

# Nevada System of Higher Education

## Fourth Quarter 2017 Discussion Guide

February 16, 2018

**Aon Hewitt**  
Retirement and Investment

Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company.

Nothing in this document should be construed as legal or investment advice. Please consult with your independent professional for any such advice. To protect the confidential and proprietary information included in this material, it may not be disclosed or provided to any third parties without the approval of Aon Hewitt.



## Your Consulting Team

---

### **Daniel Pawlisch**

Lead Investment Consultant

+1.312.381.1284 (office)

+1.312.714.6393 (mobile)

[daniel.pawlisch@aonhewitt.com](mailto:daniel.pawlisch@aonhewitt.com)

### **Joe Steen**

Lead Administration Consultant

+1.813.636.3119 (office)

+1.813.313.7895 (mobile)

[joe.steen@aonhewitt.com](mailto:joe.steen@aonhewitt.com)

### **Leon Kung**

Consultant

+1.312.381.1336 (office)

[leon.kung@aonhewitt.com](mailto:leon.kung@aonhewitt.com)

# Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update

# Legal Disclosures and Disclaimers

---

Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc. (“AHIC”). The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The delivery at any time shall not, under any circumstances, create any implication that there has been a change in the information set forth herein since the date hereof or any obligation to update or provide amendments hereto.

This document is not intended to provide, and shall not be relied upon for, accounting, legal, or tax advice. Any accounting, legal, or taxation position described in this presentation is a general statement and shall only be used as a guide. It does not constitute accounting, legal, and tax advice and is based on AHIC’s understanding of current laws and interpretation.

This document is intended for general information purposes only and should not be construed as advice or opinions on any specific facts or circumstances. The comments in this summary are based upon AHIC’s preliminary analysis of publicly available information. The content of this document is made available on an “as is” basis, without warranty of any kind. AHIC disclaims any legal liability to any person or organization for loss or damage caused by or resulting from any reliance placed on that content. AHIC reserves all rights to the content of this document. No part of this document may be reproduced, stored, or transmitted by any means without the express written consent of AHIC.

Aon Hewitt Investment Consulting, Inc. is a federally registered investment advisor with the U.S. Securities and Exchange Commission. AHIC is also registered with the Commodity Futures Trading Commission as a commodity pool operator and a commodity trading advisor, and is a member of the National Futures Association. The AHIC ADV Form Part 2A disclosure statement is available upon written request to:

Aon Hewitt Investment Consulting, Inc.  
200 E. Randolph Street  
Suite 1500  
Chicago, IL 60601  
ATTN: AHIC Compliance Officer

© Aon plc 2018. All rights reserved.

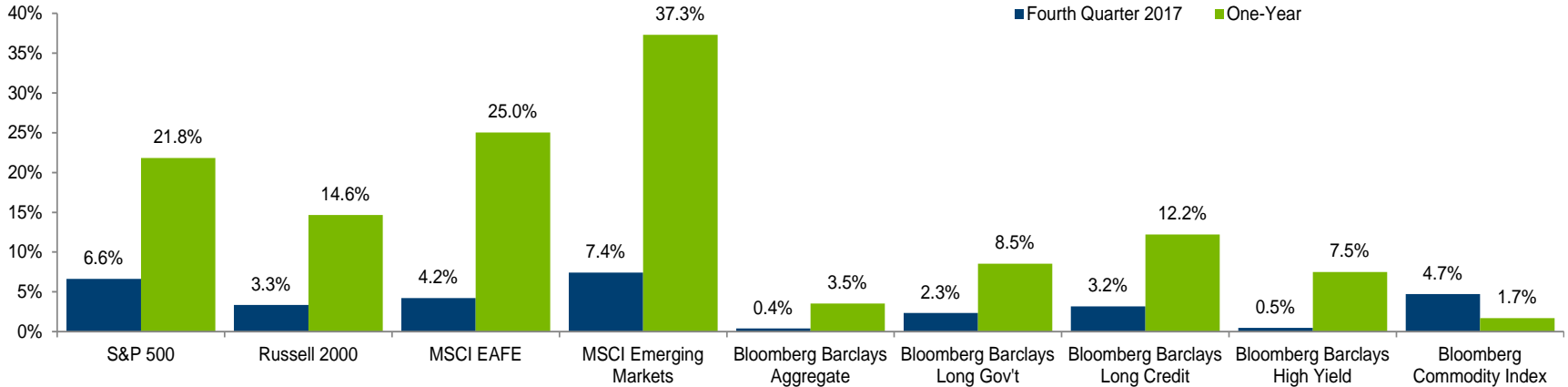
# Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
Section 2	Performance Review
Section 3	Noteworthy Items
Section 4	Vanguard Proxy Vote Summary
Section 5	DFA Flash Report
Section 6	Dodge & Cox Flash Report
Section 7	Legal and Compliance Update

