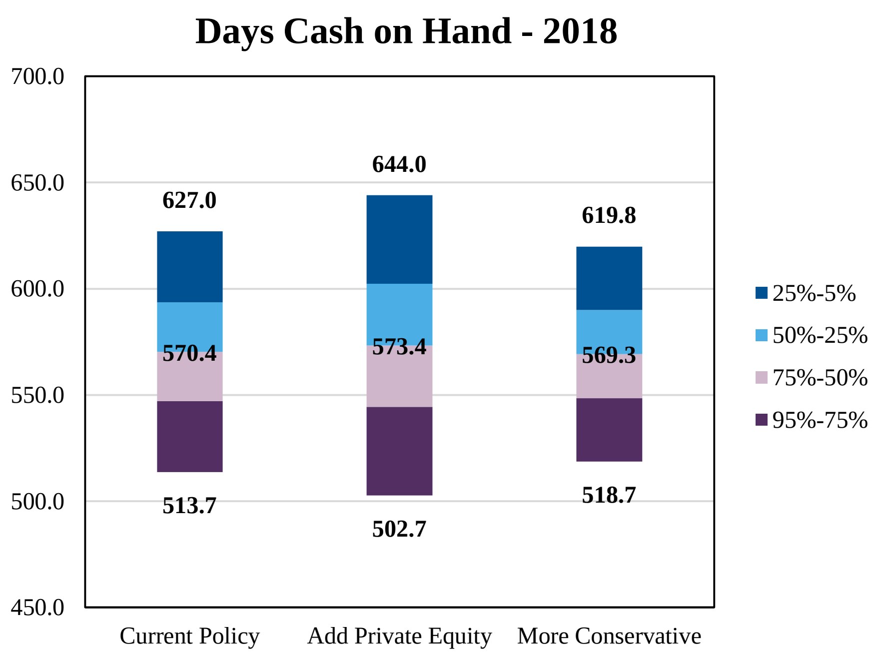
- In recent meetings, members of the Investment Committee have expressed interest in private equity, while there have also been concerns of increased volatility.
- Relative to the current target asset allocation, the "Add Private Equity" portfolio introduces a 10% private equity allocation, funded from a combination of public equity, market duration fixed income and hedge funds. This increases the expected risk and return, but reduces liquidity.
- The "More Conservative" portfolio moves 5% from public equity into market duration fixed income. While this reduces the expected risk and return, the portfolio is expected to perform best in periods of market duress.

[1] Reflects Pavilion's current targets within ranges stated in the Investment Policy Statement.

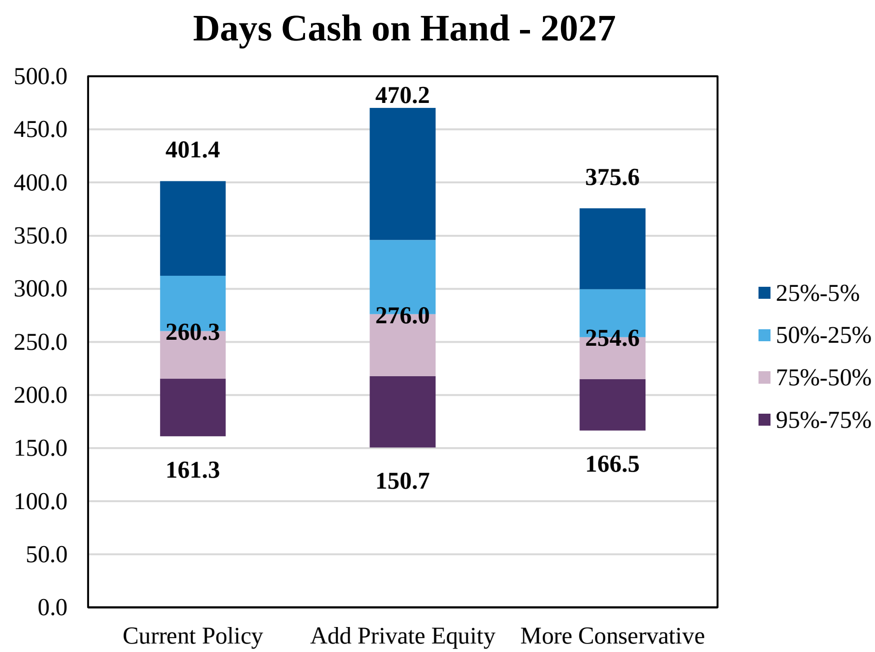
# Projected risk and expected return

**Note: Analysis assumes 2017 Fiscal Year End as starting point.**

| | Current Policy | Add Private Equity | More Conservative |
|---|---|---|---|
| Expected Return | 5.3% | 5.9% | 5.1% |
| Expected Std. Dev. | 6.7% | 8.3% | 5.9% |
| Probability of exceeding Budgeted Return (4.0%) over 5 years | 66.8% | 69.2% | 65.7% |
| Average Expected Investment Income per year (2018-2027) | $35.5 mil. | $40.8 mil. | $33.5 mil. |