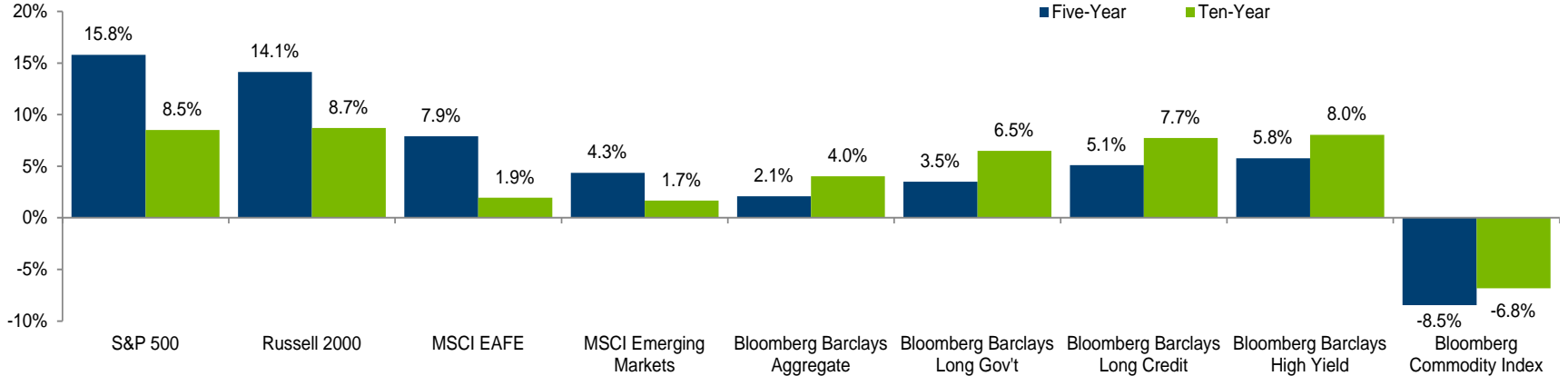
# Market Highlights

## SHORT TERM RETURNS AS OF 12/31/2017



Source: Russell, MSCI, Bloomberg Barclays, Bloomberg

## LONG TERM ANNUALIZED RETURNS AS OF 12/31/2017



Source: Russell, MSCI, Bloomberg Barclays, Bloomberg

# Market Highlights

Returns of the Major Capital Markets					
	Period Ending 12/31/2017				
	Fourth Quarter	1-Year	3-Year <sup>1</sup>	5-Year <sup>1</sup>	10-Year <sup>1</sup>
<b>Equity</b>					
MSCI All Country World IMI	5.72%	23.95%	9.52%	11.00%	4.97%
MSCI All Country World	5.73%	23.97%	9.30%	10.80%	4.65%
Dow Jones U.S. Total Stock Market	6.33%	21.17%	11.08%	15.52%	8.66%
Russell 3000	6.34%	21.13%	11.12%	15.58%	8.60%
S&P 500	6.64%	21.83%	11.41%	15.79%	8.50%
Russell 2000	3.34%	14.65%	9.96%	14.12%	8.71%
MSCI All Country World ex-U.S. IMI	5.23%	27.81%	8.38%	7.22%	2.20%
MSCI All Country World ex-U.S.	5.01%	27.19%	7.83%	6.80%	1.84%
MSCI EAFE	4.23%	25.03%	7.80%	7.90%	1.94%
MSCI EAFE (Local Currency)	3.66%	15.23%	8.54%	11.44%	3.30%
MSCI Emerging Markets	7.44%	37.28%	9.10%	4.35%	1.68%
<b>Fixed Income</b>					
Bloomberg Barclays Global Aggregate	1.08%	7.39%	2.02%	0.79%	3.09%
Bloomberg Barclays U.S. Aggregate	0.39%	3.54%	2.24%	2.10%	4.01%
Bloomberg Barclays U.S. Long Gov't	2.34%	8.53%	2.85%	3.49%	6.49%
Bloomberg Barclays U.S. Long Credit	3.18%	12.21%	5.68%	5.11%	7.72%
Bloomberg Barclays U.S. Long Gov't/Credit	2.84%	10.71%	4.52%	4.43%	7.26%
Bloomberg Barclays U.S. TIPS	1.26%	3.01%	2.05%	0.13%	3.53%
Bloomberg Barclays U.S. High Yield	0.47%	7.50%	6.35%	5.78%	8.03%
Citi Group Non-U.S. WGBI	1.57%	10.33%	1.99%	-0.29%	2.44%
JP Morgan EMBI Global (Emerging Markets)	0.54%	9.32%	6.84%	3.75%	7.06%
<b>Commodities</b>					
Bloomberg Commodity Index	4.71%	1.70%	-5.03%	-8.45%	-6.83%
Goldman Sachs Commodity Index	9.90%	5.77%	-7.52%	-12.16%	-10.16%
<b>Hedge Funds</b>					
HFR I Fund-Weighted Composite <sup>2</sup>	2.51%	8.54%	4.20%	4.92%	3.22%
HFR I Fund of Funds <sup>2</sup>	2.03%	7.74%	2.60%	4.00%	1.08%
<b>Real Estate</b>					
NAREIT U.S. Equity REITS	1.51%	5.23%	5.62%	9.46%	7.44%
NCREIF NFI - ODCE <sup>3</sup>	2.07%	7.62%	10.42%	11.53%	5.03%
<b>Private Equity</b>					
Burgiss Private iQ Global Private Equity <sup>4</sup>	NA	15.70%	9.51%	12.86%	8.59%
<b>Infrastructure</b>					
FTSE Global Core Infrastructure Index	1.95%	16.87%	5.03%	10.04%	6.83%

MSCI Indices show net returns.

All other indices show total returns.

<sup>1</sup> Periods are annualized.

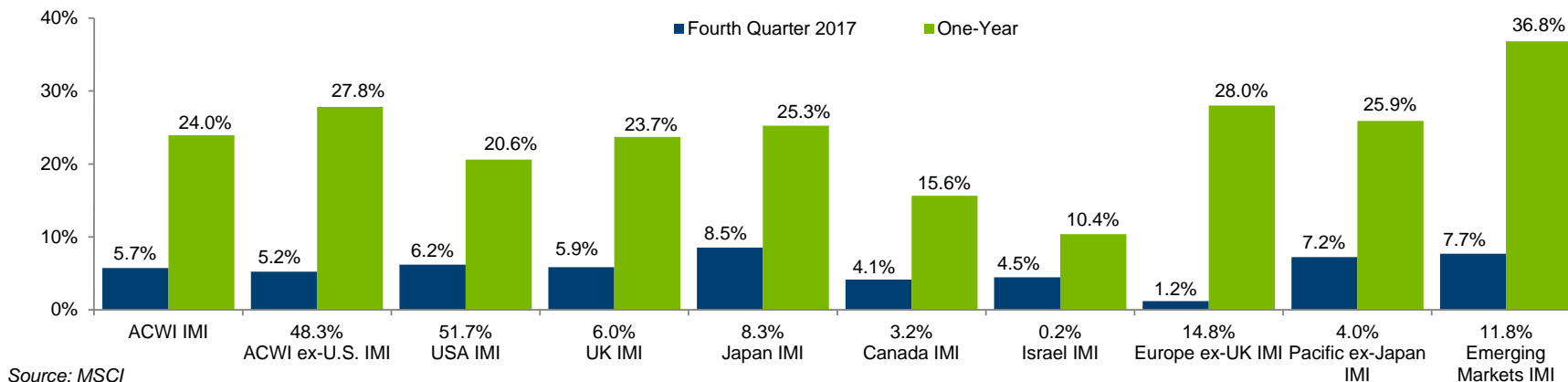
<sup>2</sup> Latest 5 months of HFR data are estimated by HFR and may change in the future.

<sup>3</sup> Fourth quarter results are preliminary.

<sup>4</sup> Source: Burgiss Private iQ. Benchmark is as of 06/30/2017.

# Global Equity Markets

## GLOBAL MSCI IMI INDEX RETURNS AS OF 12/31/2017

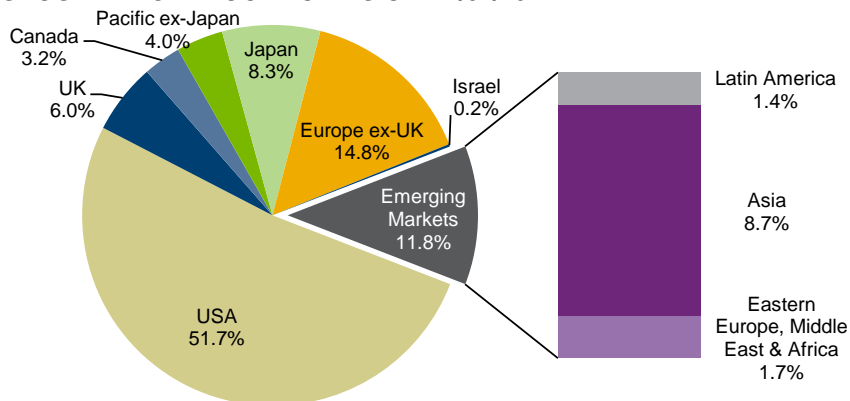


- A strong earnings season, supportive monetary policies, and a synchronized pick-up in global growth helped global equities return 5.7% during the fourth quarter in U.S. dollar terms. The weakening of the U.S. dollar (0.4% in trade-weighted terms) led to a lower return of 5.3% in local currency terms.
- As shown above, all regions generated positive returns during the quarter. Japan was the strongest performer, returning 8.5% during the fourth quarter. The Japanese economy and equities ended 2017 in strong footing with a number of economic releases and corporate earnings exceeding analyst forecasts. A positive result in the snap Japanese election and expectations of continued easy monetary policy provided additional support to the strong performance over the quarter.



# Global Equity Markets

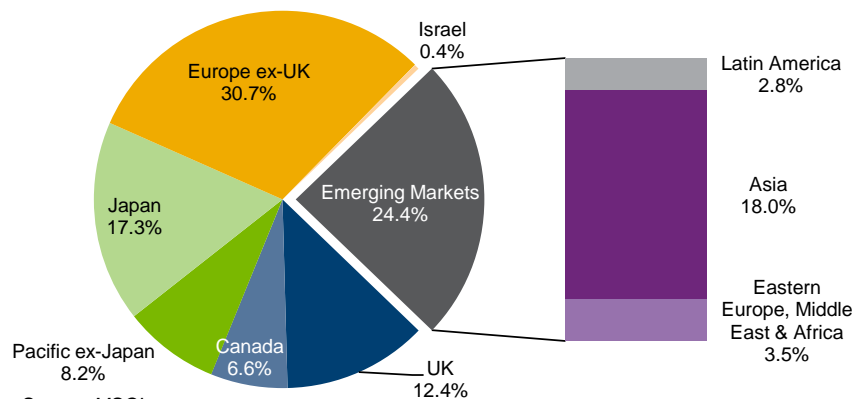
**MSCI ALL COUNTRY WORLD IMI INDEX  
GEOGRAPHIC ALLOCATION AS OF 12/31/2017**



Source: MSCI

- The two exhibits on this slide illustrate the percentage that each country/region represents of the global and international equity markets as measured by the MSCI All Country World IMI Index and the MSCI All Country World ex-U.S. IMI Index, respectively.

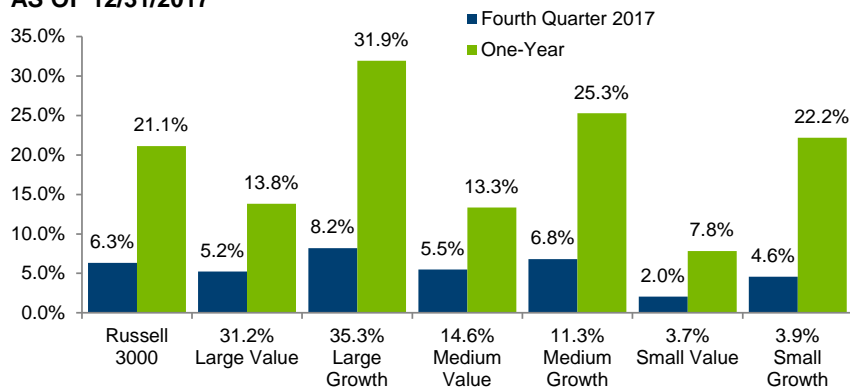
**MSCI ALL COUNTRY WORLD EX-U.S. IMI INDEX  
GEOGRAPHIC ALLOCATION AS OF 12/31/2017**



Source: MSCI

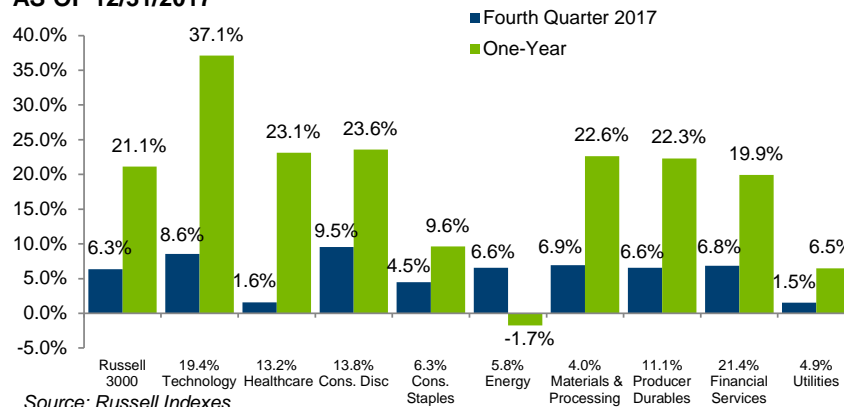
# U.S. Equity Markets

## RUSSELL STYLE RETURNS AS OF 12/31/2017



Source: Russell Indexes

## RUSSELL GICS SECTOR RETURNS AS OF 12/31/2017



Source: Russell Indexes

- The Russell 3000 Index returned 6.3% during the fourth quarter and 21.1% over the one-year period.
- During the fourth quarter, the consumer discretionary sector continued to be the strongest performer, posting returns of 9.5%. More defensive sectors, which are not sensitive to economic activity, underperformed more cyclical sectors. In particular, utilities and health care were the weakest performing sectors, posting returns of 1.5% and 1.6% respectively during the fourth quarter .
- Performance was positive across the market capitalization spectrum during the quarter. The impressive run for the U.S. equities was sustained during the later stages of 2017 as it became increasingly clear that tax reform would be signed into law, entering 2018 with fourteen consecutive months of market gains. Large cap stocks outperformed small cap stocks on a one-year basis. In general, growth stocks outperformed value stocks.