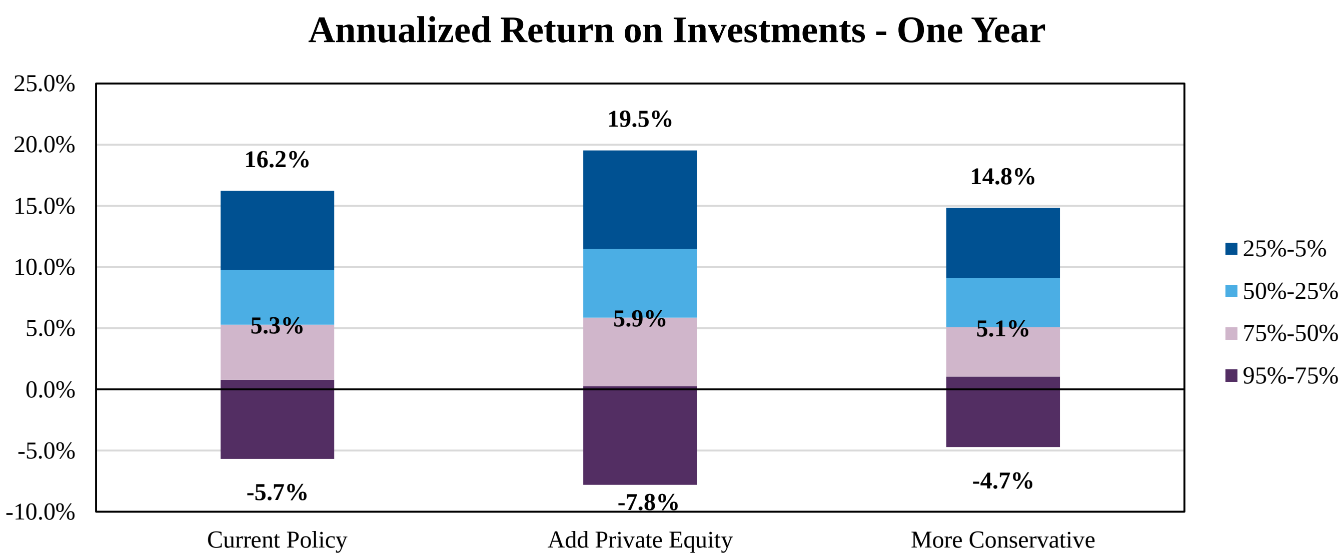

Base projection = 551.1

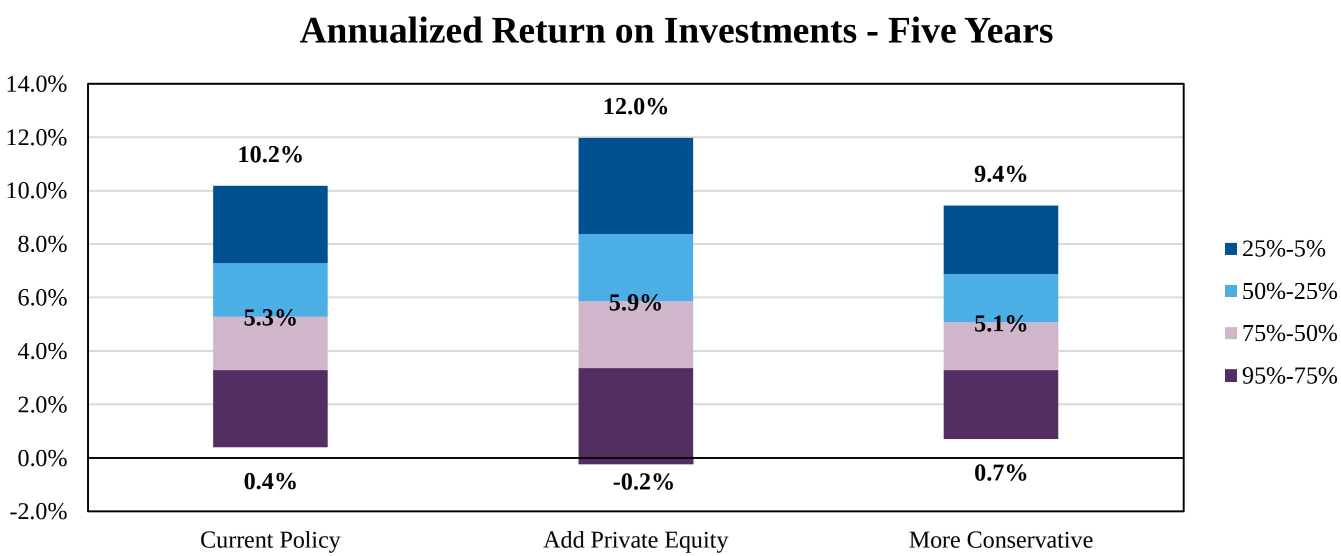



Base projection = 234.5

*Base projection assumes 4.0% annual return*

# Projected risk and expected return



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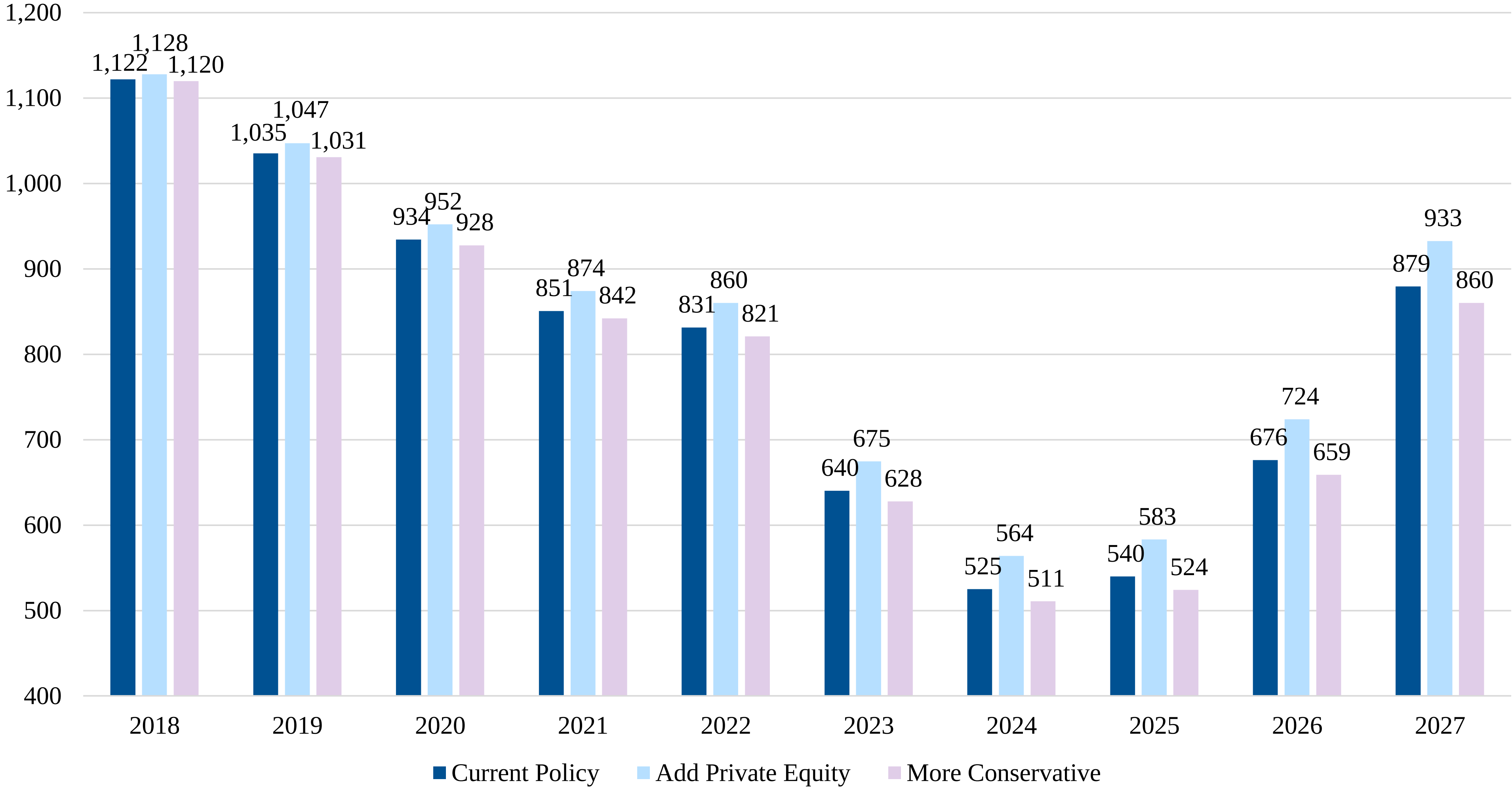
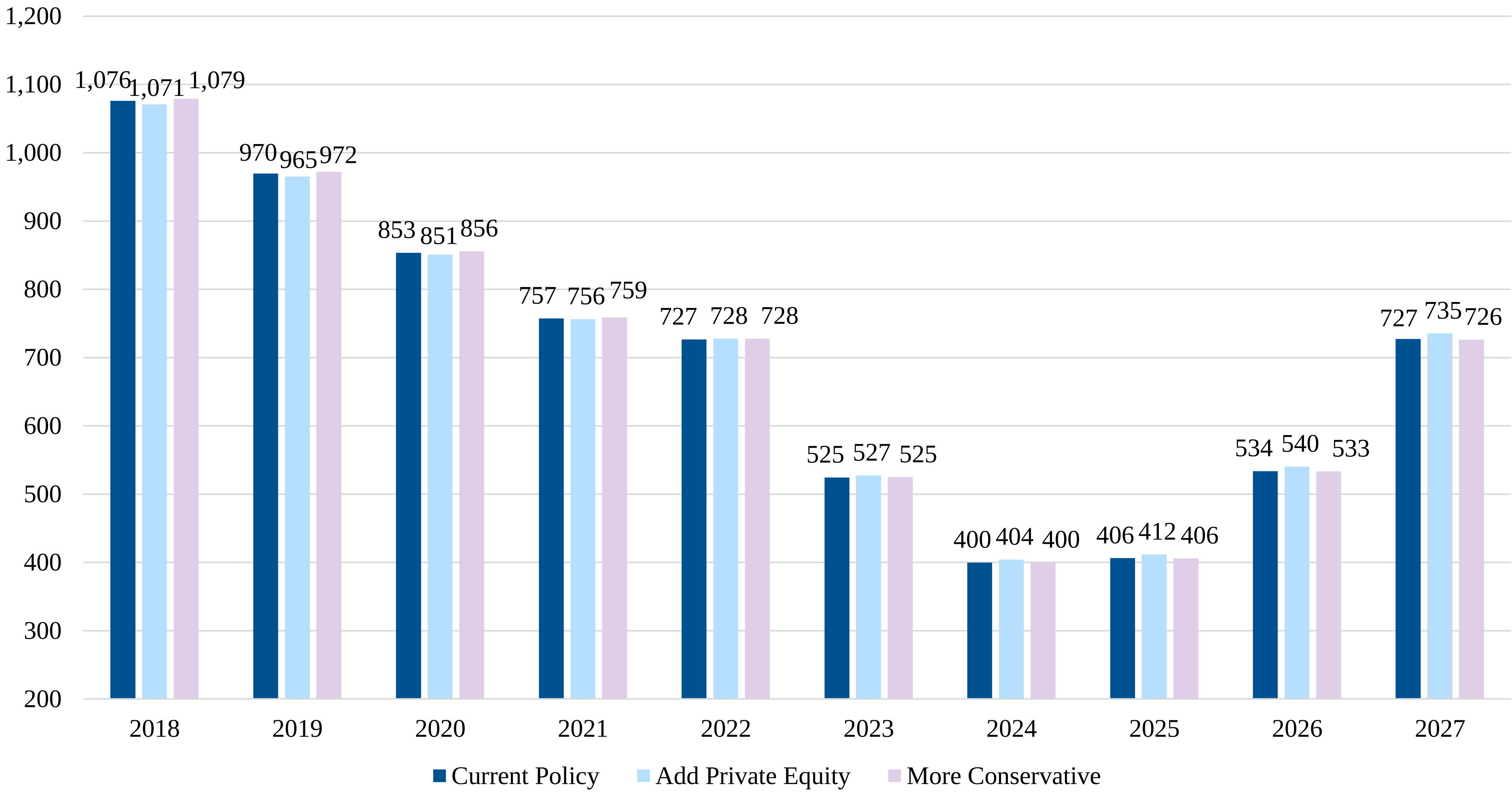
# Projected Unrestricted Cash and Investments ($millions)
## Expected Return (50th Percentile)



# Projected Unrestricted Cash and Investments ($millions)
## Unfavorable Return (75th Percentile)



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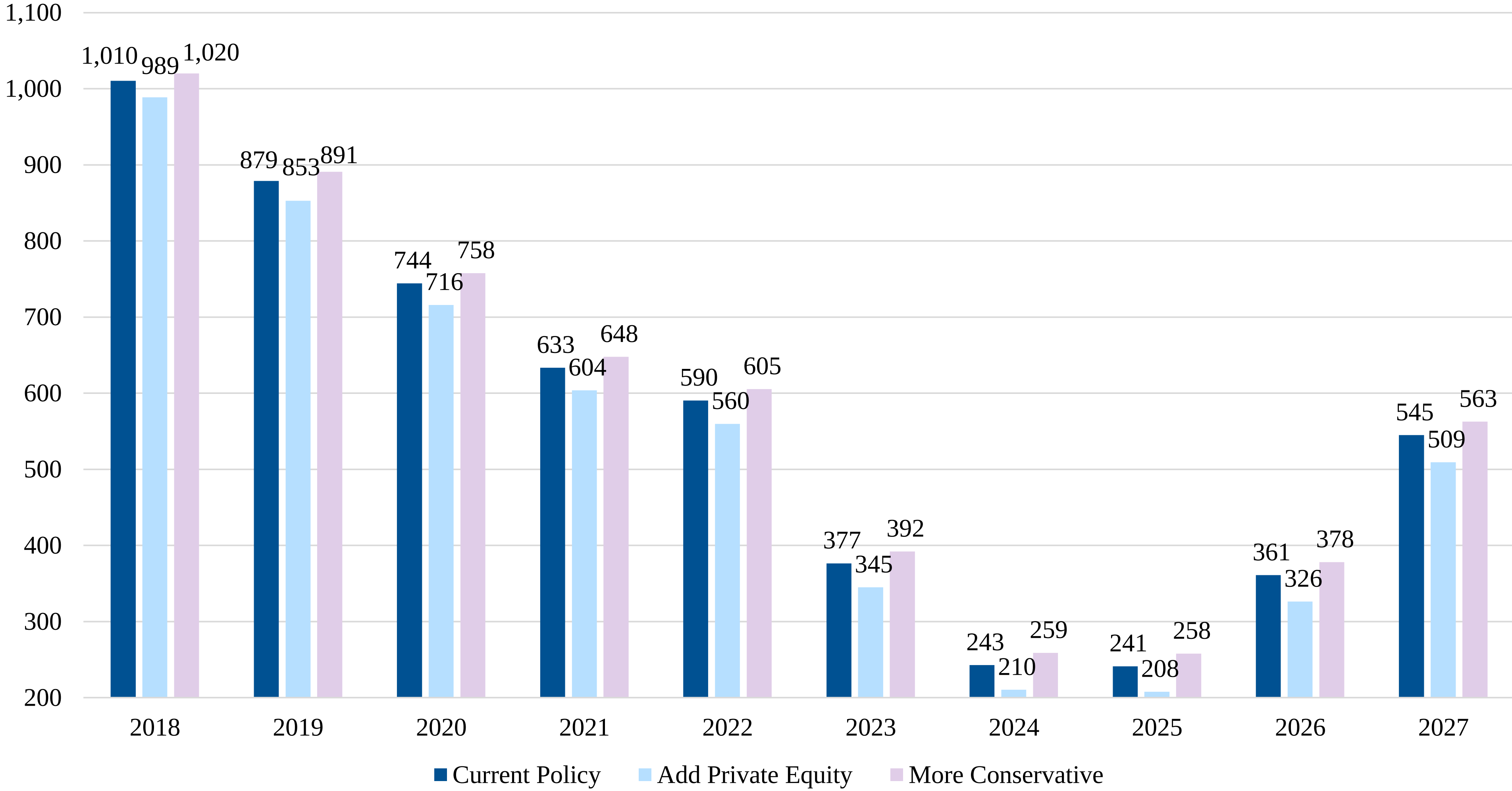
# Projected Unrestricted Cash and Investments ($millions)