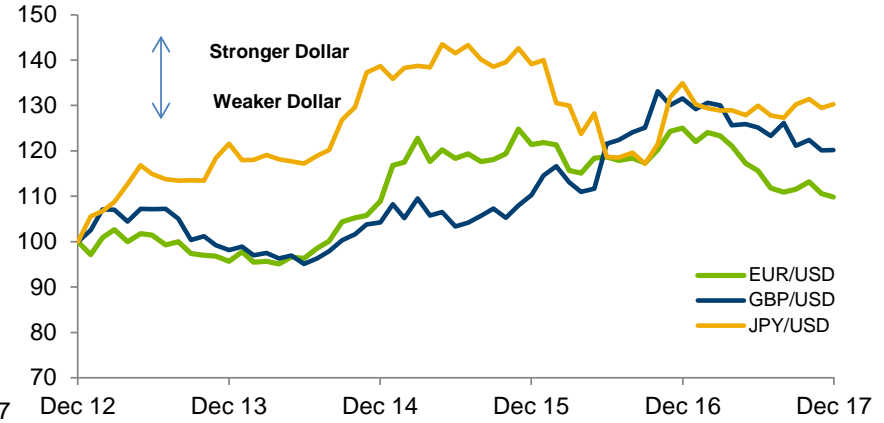
# Currency

**TRADE WEIGHTED U.S. DOLLAR INDEX  
(1997 = 100)**



Source: Federal Reserve

**U.S. DOLLAR RELATIVE TO EUR, GBP AND JPY  
REBASED TO 100 AT 12/31/2012**

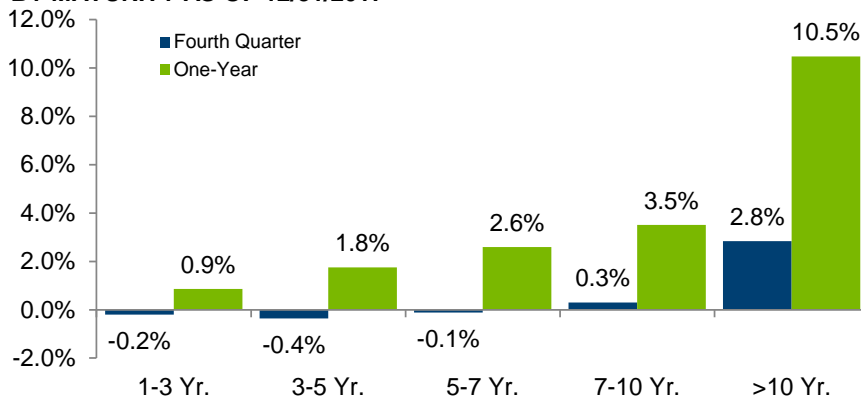


Source: DataStream

- The U.S. dollar weakened by 0.4% on a trade-weighted basis during the quarter which saw the U.S. Federal Reserve (Fed) raise interest rates for third time in a year. The Fed raised their benchmark rate by 25 bps to a range of 1.25%-1.50%. However, widening interest rate differentials and the passing of the stimulatory tax reform was not enough to stem the downward trend in the U.S. dollar.
- The U.S. dollar depreciated against all the major currencies with the exception of the Japanese yen. The Bank of England (BoE) hiked rates for first time in a decade, restoring the base rate back to the pre-Brexit level of 0.5%. Brexit talks showed signs of progress with the European Union and the UK agreeing a deal on the first stage of Brexit negotiations which sent sterling 0.8% higher against the U.S. dollar. The yen marginally fell by 0.1% against the U.S. dollar. Positive economic data emanating from the Eurozone supported the euro's 1.6% appreciation against the 'greenback'.

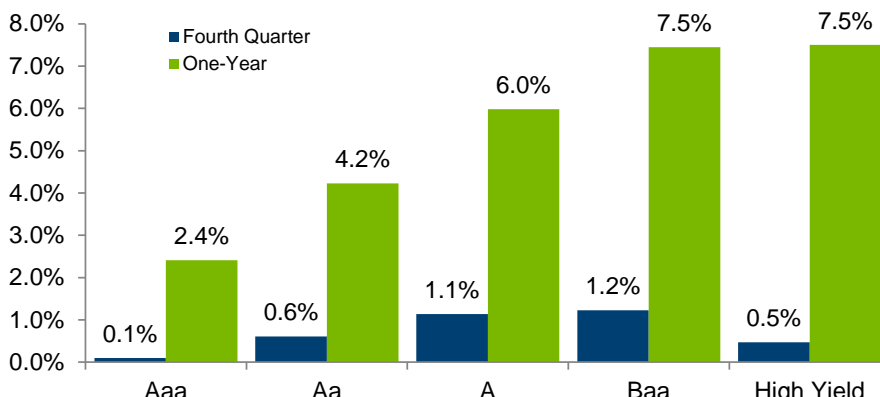
# U.S. Fixed Income Markets

**BLOOMBERG BARCLAYS U.S. AGGREGATE RETURNS BY MATURITY AS OF 12/31/2017**



Source: Bloomberg Barclays

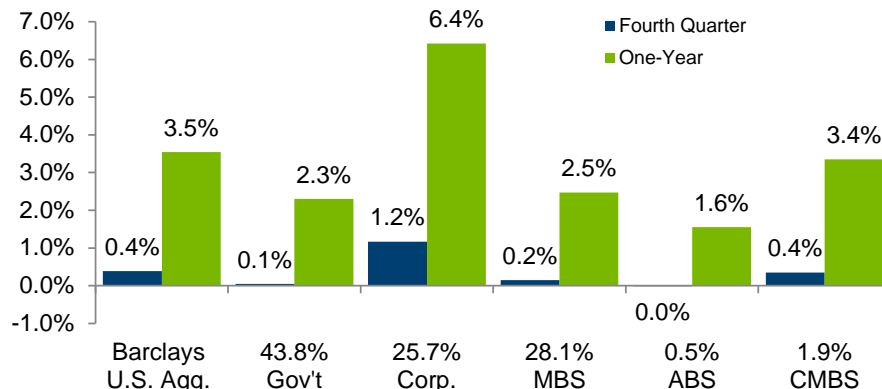
**BLOOMBERG BARCLAYS U.S. AGGREGATE RETURNS BY QUALITY AND HIGH YIELD RETURNS AS OF 12/31/2017**



Source: Bloomberg Barclays

- The Bloomberg Barclays U.S. Aggregate Bond Index returned 0.4% during the fourth quarter. Corporate bonds posted the highest return over the quarter at 1.2%.
- Although performance was positive across all credit qualities, lower quality investment grade bonds outperformed with greater scope for spread tightening.
- A flattening of the yield curve during the quarter led to long duration bonds outperforming intermediate and short duration bonds.

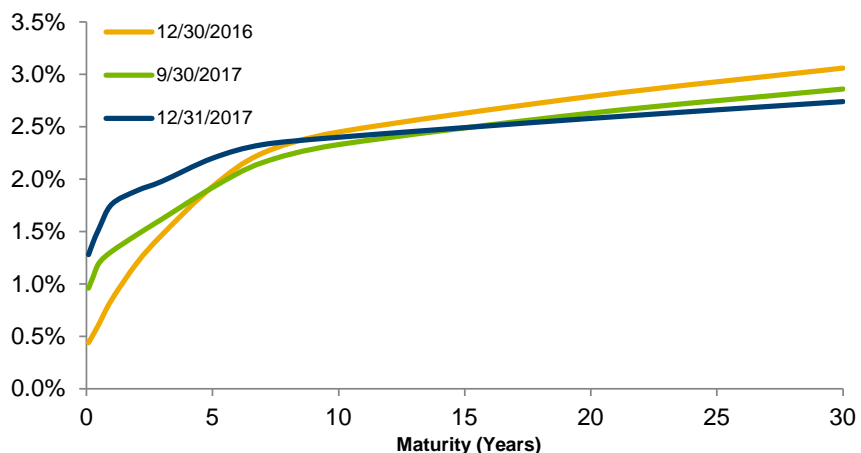
**BLOOMBERG BARCLAYS U.S. AGGREGATE RETURNS BY SECTOR AS OF 12/31/2017**



Source: Bloomberg Barclays

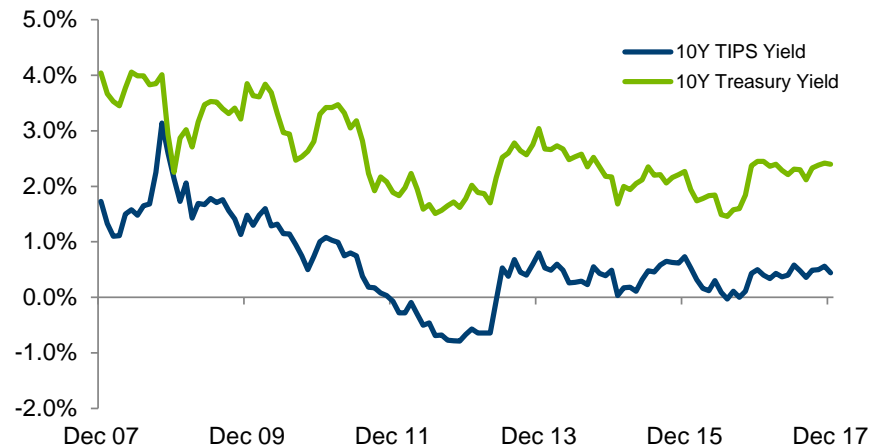
# U.S. Fixed Income Markets

**U.S. TREASURY YIELD CURVE**



Source: U.S. Department of Treasury

**U.S. 10-YEAR TREASURY AND TIPS YIELDS**



Source: U.S. Department of Treasury

- The Treasury yield curve flattened during the quarter, as yields of short to long term maturity bonds rose as expectations of greater monetary tightening grew while longer maturity bond yields fell.
- The 10-year U.S. Treasury yield ended the quarter at 2.4%, 7 basis points (bps) higher than at the start of the quarter. This was largely driven by higher breakeven inflation which moved 14 bps higher thereby offsetting the fall in real yields.
- The 10-year TIPS yield fell by 5 bps over the quarter and ended the period at 0.4%.

# Credit Spreads

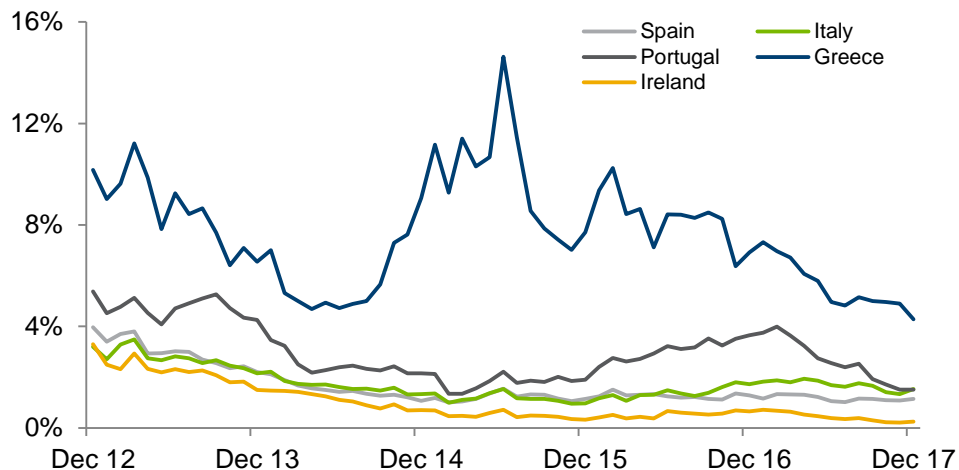
Spread (bps)	12/31/2017	9/30/2017	12/31/2016	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	36	38	43	-2	-7
Long Gov't	2	2	3	0	-1
Long Credit	139	149	167	-10	-28
Long Gov't/Credit	83	90	104	-7	-21
MBS	25	22	15	3	10
CMBS	62	71	75	-9	-13
ABS	36	44	59	-8	-23
Corporate	93	101	123	-8	-30
High Yield	343	347	409	-4	-66
Global Emerging Markets	215	235	288	-20	-73

Source: Bloomberg Barclays

- During the fourth quarter, credit spreads fell across all the areas of the bond market except for MBS bonds which rose by 3 bps. Meanwhile, credit spreads for Long Government bonds remained flat.
- Global emerging market bond spreads fell by the most during the quarter, narrowing by 20 bps. They were followed by Long Credit bonds which fell by 10 bps.

# European Fixed Income Markets

**EUROZONE PERIPHERAL BOND SPREADS  
(10-YEAR SPREADS OVER GERMAN BUNDS)**

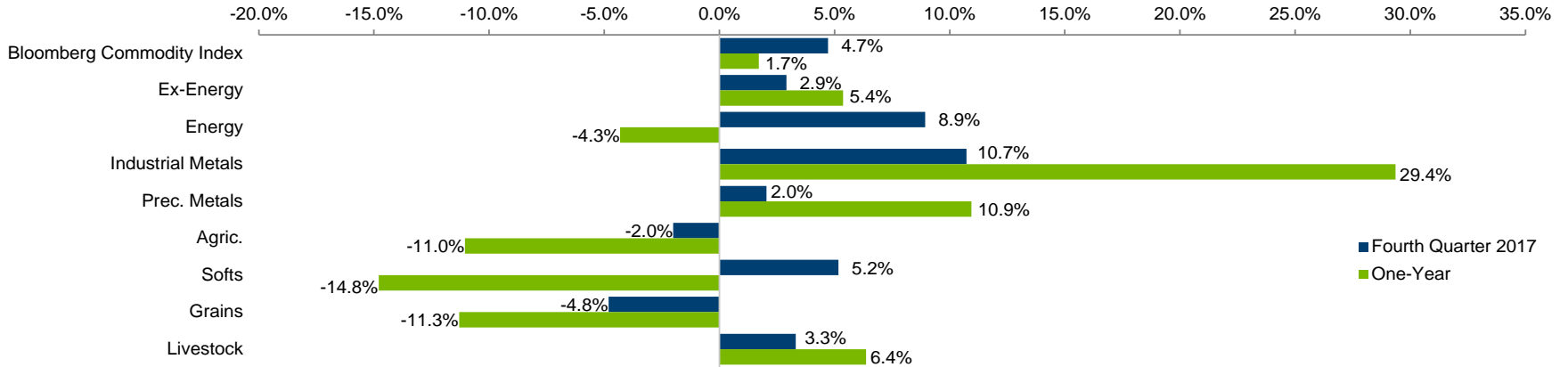


Source: DataStream

- In the Eurozone, bond spreads over 10 year German bunds fell across peripheral region (except for Spain which remained flat). Spanish government bond yields fell by 4 bps with the majority of the fall being recovered towards end of the quarter as Spain pro-independence parties maintained a majority in the Catalan regional elections.
- Italian bond yields fell by 16 bps, however, yields rose sharply towards end of the quarter as President Sergio Mattarella dissolved parliament ahead of elections in March 2018.
- Portuguese government bond yields fell sharply, moving 45 bps lower as Fitch (a major credit rating agency) followed S&P Global Ratings and upgraded the Portuguese bonds credit rating to investment grade.
- Greek government bond yields fell by 76 bps to 4.70% due to upbeat economic data and the progress made on the bailout program; the spread between Greek bonds and German Bunds moved 73 bps lower over the same period.