## Very Unfavorable Return (95th Percentile)



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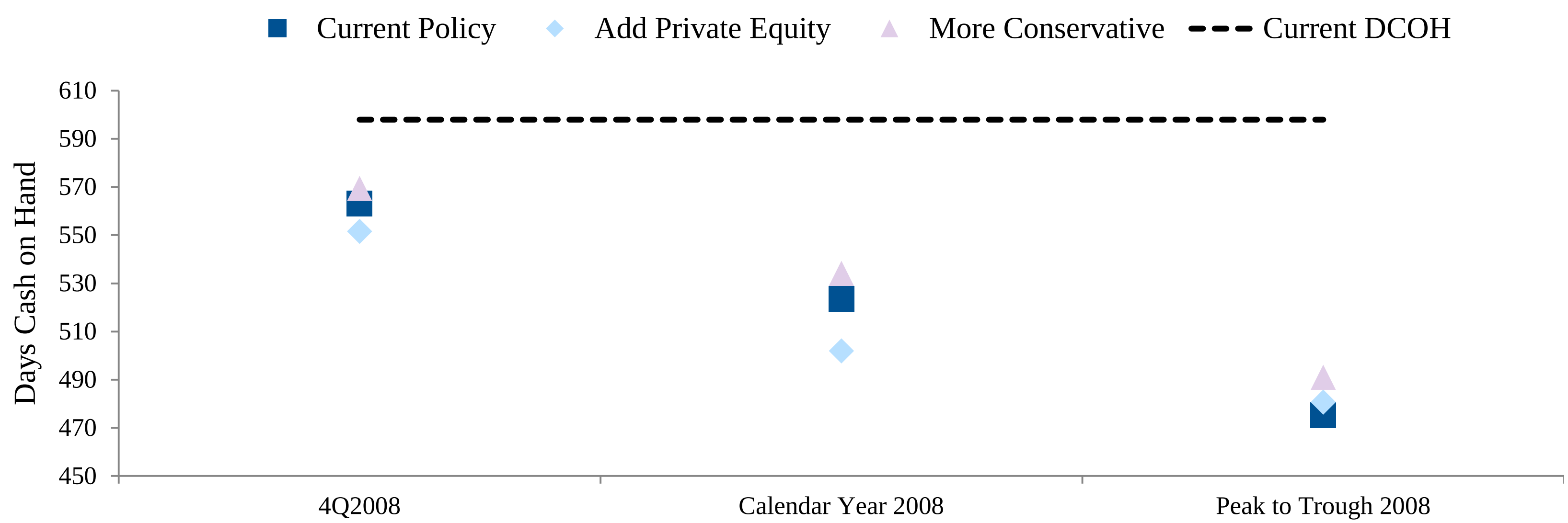
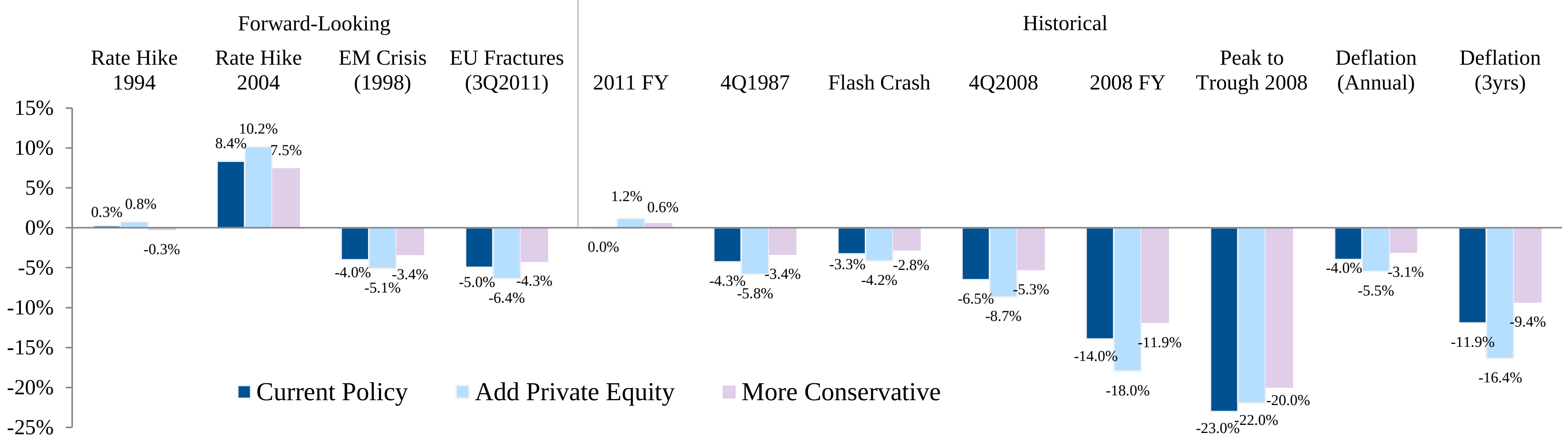
# Historical Scenario Analysis

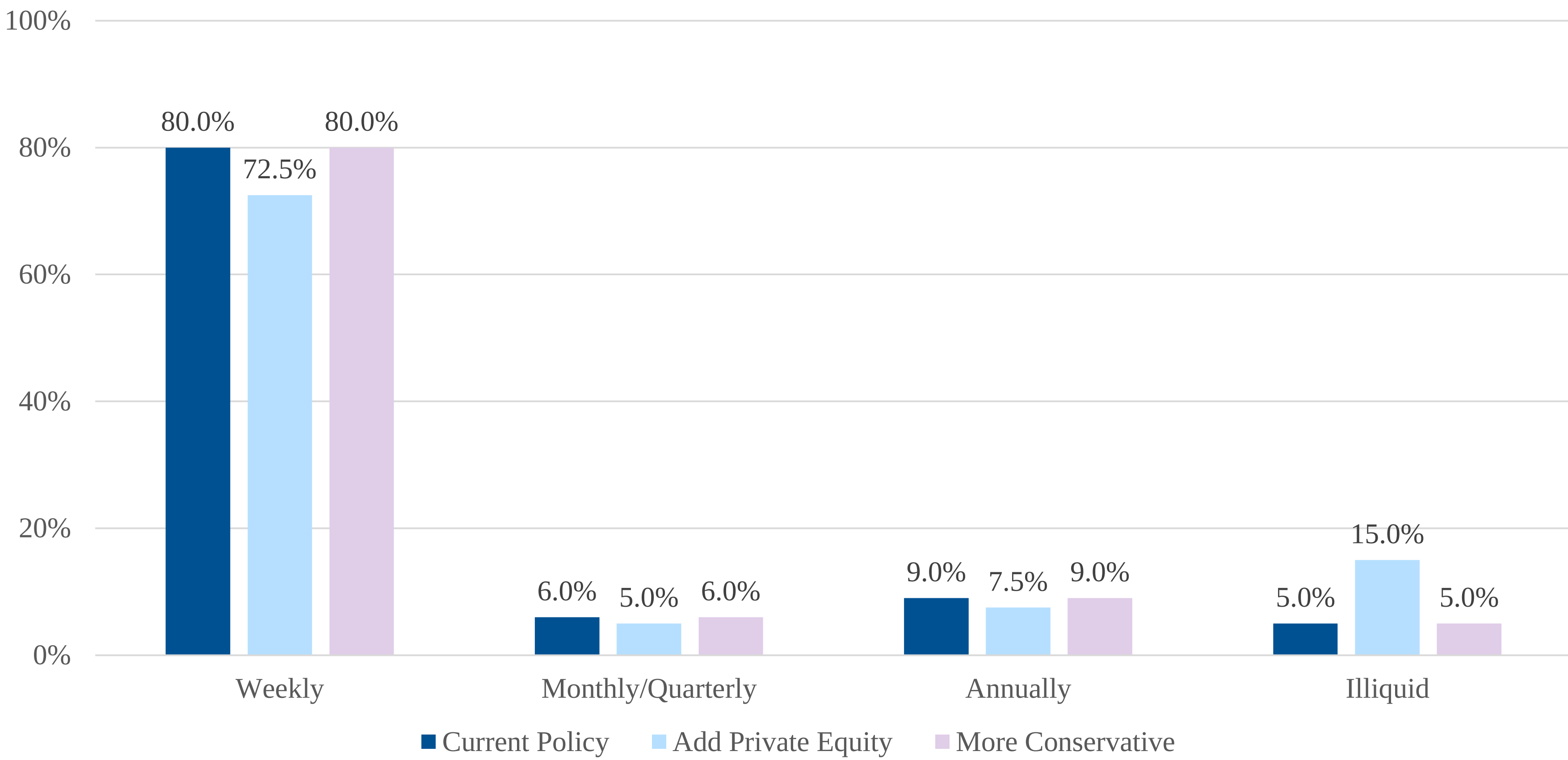



- As expected, the More Conservative allocation performs best during periods of market distress, while adding Private Equity increases downside risk relative to the Current Policy.

*Description of scenarios included in appendix*

# Liquidity Comparison




- Compared to the Current Policy, the More Conservative Portfolio would have no impact on liquidity, while adding Private Equity would significantly reduce liquidity.

# Operating Funds – Peer Comparison

| Asset Class | Current Policy | Healthcare Operating Portfolios -2015 Commonfund Benchmark Study of Healthcare Organizations: $501 million to $1 billion | Over $1 billion |
|---|---|---|---|
| Domestic Equities | 25% | 26% | 18% |
| International Equities | 15% | 20% | 19% |
| Fixed Income | 30% | 27% | 28% |
| Short-Term Securities / Cash | 10% | 4% | 5% |
| Alternative Strategies | 20% | 23% | 30% |
| Private Strategies | 5% | 6% | 9% |
| Hedge Funds/Alternatives | 15% | 13% | 17% |
| Commodities/Energy | -- | 4% | 3% |
| Other | -- | -- | 1% |

- When compared to peer operating portfolios between $500 million and $1 billion, the Surplus Cash portfolio is overweight fixed income, especially short-term strategies.
- When compared to peers with portfolios in excess of $1 billion, the Surplus Cash portfolio has noticeably lower exposure to alternatives.
- Pavilion believes the portfolio is sufficiently defensive and does not recommend reducing risk.

# Asset Allocation Recommendations and Considerations

**Pavilion recommends maintaining the current target asset allocation.**

| Asset Class | Equity | Fixed Income | Alternatives |
|---|---|---|---|
| Current Target | 40% | 40% | 20% |
| Allocation Consideration | Current exposure is diversified across geographies and market caps. There is a bias towards Large-Cap U.S. stocks.<br><br>The 40% target allocation is appropriate for El Camino's risk tolerance and liquidity needs. Pavilion recommends no change to the target equity allocation.<br><br>Pavilion recommends increasing emerging markets exposure to implement U.S./emerging markets barbell, which provides maximum exposure to global growth while managing overall equity portfolio volatility. | 10% short duration target provides ample liquidity, downside protection, and reduces overall duration risk.<br><br>Market duration portfolio consists of credit focused manager Dodge & Cox and relative value manager MetWest, which is currently positioned defensively.<br><br>Pavilion recommends maintaining target allocations. If market duration target allocation is maintained or increased, consider adding a global unconstrained strategy to add non-U.S. exposure while further reducing duration risk in the event U.S. Treasury rates continue rising. | As of December 31, 2017, the alternatives allocation consisted of direct hedge funds (14%) and private real estate (3%).<br><br>The hedge fund allocation is expected to provide diversification if markets become challenged.<br><br>Real estate provides a combination of diversification and inflation protection. While real estate has generated strong returns since the financial crisis, forward looking expectations are muted as valuations fore core real estate appear full. Private, value added real estate provides an opportunity for excess returns.<br><br>Pavilion recommends no change to the target allocation. |
| Manager Consideration | Harbor International's (Northern Cross) performance has not met expectations.<br><br>***Pavilion recommends replacing with Causeway International Value.*** | ***Consider additional diversification within the market duration portfolio to protect from rising U.S. interest rates.*** | ***Pavilion will continue to monitor for new opportunities within hedge funds and real estate.*** |