# Commodities

## COMMODITY RETURNS AS OF 12/31/2017



Source: Bloomberg

- A strong upturn in commodity prices during the quarter saw the Bloomberg Commodity Index return 4.7%, driven mainly by the increase in crude oil prices. The price of WTI crude oil rose 17.0% to over \$60/bbl.
- During the quarter, the best performing segment was Industrial metals with a return of 10.7%, followed by energy (8.9%).
- Grains and agriculture were the worst performing sectors during the quarter, returning -4.8% and -2.0%, respectively.



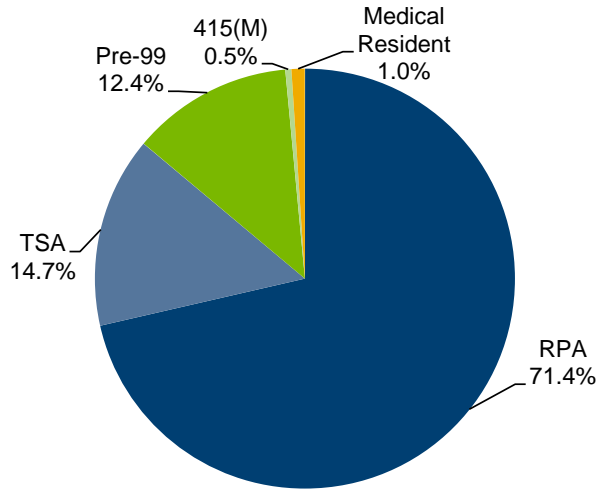
# Discussion Topics

---

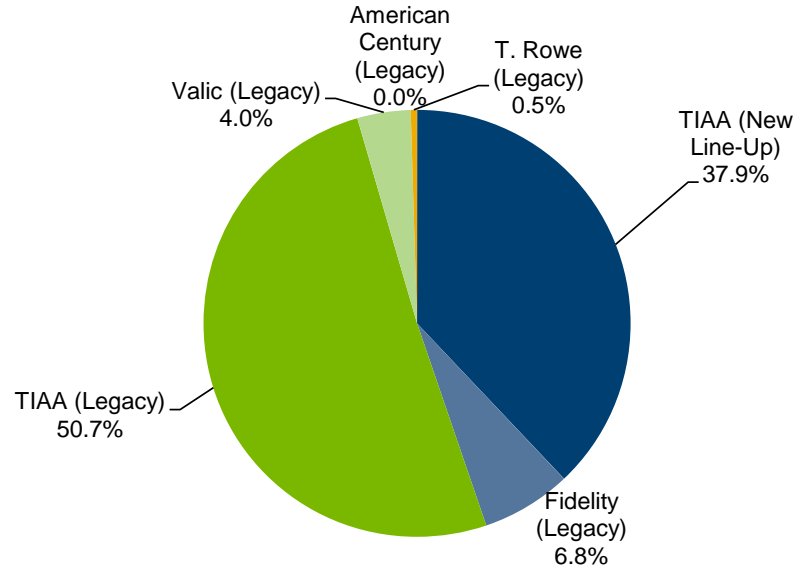
<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update

# Asset Allocation

**Assets by Plan**  
As of December 31, 2017



**Assets by Vendor**  
As of December 31, 2017



As of 12/31/2017

Plan	RPA		TSA		Pre-99		415(M)		Medical Resident		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
TIAA (New Line-Up)	\$ 917,948,356	41.7%	\$ 205,515,183	45.4%	\$ 13,697,088	3.6%	\$ 11,530,590	80.6%	\$ 20,931,763	65.9%	\$ 1,169,622,980	37.9%
Fidelity (Legacy)	\$ 163,953,637	7.4%	\$ 37,575,488	8.3%	\$ 6,238,893	1.6%	\$ 1,174,028	8.2%	\$ 956,142	3.0%	\$ 209,898,187	6.8%
TIAA (Legacy)	\$ 1,027,305,392	46.7%	\$ 179,571,199	39.6%	\$ 355,583,760	92.9%	\$ 1,552,739	10.9%	\$ 203,271	0.6%	\$ 1,564,216,361	50.7%
Valic (Legacy)	\$ 84,512,167	3.8%	\$ 29,999,851	6.6%	\$ -	0.0%	\$ 49,192	0.3%	\$ 9,678,740	30.5%	\$ 124,239,949	4.0%
T. Rowe (Legacy)	\$ 7,291,748	0.3%	\$ 253,918	0.1%	\$ 6,820,871	1.8%	\$ -	0.0%	\$ -	0.0%	\$ 14,366,537	0.5%
American Century (Legacy)	\$ -	0.0%	\$ -	0.0%	\$ 279,960	0.1%	\$ -	0.0%	\$ -	0.0%	\$ 279,960	0.0%
<b>Total</b>	<b>\$ 2,201,011,300</b>	<b>100.0%</b>	<b>\$ 452,915,638</b>	<b>100.0%</b>	<b>\$ 382,620,572</b>	<b>100.0%</b>	<b>\$ 14,306,549</b>	<b>100.0%</b>	<b>\$ 31,769,916</b>	<b>100.0%</b>	<b>\$ 3,082,623,975</b>	<b>100.0%</b>
Other Assets*											\$ 1,292,413	0.0%
<b>Grand Total</b>	<b>\$ 2,201,011,300</b>	<b>71.4%</b>	<b>\$ 452,915,638</b>	<b>14.7%</b>	<b>\$ 382,620,572</b>	<b>12.4%</b>	<b>\$ 14,306,549</b>	<b>0.5%</b>	<b>\$ 31,769,916</b>	<b>1.0%</b>	<b>\$ 3,083,916,389</b>	<b>100.0%</b>

\*Other Assets includes Loans and TIAA-CREF Money Market.

# Tier I(a) Watch List

## Tier I (a)

	1. <i>Underperformed During Trailing 5 Years</i>	2. <i>Underperformed in 3 of 4 Trailing Calendar Quarters</i>	3. <i>Diverged from Strategy and/or Portfolio Characteristics</i>	4. <i>Adverse Change in Portfolio Manager</i>	5. <i>Weak Manager Research Rating</i>	6. <i>Significant Organizational Change</i>	Watch List Status			
							4th Quarter 2017	3rd Quarter 2017	2nd Quarter 2017	1st Quarter 2017
Vanguard Target Retirement Income Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2015 Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2020 Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2025 Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2030 Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2035 Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2040 Trust I	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2045 Trust I	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2050 Trust I	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2055 Trust I	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2060 Trust I	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2065 Trust I*	No	N/A	No	No	No (Buy)	No				

Negative tracking of greater than 0.2% constitutes underperformance for the Plan's target date retirement funds.

- **Notes on Table:** Changes in Watch List designations from the previous quarter are highlighted in red.
- **Yellow-Level Watch List.** An investment fund goes on the Watch List with a yellow designation when two of the above occur, or when item numbers 4, 5, or 6 occur.
- **Orange-Level Watch List.** An investment fund goes on the Watch List with an orange designation when it has been on the yellow watch list for two consecutive quarters or when three of the above occur.
- **Red-Level Watch List.** An investment fund goes on the Watch List with a red designation when it has been on the orange watchlist for two consecutive quarters or when four of the above occur. When an investment fund is placed on the Watch List with a red designation, a formal fund review will be conducted and a recommendation for action will be made.