Appendix

# Pavilion Long-Term Capital Market Assumptions and ECH Long Term Forecasts

# Long-Term Capital Market Assumptions: Methodology

- Modern portfolio theory provides a useful and important framework for addressing the challenges of asset allocation with two inputs, the expected returns, and the relative risk or co-movement, also known as the covariance for the various asset classes. Unfortunately, while the estimation of covariance is straight forward, relying heavily on historical data, formulating reasonable estimates for expected returns can be quite difficult. The challenges become determining which factors to emphasize and identifying what circumstances will drive returns over the next decade or longer. All too frequently, prognosticators allow subjective biases to creep into their assessments, resulting in estimates representing little more than a guess. To address these issues, we produce long-term capital market assumptions ("LTCMA") to establish strategic allocations which are objective and business cycle agnostic while capturing secular conditions over longer time horizons (10- to 15-years).
- The estimation process is carried out in three separate but related categories: fixed income, equity, and alternatives. For each of these categories or asset classes, the expected riskless rate of return is combined with an expected risk premium to provide the expected return for the asset class. This process builds off of two components: forward interest rate curves (i.e. the market's view of the future path of interest rates, including the riskless rate) and consensus earnings growth (which provides the equity risk premium). We begin with the fixed income returns.
  - Fixed income return assumptions are derived primarily from forward interest rate curves. These forward curves provide the market's current estimate of the future path of interest rates over time. The paths projected by these curves enable us to estimate the future path of the riskless rate as well as forward looking coupon expectations based on the underlying composition of each fixed income sub-asset class, thus providing the basis for calculating expected returns for this class of assets. Assumptions are refined further through an incorporation of idiosyncratic characteristics (e.g. spreads, duration, capital impairment, etc.).
  - Equity returns build off the foundations established in the fixed income exercise, in particular the risk-free expectation which is combined with an equity risk premium to form the basis of expected equity returns. We estimate the equity risk premium through a dividend discount model approach. The model utilizes intermediate-term, consensus earnings growth expectations blended with the risk-free rate to calculate a discounted future value. This value becomes the basis for calculating the equity risk premium. While historical earnings growth expectations have been overly optimistic, the risk-free rate dampens the impact of these estimates anchoring growth to the market's more conservative estimate of longer-run economic growth. Once the equity risk premium is established, we estimate sub-asset class returns through a Black-Litterman approach. Black-Litterman is a statistical technique for extrapolating the broader equity risk premium to equity sub-asset classes based on current market capitalization, underlying risks (volatility), and historical relationships (correlations). The results typically produce higher return estimates for riskier allocations.
  - Finally, alternative asset classes are estimated through a two phase process. The first phase captures systemic risks using both fixed income and equity expectations. We use regressions to extrapolate underlying asset class relationships and then uses a linear combination to establish a systemic return. The second phase reviews historical performance to determine idiosyncratic factors (e.g. alpha, real estate prices, etc.)
- Our methods employed are standard and commonly employed by most sophisticated asset managers and brokers, explaining the modest differentials present in such estimates. We undertake the process independently in order to understand all underlying assumptions and to ensure consistency across all aspects of the process. As a matter of due diligence, we benchmark our LTCM assumptions against several other sets of assumptions to safeguard against the prospect of errors or rogue assumptions.

# Long-Term Capital Market Assumptions: Year-over-Year Change

| | | Strategy | 2018 Return | 2018 Risk | 2017 Return | 2017 Risk | YOY Change Return |
|---|---|---|---|---|---|---|---|
| Equities | 1 | Global Equity | 6.80% | 16.10% | 7.52% | 16.43% | -0.72% |
| | 2 | U.S. Equity | 6.61% | 15.14% | 7.29% | 15.44% | -0.68% |
| | 3 | U.S. Large Cap Equity | 6.53% | 15.02% | 7.20% | 15.32% | -0.67% |
| | 4 | U.S. Small Cap Equity | 7.54% | 19.51% | 8.37% | 19.75% | -0.83% |
| | 5 | Intl Equity | 6.86% | 16.31% | 7.60% | 16.61% | -0.74% |
| | 6 | Emerging Markets | 8.13% | 21.52% | 9.09% | 21.93% | -0.96% |
| | 7 | Long/Short Equity | 4.72% | 8.89% | 5.10% | 9.09% | -0.38% |
| | 8 | Private Equity | 9.80% | 25.39% | 10.52% | 25.66% | -0.72% |
| Fixed Income | 9 | Global Bonds | 2.68% | 5.43% | 2.84% | 5.41% | -0.16% |
| | 10 | Short Duration | 2.73% | 1.41% | 2.85% | 1.43% | -0.12% |
| | 11 | Treasuries | 2.50% | 4.34% | 2.51% | 4.36% | -0.01% |
| | 12 | Intermediate Gov't | 2.50% | 2.99% | 2.52% | 3.01% | -0.02% |
| | 13 | Long Duration Gov't | 2.73% | 10.15% | 2.94% | 10.13% | -0.21% |
| | 14 | Long G/C | 3.60% | 8.66% | 3.94% | 8.69% | -0.34% |
| | 15 | Municipal Bonds | 2.46% | 4.06% | -- | -- | -- |
| | 16 | Core Plus | 2.94% | 3.42% | 3.05% | 3.43% | -0.11% |
| | 17 | Investment Grade Corporates | 3.54% | 5.28% | 3.78% | 5.35% | -0.24% |
| | 18 | High Yield | 4.46% | 8.81% | 5.00% | 9.01% | -0.54% |
| | 19 | Emerging Markets Debt | 4.26% | 8.73% | 4.91% | 8.88% | -0.65% |
| Multi-Strat. | 20 | Distressed | 7.51% | 10.41% | 8.77% | 10.52% | -1.26% |
| | 21 | Long/Short Fixed Income | 4.52% | 8.38% | 4.95% | 8.47% | -0.43% |
| | 22 | Diversified Hedge Funds (FOF) | 4.67% | 3.85% | 4.85% | 3.94% | -0.18% |
| | 23 | Multi-Strategy - Direct | 4.98% | 6.73% | 5.48% | 6.88% | -0.50% |
| Real Assets | 24 | Commodities | 4.96% | 15.83% | 5.39% | 16.18% | -0.43% |
| | 25 | Inflation Linked Notes | 2.56% | 5.44% | 2.67% | 5.53% | -0.11% |
| | 26 | Natural Resources / Infrastructure | 5.87% | 16.17% | 6.29% | 16.35% | -0.42% |
| | 27 | Real Estate (Private) | 6.00% | 10.28% | 6.40% | 10.35% | -0.40% |
| | 28 | REITs | 6.49% | 19.73% | 7.16% | 20.10% | -0.67% |
| | 29 | Cash | 2.43% | 0.64% | 2.44% | 0.64% | -0.01% |

**Represents 2018 Asset Allocation Assumptions published in January 2018;*



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# Long-Term Capital Market Assumptions

| | | Strategy | Return | Risk | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Correlation Matrix | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Equities | 1 | Global Equity | 6.8% | 16.1% | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | U.S. Equity | 6.6% | 15.1% | 0.95 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | U.S. Large Cap Equity | 6.5% | 15.0% | 0.95 | 1.00 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | U.S. Small Cap Equity | 7.5% | 19.5% | 0.81 | 0.86 | 0.84 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 | Intl Equity | 6.9% | 16.3% | 0.96 | 0.84 | 0.84 | 0.74 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 | Emerging Markets | 8.1% | 21.5% | 0.88 | 0.77 | 0.77 | 0.72 | 0.86 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 | Long/Short Equity | 4.7% | 8.9% | 0.83 | 0.81 | 0.79 | 0.84 | 0.78 | 0.81 | 1.00 | | | | | | | | | | | | | | | | | | | | | | |
| | 8 | Private Equity | 9.8% | 25.4% | 0.99 | 0.95 | 0.95 | 0.81 | 0.95 | 0.87 | 0.82 | 1.00 | | | | | | | | | | | | | | | | | | | | | |
| Fixed Income | 9 | Global Bonds | 2.7% | 5.4% | 0.28 | 0.16 | 0.16 | 0.10 | 0.36 | 0.29 | 0.17 | 0.26 | 1.00 | | | | | | | | | | | | | | | | | | | | |
| | 10 | Short Duration | 2.7% | 1.4% | -0.10 | -0.13 | -0.12 | -0.17 | -0.08 | -0.07 | -0.04 | -0.10 | 0.56 | 1.00 | | | | | | | | | | | | | | | | | | | |
| | 11 | Treasuries | 2.5% | 4.3% | -0.25 | -0.26 | -0.25 | -0.30 | -0.23 | -0.22 | -0.26 | -0.26 | 0.59 | 0.72 | 1.00 | | | | | | | | | | | | | | | | | | |
| | 12 | Intermediate Gov't | 2.5% | 3.0% | -0.27 | -0.28 | -0.27 | -0.33 | -0.24 | -0.23 | -0.27 | -0.28 | 0.60 | 0.80 | 0.96 | 1.00 | | | | | | | | | | | | | | | | | |
| | 13 | Long Duration Gov't | 2.7% | 10.2% | -0.24 | -0.24 | -0.23 | -0.28 | -0.22 | -0.20 | -0.27 | -0.25 | 0.50 | 0.49 | 0.93 | 0.83 | 1.00 | | | | | | | | | | | | | | | | |
| | 14 | Long G/C | 3.6% | 8.7% | 0.00 | -0.03 | -0.03 | -0.09 | 0.02 | 0.02 | -0.06 | -0.01 | 0.62 | 0.53 | 0.87 | 0.75 | 0.93 | 1.00 | | | | | | | | | | | | | | | |
| | 15 | Municipal Bonds | 2.5% | 4.1% | 0.02 | 0.00 | 0.00 | -0.06 | 0.04 | 0.04 | 0.03 | 0.01 | 0.48 | 0.43 | 0.58 | 0.53 | 0.57 | 0.66 | 1.00 | | | | | | | | | | | | | | |
| | 16 | Core Plus | 2.9% | 3.4% | -0.01 | -0.04 | -0.03 | -0.11 | 0.01 | 0.02 | -0.04 | -0.02 | 0.70 | 0.74 | 0.92 | 0.88 | 0.85 | 0.93 | 0.71 | 1.00 | | | | | | | | | | | | | |
| | 17 | Investment Grade Corporates | 3.5% | 5.3% | 0.28 | 0.22 | 0.23 | 0.15 | 0.30 | 0.29 | 0.23 | 0.27 | 0.68 | 0.57 | 0.63 | 0.56 | 0.62 | 0.85 | 0.68 | 0.86 | 1.00 | | | | | | | | | | | | |
| | 18 | High Yield | 4.5% | 8.8% | 0.68 | 0.64 | 0.63 | 0.62 | 0.65 | 0.68 | 0.61 | 0.67 | 0.30 | 0.01 | -0.15 | -0.20 | -0.13 | 0.18 | 0.26 | 0.18 | 0.53 | 1.00 | | | | | | | | | | | |
| | 19 | Emerging Markets Debt | 4.3% | 8.7% | 0.68 | 0.58 | 0.59 | 0.48 | 0.68 | 0.67 | 0.54 | 0.67 | 0.61 | 0.29 | 0.24 | 0.20 | 0.22 | 0.48 | 0.40 | 0.51 | 0.71 | 0.73 | 1.00 | | | | | | | | | | |
| Multi-Strat. | 20 | Distressed | 7.5% | 10.4% | 0.65 | 0.61 | 0.59 | 0.63 | 0.64 | 0.65 | 0.75 | 0.64 | 0.11 | -0.08 | -0.31 | -0.33 | -0.33 | -0.09 | 0.06 | -0.08 | 0.23 | 0.68 | 0.48 | 1.00 | | | | | | | | | |
| | 21 | Long/Short Fixed Income | 4.5% | 8.4% | 0.20 | 0.18 | 0.17 | 0.20 | 0.19 | 0.21 | 0.24 | 0.19 | 0.00 | -0.02 | -0.16 | -0.17 | -0.15 | 0.00 | 0.13 | 0.03 | 0.20 | 0.39 | 0.21 | 0.46 | 1.00 | | | | | | | | |
| | 22 | Diversified Hedge Funds (FOF) | 4.7% | 3.9% | 0.64 | 0.59 | 0.59 | 0.55 | 0.62 | 0.63 | 0.79 | 0.63 | 0.07 | -0.01 | -0.24 | -0.27 | -0.24 | -0.04 | 0.11 | -0.02 | 0.25 | 0.57 | 0.46 | 0.82 | 0.40 | 1.00 | | | | | | | |
| | 23 | Multi-Strategy - Direct | 5.0% | 6.7% | 0.82 | 0.80 | 0.78 | 0.81 | 0.78 | 0.82 | 0.97 | 0.82 | 0.17 | -0.04 | -0.24 | -0.25 | -0.24 | -0.03 | 0.05 | -0.02 | 0.26 | 0.64 | 0.55 | 0.80 | 0.29 | 0.83 | 1.00 | | | | | | |
| Real Assets | 24 | Commodities | 5.0% | 15.8% | 0.42 | 0.33 | 0.33 | 0.33 | 0.44 | 0.48 | 0.47 | 0.41 | 0.34 | 0.09 | -0.08 | -0.06 | -0.14 | 0.00 | -0.03 | 0.05 | 0.20 | 0.36 | 0.41 | 0.43 | 0.16 | 0.46 | 0.48 | 1.00 | | | | | |
| | 25 | Inflation Linked Notes | 2.6% | 5.4% | 0.08 | 0.02 | 0.02 | -0.02 | 0.10 | 0.15 | 0.06 | 0.07 | 0.64 | 0.53 | 0.65 | 0.63 | 0.60 | 0.69 | 0.54 | 0.74 | 0.68 | 0.27 | 0.53 | 0.10 | 0.04 | 0.13 | 0.09 | 0.28 | 1.00 | | | | |
| | 26 | Natural Resources / Infrastructure | 5.9% | 16.2% | 0.42 | 0.41 | 0.40 | 0.39 | 0.40 | 0.41 | 0.42 | 0.41 | 0.18 | 0.09 | -0.16 | -0.14 | -0.21 | -0.02 | 0.17 | 0.04 | 0.26 | 0.56 | 0.34 | 0.51 | 0.25 | 0.41 | 0.44 | 0.38 | 0.13 | 1.00 | | | |
| | 27 | Real Estate (Private) | 6.0% | 10.3% | 0.08 | 0.06 | 0.06 | 0.05 | 0.11 | 0.04 | 0.09 | 0.08 | 0.03 | -0.05 | -0.03 | -0.07 | 0.00 | 0.04 | 0.02 | 0.00 | 0.07 | 0.04 | 0.05 | 0.22 | 0.12 | 0.18 | 0.07 | 0.10 | -0.01 | 0.07 | 1.00 | | |
| | 28 | REITs | 6.5% | 19.7% | 0.58 | 0.59 | 0.57 | 0.62 | 0.55 | 0.51 | 0.44 | 0.58 | 0.32 | 0.01 | -0.04 | -0.06 | -0.01 | 0.18 | 0.20 | 0.17 | 0.36 | 0.61 | 0.51 | 0.43 | 0.22 | 0.32 | 0.44 | 0.25 | 0.24 | 0.33 | 0.13 | 1.00 | |
| | 29 | Cash | 2.4% | 0.6% | -0.03 | -0.02 | -0.01 | -0.04 | -0.04 | -0.01 | 0.12 | -0.04 | 0.02 | 0.46 | 0.13 | 0.20 | 0.02 | -0.02 | 0.02 | 0.11 | -0.02 | -0.11 | -0.03 | 0.02 | -0.08 | 0.17 | 0.10 | 0.07 | 0.03 | 0.05 | 0.06 | -0.02 | 1.00 |