\* Since-inception returns were used since this fund does not have a trailing five-year return.

# Tier I Watch List

## Tier I

	1. Underperformed During Trailing 5 Years	2. Underperformed in 3 of 4 Trailing Calendar Quarters	3. Diverged from Strategy and/or Portfolio Characteristics	4. Adverse Change in Portfolio Manager	5. Weak Manager Research Rating	6. Significant Organizational Change	Watch List Status			
							4th Quarter 2017	3rd Quarter 2017	2nd Quarter 2017	1st Quarter 2017
Vanguard Target Retirement Income - Instl.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2015 - Instl.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2020 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2025 - Instl.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2030 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2035 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2040 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2045 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2050 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2055 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2060 - Instl.	Yes	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2065 - Instl.*	No	N/A	No	No	No (Buy)	No				

Negative tracking of greater than 0.2% constitutes underperformance for the Plan's target date retirement funds.

- **Notes on Table:** Changes in Watch List designations from the previous quarter are highlighted in red.
- **Yellow-Level Watch List.** An investment fund goes on the Watch List with a yellow designation when two of the above occur, or when item numbers 4, 5, or 6 occur.
- **Orange-Level Watch List.** An investment fund goes on the Watch List with an orange designation when it has been on the yellow watch list for two consecutive quarters or when three of the above occur.
- **Red-Level Watch List.** An investment fund goes on the Watch List with a red designation when it has been on the orange watchlist for two consecutive quarters or when four of the above occur. When an investment fund is placed on the Watch List with a red designation, a formal fund review will be conducted and a recommendation for action will be made.

\* Since-inception returns were used since this fund does not have a trailing five-year return.

# Tier II Watch List

## Tier II

	1. <i>Underperformed During Trailing 5 Years</i>	2. <i>Underperformed in 3 of 4 Trailing Calendar Quarters</i>	3. <i>Diverged from Strategy and/or Portfolio Characteristics</i>	4. <i>Adverse Change in Portfolio Manager</i>	5. <i>Weak Manager Research Rating</i>	6. <i>Significant Organizational Change</i>	Watch List Status			
							4th Quarter 2017	3rd Quarter 2017	2nd Quarter 2017	1st Quarter 2017
Vanguard Total Bond Market Index Fund	No	No	No	No	No (Buy)	No				
Vanguard Total Stock Market Index Fund	No	No	No	No	No (Buy)	No				
Vanguard Institutional Index Fund	No	No	No	No	No (Buy)	No				
Vanguard Extended Market Index Fund	No	No	No	No	No (Buy)	No				
Vanguard Total International Stock Index	No	No	No	No	No (Buy)	No				
Vanguard Developed Market Index Fund	No	No	No	No	No (Buy)	No				
Vanguard Emerging Markets Stock Index Fund	Yes	No	No	No	No (Buy)	No				
Vanguard Federal Money Market Fund	No	No	No	No	No (Buy)	No				
TIAA Traditional - RC	No	No	No	No	No (Buy)	No				
TIAA Traditional - RCP	No	No	No	No	No (Buy)	No				
PIMCO Total Return Fund	No	No	No	No	No (Buy)	No				
DFA Inflation-Protected Securities	Yes	No	No	No	No (Buy)	No				
American Century High Income*	No	No	No	No	No (Buy)	No				
T. Rowe Price Instl. Large Cap Growth Fund	No	No	No	No	No (Buy)	No				
Diamond Hill Large Cap	No	No	No	No	No (Buy)	No				
William Blair Small/Mid Cap Growth Fund	No	No	No	No	No (Buy)	No				
DFA U.S. Targeted Value	No	No	No	No	No (Buy)	No				
Dodge & Cox Global Stock Fund	No	No	No	No	No (Buy)	No				
Harding Loewner International Equity Instl.	No	Yes	No	No	No (Buy)	No				
MFS International Value Fund	No	No	No	No	No (Buy)	No				
Laudus Mondrian Emerging Markets Instl.	Yes	Yes	No	No	No (Buy)	No				
Cohen & Steers Instl Realty Shares	No	No	No	No	No (Buy)	No				

Negative tracking of greater than 0.1% for domestic equities and fixed income or 0.3% for non-U.S. equities constitutes underperformance for the Plan's index funds.

- **Notes on Table:** Changes in Watch List designations from the previous quarter are highlighted in red.
- **Yellow-Level Watch List.** An investment fund goes on the Watch List with a yellow designation when two of the above occur, or when item numbers 4, 5, or 6 occur.
- **Orange-Level Watch List.** An investment fund goes on the Watch List with an orange designation when it has been on the yellow watch list for two consecutive quarters or when three of the above occur.
- **Red-Level Watch List.** An investment fund goes on the Watch List with a red designation when it has been on the orange watchlist for two consecutive quarters or when four of the above occur. When an investment fund is placed on the Watch List with a red designation, a formal fund review will be conducted and a recommendation for action will be made.

\* Since-inception returns were used since this fund does not have a trailing five-year return.