*Inflation Expectation: 2.0%*
**Represents 2018 Asset Allocation Assumptions published in January 2018*

# FY17 Long Term Forecast Income Statement

| | Actual 2016 | Actual 2017 | Projected 2018 | Forecast 2019 | Forecast 2020 | Forecast 2021 | Forecast 2022 | Forecast 2023 | Forecast 2024 | Forecast 2025 | Forecast 2026 | Forecast 2027 | Forecast 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Patient Statistics** | | | | | | | | | | | | | |
| Patient days | 86,829 | 97,774 | 98,334 | 98,892 | 103,836 | 106,226 | 107,584 | 108,434 | 109,730 | 120,172 | 131,266 | 132,309 | 133,362 |
| Visits | 139,927 | 145,909 | 147,485 | 149,697 | 154,064 | 157,795 | 160,653 | 163,001 | 165,384 | 183,703 | 190,132 | 197,594 | 206,334 |
| | | | | | | | | | | | | | |
| **Income Statement** | | | | | | | | | | | | | |
| **REVENUE:** | | | | | | | | | | | | | |
| Gross patient revenue | 2,755,387 | 3,019,082 | 3,194,413 | 3,374,418 | 3,597,299 | 3,811,808 | 4,029,902 | 4,256,988 | 4,509,846 | 5,266,853 | 5,915,497 | 6,330,411 | 6,784,770 |
| Total deductions | 1,983,365 | 2,186,820 | 2,358,886 | 2,502,423 | 2,684,244 | 2,855,123 | 3,030,543 | 3,217,458 | 3,428,928 | 4,030,845 | 4,547,053 | 4,891,595 | 5,268,613 |
| Net patient revenue | 772,022 | 832,262 | 835,527 | 871,995 | 913,055 | 956,685 | 999,359 | 1,039,530 | 1,080,918 | 1,236,007 | 1,368,444 | 1,438,817 | 1,516,156 |
| *% of Change from PY* | | *7.8%* | *0.4%* | *4.4%* | *4.7%* | *4.8%* | *4.5%* | *4.0%* | *4.0%* | *14.3%* | *10.7%* | *5.1%* | *5.4%* |
| Other operating revenues | 23,636 | 26,085 | 23,129 | 27,730 | 28,531 | 29,355 | 30,203 | 31,076 | 32,048 | 35,416 | 36,422 | 37,431 | 38,394 |
| | | | | | | | | | | | | | |
| **Total operating revenues** | **795,659** | **858,347** | **858,657** | **899,725** | **941,586** | **986,040** | **1,029,562** | **1,070,606** | **1,112,967** | **1,271,423** | **1,404,866** | **1,476,248** | **1,554,550** |
| | | | | | | | | | | | | | |
| **EXPENSES:** | | | | | | | | | | | | | |
| Total Labor Expense | 435,997 | 446,085 | 470,357 | 500,866 | 527,968 | 548,943 | 569,547 | 588,333 | 607,994 | 681,503 | 744,139 | 774,165 | 807,227 |
| Total Non-Labor Expense | 307,056 | 300,086 | 300,634 | 334,606 | 357,669 | 397,593 | 421,400 | 438,350 | 463,518 | 530,251 | 577,998 | 604,612 | 625,582 |
| | | | | | | | | | | | | | |
| **Total expenses** | **743,053** | **746,171** | **770,990** | **835,472** | **885,637** | **946,535** | **990,947** | **1,026,683** | **1,071,512** | **1,211,754** | **1,322,137** | **1,378,777** | **1,432,809** |
| | | | | | | | | | | | | | |
| **INCOME FROM OPERATIONS** | **52,606** | **112,176** | **87,667** | **64,254** | **55,949** | **39,504** | **38,615** | **43,923** | **41,455** | **59,669** | **82,729** | **97,471** | **121,742** |
| Total nonoperating income | -9,570 | 57,400 | 2,703 | 26,093 | 21,676 | 17,998 | 16,919 | 8,988 | 5,024 | 5,155 | 9,670 | 15,984 | 23,320 |
| **EXCESS OF REVENUE OVER EXPENSES** | **43,035** | **169,576** | **90,370** | **90,346** | **77,625** | **57,502** | **55,535** | **52,911** | **46,478** | **64,824** | **92,399** | **113,455** | **145,062** |
| **Key Financial Indicators - Profitability** | | | | | | | | | | | | | |
| Operating margin | 6.61% | 13.07% | 10.21% | 7.14% | 5.94% | 4.01% | 3.75% | 4.10% | 3.72% | 4.69% | 5.89% | 6.60% | 7.83% |
| Excess margin | 5.47% | 18.52% | 10.49% | 9.76% | 8.06% | 5.73% | 5.31% | 4.90% | 4.16% | 5.08% | 6.53% | 7.60% | 9.19% |
| EBITDA margin | 13.72% | 18.85% | 16.58% | 15.24% | 14.78% | 15.30% | 15.61% | 15.97% | 16.29% | 16.64% | 17.16% | 17.75% | 18.34% |

*Source: El Camino Hospital Long Range Financial Plan – January 2018*

# FY17 Long Term Forecast Balance Sheet

Investment Portfolio market value assumption

| Balance Sheet | Actual 2016 | Actual 2017 | Projected 2018 | Forecast 2019 | Forecast 2020 | Forecast 2021 | Forecast 2022 | Forecast 2023 | Forecast 2024 | Forecast 2025 | Forecast 2026 | Forecast 2027 | Forecast 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ASSETS: | | | | | | | | | | | | | |
| Total current assets | 253,101 | 321,871 | 325,973 | 342,540 | 355,379 | 372,470 | 387,008 | 400,082 | 412,736 | 466,812 | 511,109 | 533,817 | 557,333 |
| Assets - ltd use (net) | 656,080 | 1,017,715 | 954,773 | 845,145 | 725,997 | 623,490 | 591,202 | 381,849 | 255,158 | 247,077 | 370,302 | 570,367 | 800,108 |
| PP&E, net | 731,525 | 798,279 | 944,838 | 1,127,389 | 1,304,481 | 1,441,049 | 1,506,949 | 1,747,902 | 1,899,613 | 1,914,694 | 1,833,807 | 1,715,205 | 1,597,193 |
| Total other assets | 26,922 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 | 28,960 |
| TOTAL ASSETS | 1,667,629 | 2,166,825 | 2,254,544 | 2,344,035 | 2,414,818 | 2,465,970 | 2,514,119 | 2,558,793 | 2,596,468 | 2,657,544 | 2,744,179 | 2,848,348 | 2,983,595 |
| LIABILITIES AND NET ASSETS: | | | | | | | | | | | | | |
| Total current liabilities | 96,470 | 110,054 | 111,253 | 119,028 | 121,205 | 124,285 | 126,804 | 128,967 | 131,084 | 138,795 | 145,066 | 148,411 | 151,850 |
| LONG-TERM DEBT, NET | 226,580 | 527,371 | 523,521 | 514,891 | 505,871 | 496,441 | 486,536 | 476,136 | 465,216 | 453,756 | 441,721 | 429,091 | 415,836 |
| Total other liabilities | 41,902 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 | 51,904 |
| Total net assets | 1,297,218 | 1,466,251 | 1,556,621 | 1,646,967 | 1,724,592 | 1,782,095 | 1,837,629 | 1,890,541 | 1,937,019 | 2,001,843 | 2,094,242 | 2,207,697 | 2,352,759 |
| Balancing Acct | 5,459 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 | 11,245 |
| TOTAL LIABILITIES AND NET ASSETS | 1,667,629 | 2,166,825 | 2,254,544 | 2,344,035 | 2,414,818 | 2,465,970 | 2,514,119 | 2,558,793 | 2,596,468 | 2,657,544 | 2,744,179 | 2,848,348 | 2,983,595 |

*Source: El Camino Hospital Long Range Financial Plan – January 2018*

# Scenario Analysis Definitions

**Stress Scenario Methodology:** Scenarios are estimated through a three phase process. First, key factors are determined along with the magnitude change. An analysis of historical and fundamental economics data aide in isolating and approximating values. Secondly, portfolio sensitivities to each factor are estimated by a linear regression. Finally, elements of step one and two are combined to estimate the portfolio's scenario sensitivity.

**Forward-Looking Stress Scenarios**

- **Monetary Policy Misstep (1994 vs. 2004):** Recent history has shown two different rising rate environment in the U.S. In 1994, markets sold off sharply at first before recalibrating. Alternatively, in 2004 the market easily digested the rate rise.
- **E.U. Fractures (3Q 2011):** While the E.U. has seen many improvements since the end of the 2008 financial crisis, a growing concern is the prospect for markets to begin pricing in an increased probability of a future break-up of the Union. Potential catalysts for such an event include the ongoing negotiations of the U.K. and E.U. (BREXIT), a failure in negotiations with Greece to obtain an additional round of funding or both. While currently not likely, either event would likely cause a selloff in risk assets similar to that witnessed in 2011, with some consideration given to the current level of valuations.
- **Emerging Markets Shock (1998):** Although risks have subsided, a hard landing in China or capital flight amid a rising rate environment still exist.

**Historical Stress Scenarios**

- **1987 Full Year:** Black Monday occurred on October 19, 1987 and reverberated through the globe. The drawdown erased positive U.S. performance from earlier in the year and left markets in the red at year-end.
- **Flash Crash:** Flash crash represents returns from a single month (May 2010).
- **4Q 2008 (Financial Crisis):** The financial crisis intensified in the fourth quarter of 2008, as the S&P 500 Index fell -21.9%, the largest quarterly drop since 1987. In the third quarter, Lehman Brothers filed for bankruptcy on September 15th, punctuating a continuing tightening of financial markets. Monetary and fiscal measures sought to address the destabilizing fundamentals; however, asset prices and economic conditions deteriorated further. From the monetary perspective, the US Federal Reserve set the target federal funds range at 0 – 25 basis points on December 16th, as interested rates fell. On the fiscal side and in an effort begin recapitalizing the financial system, the Troubled Assets Relief Program ("TARP") was signed into law on October 3rd.
- **Financial Crisis Peak to Trough** (**November 2007 through February 2009):** The financial crisis sent shockwaves throughout the global economy and produced the great recession. Excess leverage coupled with poor underwriting emanating from the US real estate and financial sectors catalyzed a massive deterioration in systemically important institutions. Throughout the globally connected markets, liquidity dried up which seized financial markets and spurred fire sale prices. In the US, the real gross domestic product fell approximately -4% with the real estate and financial sectors at the epicenter. On a monthly basis, the S&P 500 Index peaked at the end of October 2007, only to fall -51% through the end of February 2009 with US 10-year treasury rates tumbling 150 basis points from 4.5% to 3.0%.
- **Deflation:** The deflation scenario is designed to simulate a Japan deflation scenario taking place over a 3-year horizon within the United States.

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# ECH BOARD COMMITTEE MEETING AGENDA ITEM COVER SHEET

| | | |
|---|---|---|
| | **Item:** | Biennial Committee Self- Assessment<br>Investment Committee<br>Meeting Date: March 12, 2018 |
| | **Responsible party:** | Cindy Murphy, Director of Governance Services |
| | **Action requested:** | Possible Motion |
| | **Background:** El Camino Hospital's Board Advisory Committees conduct a Biennial Self-Assessment. This survey was conducted in December 2017. | |
| | **Other Board Advisory Committees that reviewed the issue and recommendation, if any:**<br>N/A | |
| | **Summary and session objectives**: For the Committee to review its Self – Assessment, to discuss the findings, and decide whether or not to integrate an area for improvement into the Committee's FY19 Goals. | |
| | **Suggested discussion questions:**<br>1. Does the Committee agree with the findings of the survey?<br>2. Should the Committee integrate any of the possible areas for improvement into its FY 19 Committee Goals? If yes, which one(s)? | |
| | **Proposed Committee motion, if any:**<br>None Proposed. At the discretion of the Committee. | |
| | **LIST OF ATTACHMENTS:**<br>1. Biennial Committee Self-Assessment Results. | |

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

# El Camino Hospital

## Investment Committee
## FY2017-18 Assessment Report

**Submitted on:** January 25, 2018
**Prepared for:** Investment Committee
**Prepared by:** JoAnn McNutt, PhD and Zach Morfín, PhD

# Introduction

**Background**

In keeping with the ECH Hospital Board's commitment to effective governance, Nygren Consulting was engaged to conduct the biennial performance assessment of the board committees, providing them with an opportunity to reflect on their performance during the Fiscal Year 2017-2018. The goal of the assessment was to identify the committees' strengths and areas for improvement, which would be integrated into their annual goals. This report provides the results of the Investment Committee's self-assessment.

**Interpreting the Results**

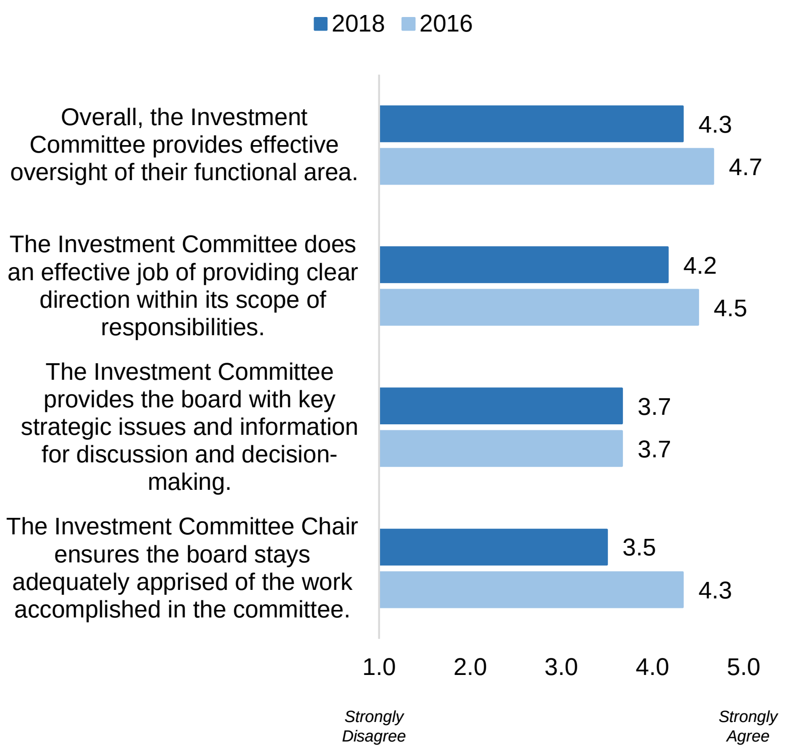
The Investment Committee assessment tool was comprised of twelve core items and three open-ended questions that applied to all committees, as well as six committee-specific items. Please note that because committee assessments are conducted on a biennial basis, the year-over-year analysis compares the committee's performance in 2018 against 2016.

The purpose of the assessment was to provide directional feedback to the Investment Committee. The quantitative scores herein are meant to provide insight into how the Investment Committee perceives its own performance. The assessment is not intended to provide statistically significant results, which cannot be achieved with a small sample size. Average scores are rounded to the nearest tenth decimal point as this will show variation in the ratings.

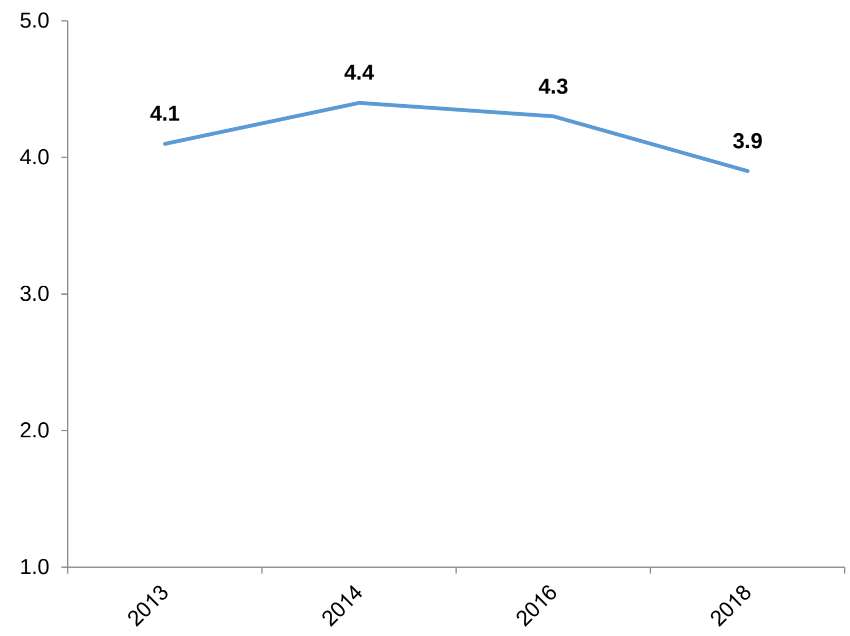
We set 3.5 as the threshold to determine whether a response is favorable. It is rare to achieve a perfect score of 5.0. Occasionally, we see an average score of 4.5 and above on exceptional cases.

# Hospital Board's Assessment of the Investment Committee

## Board's Assessment of the Investment Committee on the Four Standard Items




## Board's Assessment of the Investment Committee Over Time



# High-Level Summary of the Committee's Self-Assessment

**Participation:**

- 7 out of 7 stakeholders participated in the assessment (100%):
  - Non-director committee members = 4
  - Board members = 2
  - Executive leadership team members = 1

Self-Assessment Averages:

2018 = 4.6

2016 = 4.7

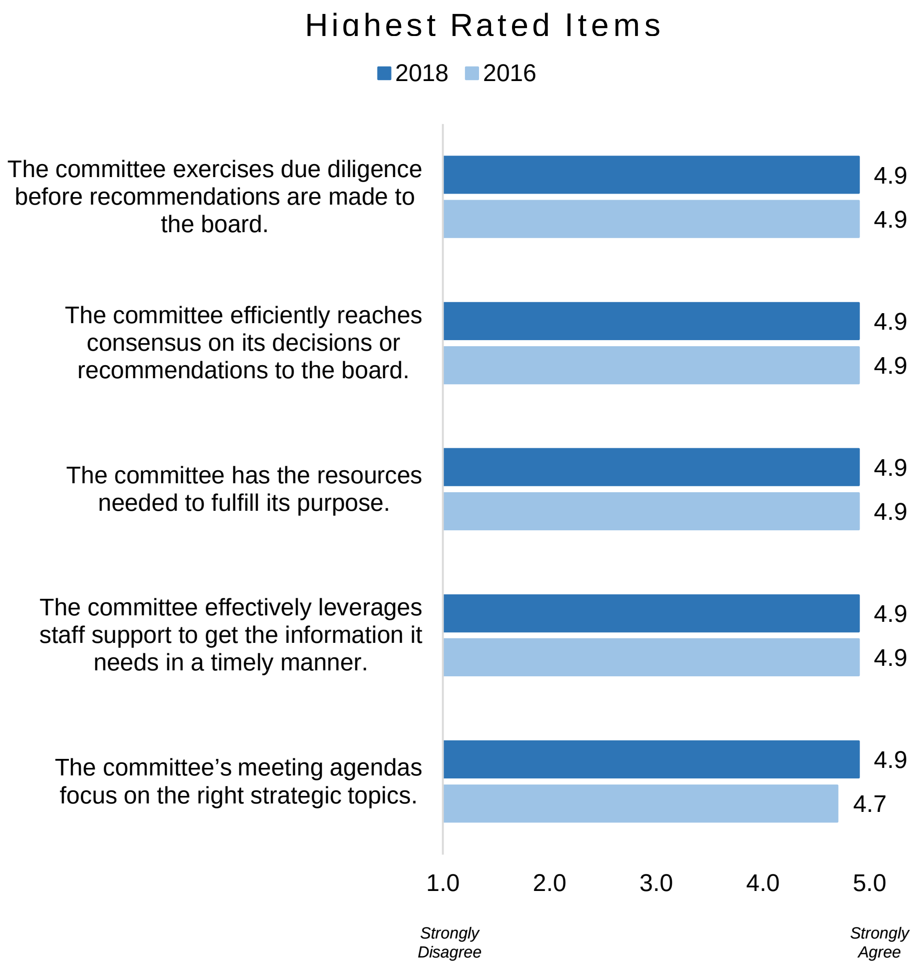
2014 = 4.3

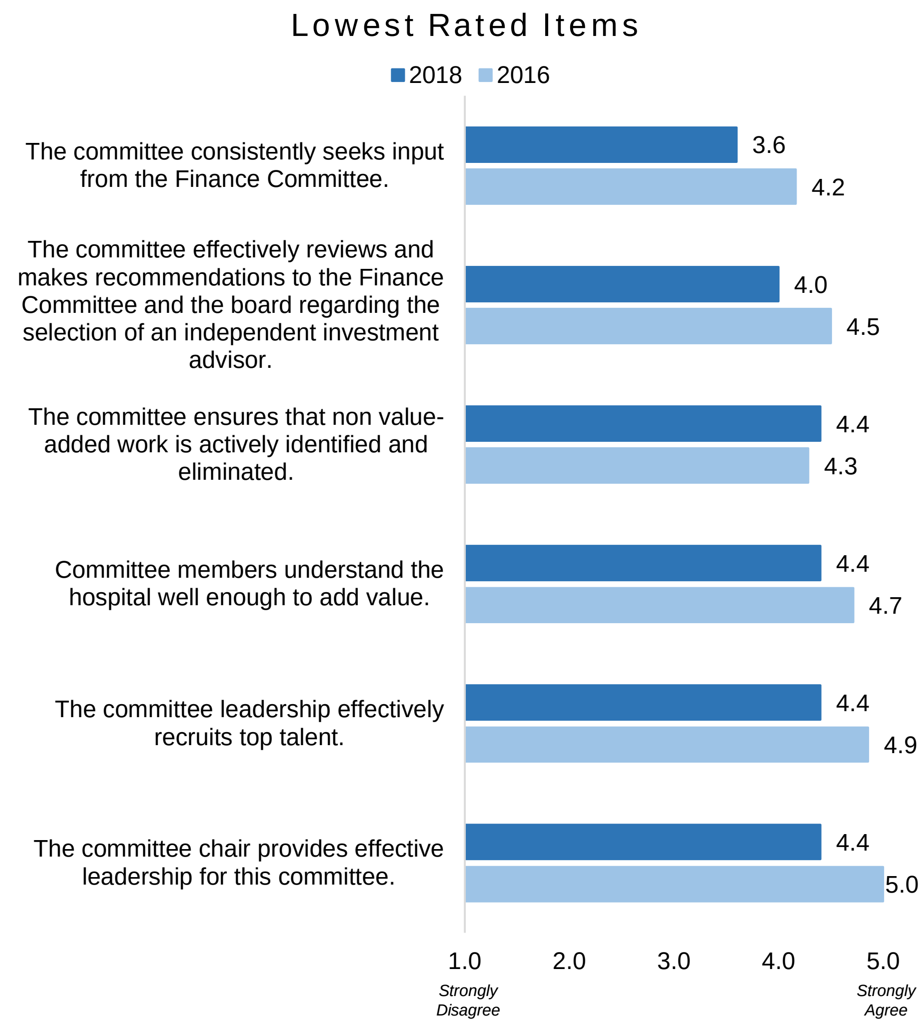
2013 = 4.3

**Key Findings:**

- The committee rated its performance largely the same as in 2016. That said, 11 of the 18 items received lower scores this year. Those with the greatest decreases were the following:
  - The committee chair provides effective leadership for this committee. (-0.6)
  - The committee consistently seeks input from the Finance Committee. (-0.6)
  - The committee leadership effectively recruits top talent. (-0.5)
  - The committee effectively reviews and makes recommendations to the Finance Committee and the board regarding the selection of an independent investment advisor. (-0.5)
- Open-ended comments pointed to the need for the following:
  - Ensuring the committee has sufficient investment experience represented among the members
  - Strengthening communications with the Finance Committee

# Highest and Lowest Rated Items

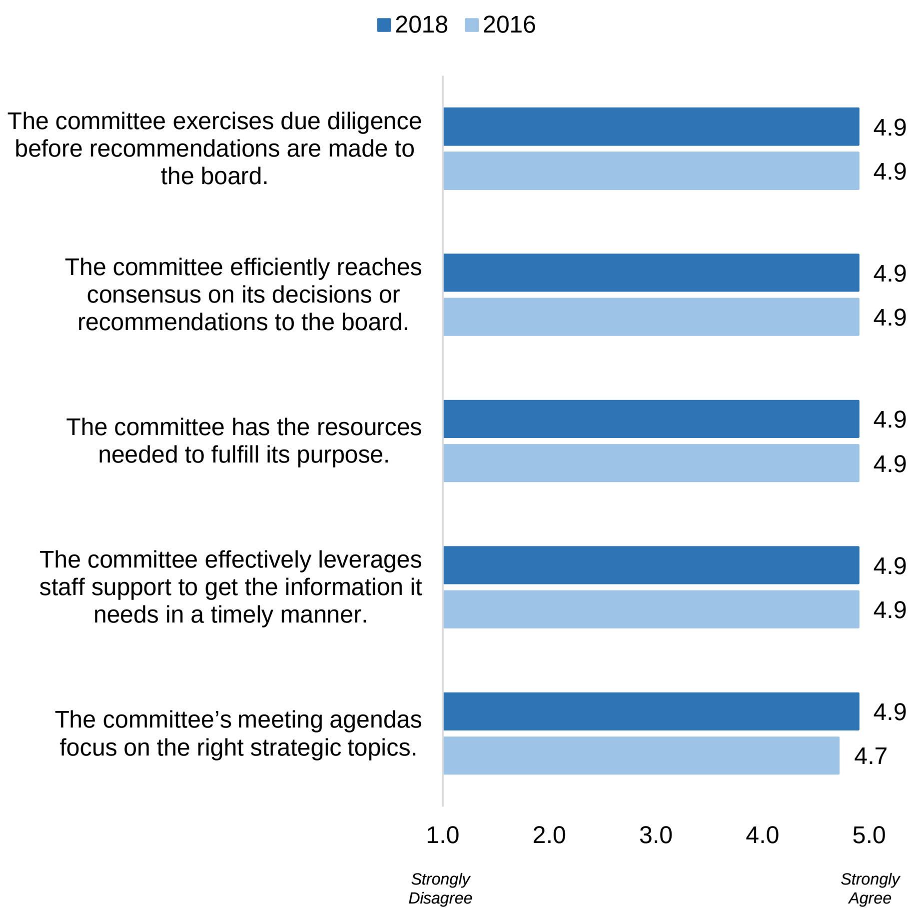


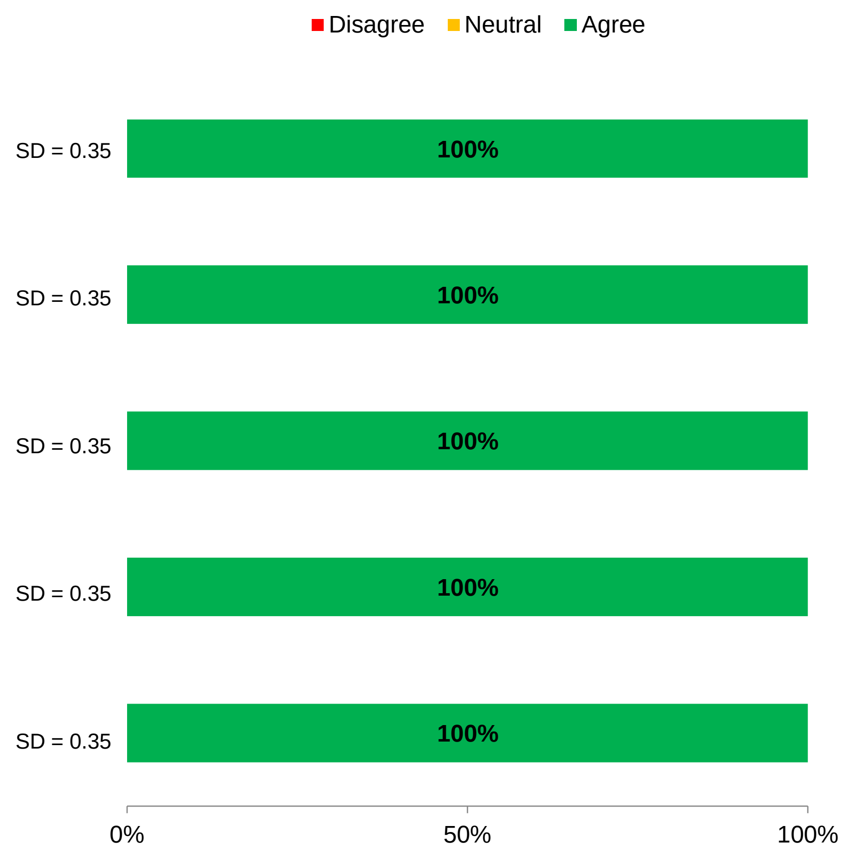
# Areas of Greatest Agreement

Areas of agreement are determined by the standard deviation (SD), which is a measure of the dataset's spread around the mean. Higher standard deviations relate to a lower consistency or agreement across ratings for a particular survey item. The lower the SD, the greater agreement there is among respondents. The higher the SD, the less agreement there is among respondents. The distribution of ratings shows the corresponding number of individual ratings of 1 or 2, neutral responses of 3, and favorable responses of 4 or 5.

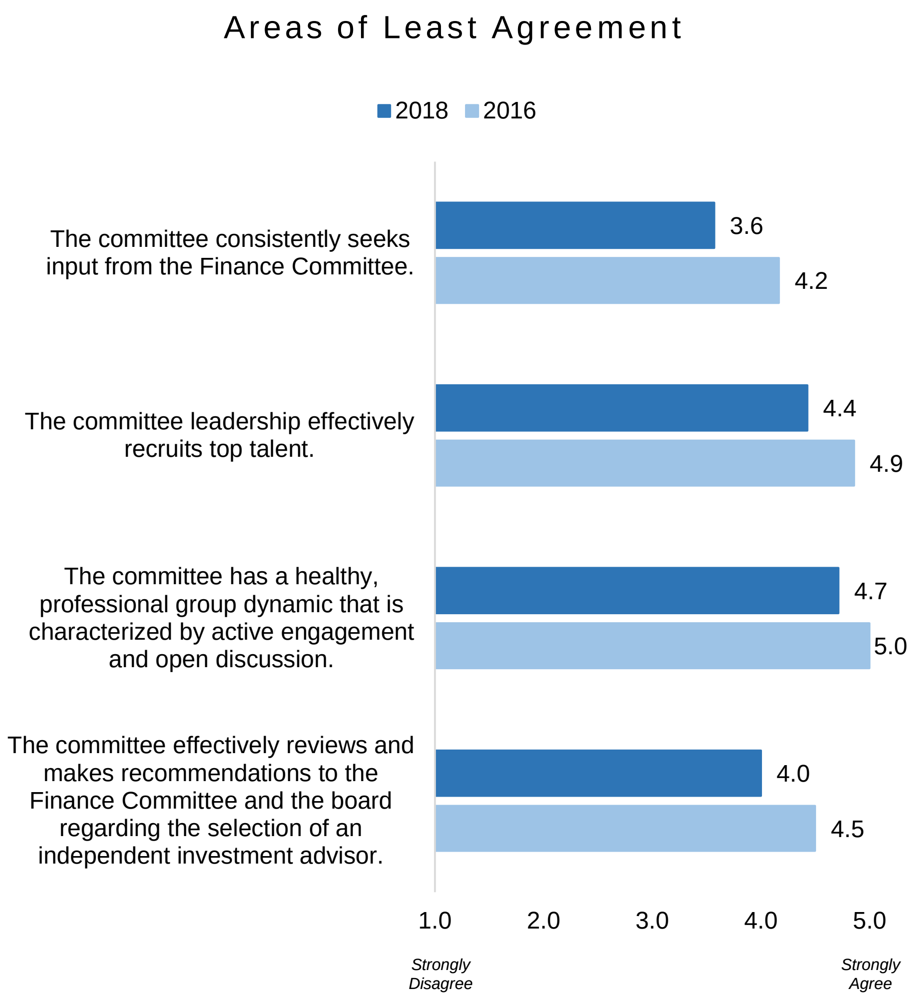
## Areas of Greatest Agreement

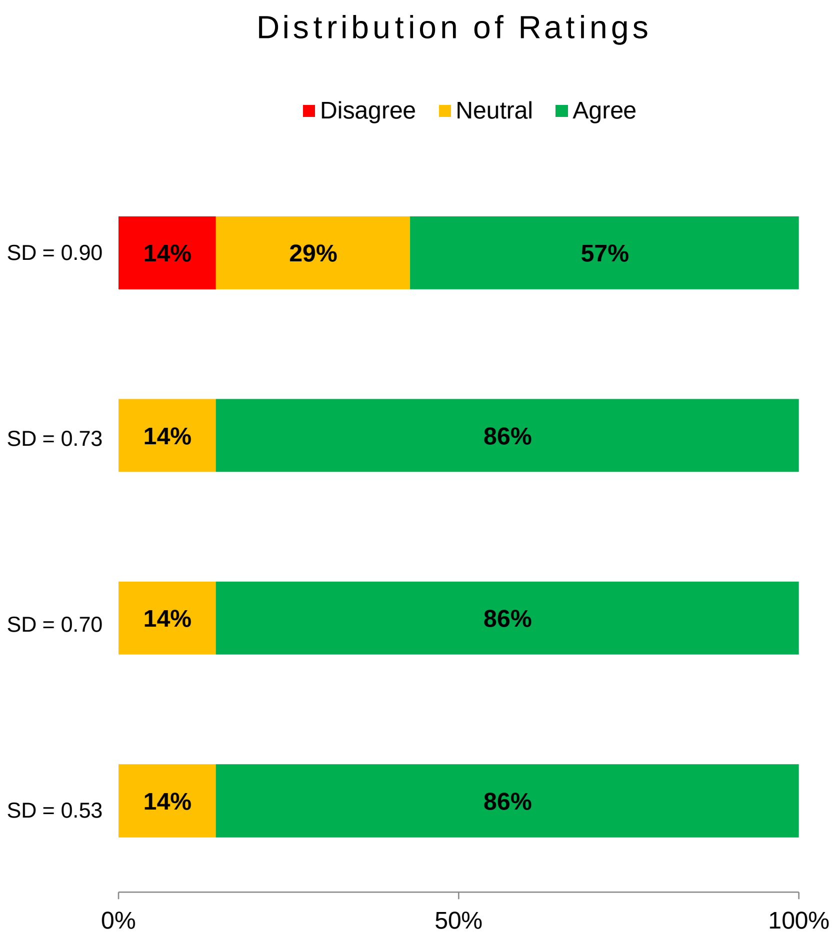



## Distribution of Ratings



# Areas of Least Agreement



# Detailed Results by Item

The table below shows all survey items, sorted highest to lowest by 2018 rating.  The *Difference* column represents the difference in ratings between the committee's 2018 vs. 2016 ratings.  A positive difference indicates items where committee members rated the committee's performance **higher** than in 2016.  Conversely, a negative difference indicates where members rated the committee's performance **lower** than in 2016**.**

| Items Sorted Highest to Lowest by Stakeholder Rating | 2018 | 2016 | N | Difference |
|---|---|---|---|---|
| The committee's meeting agendas focus on the right strategic topics. | 4.9 | 4.7 | 7 | 0.2 |
| The committee effectively leverages staff support to get the information it needs in a timely manner. | 4.9 | 4.9 | 7 | 0.0 |
| The committee has the resources needed to fulfill its purpose. | 4.9 | 4.9 | 7 | 0.0 |
| The committee efficiently reaches consensus on its decisions or recommendations to the board. | 4.9 | 4.9 | 7 | 0.0 |
| The committee exercises due diligence before recommendations are made to the board. | 4.9 | 4.9 | 7 | 0.0 |
| The committee leadership effectively retains committee members. | 4.7 | 4.9 | 7 | -0.2 |
| The committee meets often enough to effectively carry out its duties. | 4.7 | 4.9 | 7 | -0.2 |
| The committee has a healthy, professional group dynamic that is characterized by active engagement and open discussion. | 4.7 | 5.0 | 7 | -0.3 |
| The committee's decisions are aligned with board goals and organizational strategy. | 4.7 | 4.9 | 7 | -0.2 |
| The committee effectively monitors the performance of the investment managers through reports from the independent investment advisor. | 4.7 | 4.6 | 7 | 0.1 |
| The committee effectively reviews and recommends for approval by the board the investment policies for corporate assets and pension assets. | 4.6 | 4.7 | 7 | -0.1 |
| The committee operates on an appropriate level of risk that is beneficial to ECH in the long run. | 4.6 | 4.9 | 7 | -0.3 |
| The committee chair provides effective leadership for this committee. | 4.4 | 5.0 | 7 | -0.6 |
| The committee leadership effectively recruits top talent. | 4.4 | 4.9 | 7 | -0.5 |
| Committee members understand the hospital well enough to add value. | 4.4 | 4.7 | 7 | -0.3 |
| The committee ensures that non value-added work is actively identified and eliminated. | 4.4 | 4.3 | 7 | 0.1 |
| The committee effectively reviews and makes recommendations to the Finance Committee and the board regarding the selection of an independent investment advisor. | 4.0 | 4.5 | 7 | -0.5 |
| The committee consistently seeks input from the Finance Committee. | 3.6 | 4.2 | 7 | -0.6 |

# Thematic Summaries of the Qualitative Feedback

**Opportunities for Improvement**

- One stakeholder suggested recruiting candidates with greater investment experience.
- Communicating with the Finance Committee to clarify how the two committees can serve one another was also recommended.
- One committee member indicated that management provides little feedback.

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El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

**FY19 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
*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 by Fiscal Year (Timeframe applies to when the Board approves the recommended action from the Committee, if applicable) | 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.** Educate the Board and Committee: Investment strategy in volatile markets | • Q1 FY18 | • Complete by the end of Q1 |
| **3.** Asset Allocation, Investment Policy Review and ERM framework | • Q3 | • Completed by February 2019 |

**SUBMITTED BY:**
Jeffrey Davis, MD — **Chair**, Investment Committee
Iftikhar Hussain — **Executive Sponsor**, Investment Committee

<table>
<tr><th colspan="3">FY 2019: Q1</th></tr>
<tr><th>JULY – NO MEETING</th><th>AUGUST 13, 2018 Meeting</th><th>SEPTEMBER – NO MEETING</th></tr>
<tr><td></td><td>▪ Discussion on Investment Committee Meeting Structure and Pacing Calendar<br>▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ Educational Goal – Investment strategy in volatile markets<br>▪ CFO Report Out – Open Session Finance Committee Materials</td><td>N/A</td></tr>
<tr><th colspan="3">FY 2019: Q2</th></tr>
<tr><th>OCTOBER – NO MEETING</th><th>NOVEMBER 12, 2018 Meeting</th><th>DECEMBER – NO MEETING</th></tr>
<tr><td>October 24, 2018 – Board and Committee Educational Session</td><td>▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ Investment Policy Review<br>▪ CFO Report Out – Open Session Finance Committee Materials</td><td>N/A</td></tr>
<tr><th colspan="3">FY 2019: Q3</th></tr>
<tr><th>JANUARY 28, 2019</th><th>FEBRUARY - 11, 2019 Meeting</th><th>MARCH – NO MEETING</th></tr>
<tr><td>Joint Finance Committee and Investment Committee meeting.</td><td>▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ Asset Allocation Review and ERM Framework<br>▪ CFO Report Out – Open Session Finance Committee Materials<br>▪ Proposed FY 2020 Goals/Pacing Plan/Meeting Dates</td><td></td></tr>
<tr><th colspan="3">FY 2019: Q4</th></tr>
<tr><th>APRIL – NO MEETING</th><th>MAY 13, 2019 Meeting</th><th>JUNE – NO MEETING</th></tr>
<tr><td>April 24, 2019 – Board and Committee Educational Session</td><td>▪ Capital Markets Review and Portfolio Performance<br>▪ Tactical Asset Allocation Positioning and Market Outlook<br>▪ CFO Report Out – Open Session Finance Committee Materials<br>▪ 403(b) Investment Performance<br>▪ Committee Goal</td><td>N/A</td></tr>
</table>

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# Investment Committee Meetings
## Proposed FY19 Dates

| RECOMMENDED IC DATE (2nd Monday) | CORRESPONDING HOSPITAL BOARD DATE |
|---|---|
| **Monday, August 13, 2018** | Wednesday, September 12, 2018 |
| **Monday, November 12, 2018** | Wednesday, January 9, 2019 |
| *Joint Meeting with the Finance Committee* **Monday, January 28, 2019** | N/A |
| **Monday, February 11, 2019** | Wednesday, February 13, 2019 |
| **Monday, May 13, 2019** | Wednesday, June 12, 2019 |

# ECH BOARD COMMITTEE MEETING AGENDA ITEM COVER SHEET

| | | |
|---|---|---|
| | **Item:** | Approval of Resolution 2018-04 Required by Premier, Inc. Listing the CEO and CFO as Authorized Individuals to Sell Stock<br><br>Investment Committee<br><br>Meeting Date: March 12, 2018 |
| | **Responsible party:** | Iftikhar Hussain, CFO |
| | **Action requested:** | Recommendation for Board Approval |
| | **Background:**<br><br>El Camino Hospital own 238,000 shares of Premier, Inc. stock. 130,000 shares are eligible for sale with a value of $4.2 million. The sale does not change the vendor relationship with Premier. The value of the stock has been trending favorably compared to history and given that ECH is only a passive investor it seems prudent to sell at this time. The sale allows the investment to be moved into the surplus cash pool where our investments are managed with the oversight of the Investment Committee. | |
| | **Other Board Advisory Committees that reviewed the issue and recommendation, if any:**<br><br>None. The investment committee manages surplus cash pool. The proceeds of this sale will be invested in the surplus cash pool after the sale is completed. | |
| | **Proposed Committee Motion:** To Recommend Board Approval of Resolution 2018-04 | |
| | **LIST OF ATTACHMENTS:**<br><br>Draft Resolution 2018-04 | |

**Draft Resolution Granting Authority to Sell Securities**

**EL CAMINO HOSPITAL**
**RESOLUTION 2018-04**

**RESOLUTION OF THE BOARD OF DIRECTORS OF EL CAMINO HOSPITAL GRANTING AUTHORITY TO SELL SECURITIES.**

**WHEREAS**, the Board of Directors ("Board") of El Camino Hospital ("Hospital") has determined it is in the best interest of the Hospital to authorize certain officers to transfer, convert, sell and assign any securities in the name of the Hospital; now, therefore, be it

**RESOLVED**, that the Chief Executive Officer of the Hospital or the Chief Financial Officer of the Hospital be and they hereby are each, separately, authorized to transfer, convert, sell and assign any securities in the name of the Hospital; be it further

**RESOLVED**, that the Chief Executive Officer of the Hospital or the Chief Financial Officer of the Hospital be, and hereby are, authorized and empowered to execute, sign and deliver assignments or any other required instruments for any securities standing in the name of the Hospital by affixing thereto the name of the Hospital and the individual signature of such officer.

Duly passed and adopted at a regular meeting held on this ____ day of _________, 2018, by the following votes:

AYES:

NOES:

ABSENT:

ABSTAIN:

___________________________________
Julia E. Miller
Secretary, ECH Board of Directors