# Tier I(a) Performance Summary

As of 12/31/2017

	Allocation		Performance(%)						
	Market Value (\$)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Total Plan</b>	<b>3,083,916,389</b>	<b>100.0</b>							<b>03/01/2014</b>
<b>Tier I (a)</b>	<b>495,594,080</b>	<b>16.1</b>							<b>03/01/2014</b>
Vanguard Target Retirement Income Trust I <i>Vanguard Target Income Composite Index</i>	13,129,955	0.4	2.0 (56) 2.1 (55)	8.6 (68) 8.7 (67)	4.5 (65) 4.7 (63)	5.0 (84) 5.2 (82)		5.1 (84) 5.2 (83)	03/01/2008
Vanguard Target Retirement 2015 Trust I <i>Vanguard Target 2015 Composite Index</i>	30,905,765	1.0	2.7 (33) 2.8 (19)	11.6 (47) 11.6 (46)	5.7 (53) 5.8 (36)	7.3 (33) 7.5 (20)		5.9 5.9	03/01/2008
Vanguard Target Retirement 2020 Trust I <i>Vanguard Target 2020 Composite Index</i>	52,474,257	1.7	3.4 (6) 3.5 (4)	14.2 (16) 14.2 (15)	6.7 (12) 6.8 (10)	8.6 (6) 8.8 (2)		6.4 (1) 6.5 (1)	03/01/2008
Vanguard Target Retirement 2025 Trust I <i>Vanguard Target 2025 Composite Index</i>	58,206,528	1.9	3.9 (9) 4.0 (2)	16.0 (27) 16.1 (26)	7.4 (19) 7.5 (10)	9.4 (12) 9.6 (4)		6.7 (7) 6.8 (2)	03/01/2008
Vanguard Target Retirement 2030 Trust I <i>Vanguard Target 2030 Composite Index</i>	68,101,399	2.2	4.2 (24) 4.4 (17)	17.6 (36) 17.7 (36)	7.9 (29) 8.1 (21)	10.2 (13) 10.4 (6)		6.9 (15) 7.0 (12)	03/01/2008
Vanguard Target Retirement 2035 Trust I <i>Vanguard Target 2035 Composite Index</i>	81,690,866	2.6	4.6 (30) 4.8 (18)	19.2 (37) 19.2 (37)	8.5 (30) 8.6 (26)	11.0 (18) 11.2 (6)		7.2 (8) 7.3 (4)	03/01/2008
Vanguard Target Retirement 2040 Trust I <i>Vanguard Target 2040 Composite Index</i>	82,808,658	2.7	5.0 (27) 5.2 (11)	20.8 (29) 20.9 (28)	9.0 (27) 9.2 (20)	11.6 (10) 11.8 (6)		7.5 (11) 7.6 (8)	03/01/2008
Vanguard Target Retirement 2045 Trust I <i>Vanguard Target 2045 Composite Index</i>	63,848,113	2.1	5.2 (25) 5.4 (3)	21.5 (25) 21.5 (24)	9.2 (21) 9.4 (13)	11.7 (14) 12.0 (8)		7.6 (6) 7.7 (1)	03/01/2008
Vanguard Target Retirement 2050 Trust I <i>Vanguard Target 2050 Composite Index</i>	32,520,226	1.1	5.2 (29) 5.4 (7)	21.5 (39) 21.5 (33)	9.2 (35) 9.4 (15)	11.7 (14) 12.0 (12)		7.6 (1) 7.7 (1)	03/01/2008
Vanguard Target Retirement 2055 Trust I <i>Vanguard Target 2055 Composite Index</i>	9,098,621	0.3	5.2 (29) 5.4 (9)	21.5 (55) 21.5 (51)	9.2 (46) 9.4 (26)	11.7 (17) 12.0 (15)		12.3 12.5	09/01/2010
Vanguard Target Retirement 2060 Trust I <i>Vanguard Target 2060 Composite Index</i>	2,809,692	0.1	5.2 (27) 5.4 (9)	21.5 (55) 21.5 (51)	9.2 (45) 9.4 (26)	11.7 (17) 12.0 (15)		10.9 (21) 11.0 (18)	04/01/2012
Vanguard Target Retirement 2065 Trust I <i>Vanguard Target 2065 Composite Index</i>	0	0.0	5.1 (39) 5.4 (9)					7.7 (38) 7.9 (20)	08/01/2017

Note: Trust II through October 31, 2017; Trust I thereafter.

# Tier I Performance Summary

As of 12/31/2017

	Allocation		Performance(%)							Inception Date
	Market Value (\$)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception		
<b>Tier I</b>	<b>78,624,044</b>	<b>2.6</b>							<b>02/01/2014</b>	
Vanguard Target Retirement Income - Instl.	4,564,485	0.1	2.0 (56)	8.5 (68)	4.5 (65)	5.0 (84)	4.9 (71)	5.4	11/01/2003	
<i>Vanguard Target Income Composite Index</i>			2.1 (55)	8.7 (67)	4.7 (63)	5.2 (82)	5.0 (67)	5.4		
Vanguard Target Retirement 2015 - Instl.	11,816,720	0.4	2.7 (32)	11.5 (50)	5.6 (55)	7.3 (38)	5.2	6.3	11/01/2003	
<i>Vanguard Target 2015 Composite Index</i>			2.8 (19)	11.6 (46)	5.8 (36)	7.5 (20)	5.3	6.4		
Vanguard Target Retirement 2020 - Instl.	10,115,977	0.3	3.4 (8)	14.1 (18)	6.6 (13)	8.5 (9)	5.6 (1)	6.5	07/01/2006	
<i>Vanguard Target 2020 Composite Index</i>			3.5 (4)	14.2 (15)	6.8 (10)	8.8 (2)	5.8 (1)	6.6		
Vanguard Target Retirement 2025 - Instl.	9,163,539	0.3	3.8 (13)	15.9 (28)	7.3 (24)	9.4 (14)	5.8 (11)	7.0	11/01/2003	
<i>Vanguard Target 2025 Composite Index</i>			4.0 (2)	16.1 (26)	7.5 (10)	9.6 (4)	5.9 (1)	7.1		
Vanguard Target Retirement 2030 - Instl.	8,884,048	0.3	4.3 (23)	17.6 (37)	7.9 (33)	10.1 (16)	5.9 (16)	6.8	07/01/2006	
<i>Vanguard Target 2030 Composite Index</i>			4.4 (17)	17.7 (36)	8.1 (21)	10.4 (6)	6.1 (9)	7.0		
Vanguard Target Retirement 2035 - Instl.	7,322,949	0.2	4.6 (34)	19.1 (39)	8.4 (38)	10.9 (21)	6.2 (11)	7.6	11/01/2003	
<i>Vanguard Target 2035 Composite Index</i>			4.8 (18)	19.2 (37)	8.6 (26)	11.2 (6)	6.3 (1)	7.8		
Vanguard Target Retirement 2040 - Instl.	7,654,316	0.2	5.0 (32)	20.7 (31)	8.9 (33)	11.5 (11)	6.5 (14)	7.3	07/01/2006	
<i>Vanguard Target 2040 Composite Index</i>			5.2 (11)	20.9 (28)	9.2 (20)	11.8 (6)	6.6 (7)	7.5		
Vanguard Target Retirement 2045 - Instl.	8,418,539	0.3	5.2 (22)	21.5 (26)	9.2 (21)	11.7 (15)	6.6 (4)	8.1	11/01/2003	
<i>Vanguard Target 2045 Composite Index</i>			5.4 (3)	21.5 (24)	9.4 (13)	12.0 (8)	6.7 (1)	8.3		
Vanguard Target Retirement 2050 - Instl.	8,621,136	0.3	5.2 (31)	21.5 (40)	9.2 (39)	11.6 (15)	6.6 (1)	7.4	07/01/2006	
<i>Vanguard Target 2050 Composite Index</i>			5.4 (7)	21.5 (33)	9.4 (15)	12.0 (12)	6.7 (1)	7.5		
Vanguard Target Retirement 2055 - Instl.	1,662,624	0.1	5.2 (34)	21.5 (55)	9.1 (56)	11.6 (18)		12.2	09/01/2010	
<i>Vanguard Target 2055 Composite Index</i>			5.4 (9)	21.5 (51)	9.4 (26)	12.0 (15)		12.5		
Vanguard Target Retirement 2060 - Instl.	399,712	0.0	5.2 (35)	21.4 (56)	9.1 (56)	11.6 (18)		11.5 (25)	02/01/2012	
<i>Vanguard Target 2060 Composite Index</i>			5.4 (9)	21.5 (51)	9.4 (26)	12.0 (15)		11.8 (19)		
Vanguard Target Retirement 2065 - Instl.	0	0.0	5.2 (28)					7.7 (38)	08/01/2017	
<i>Vanguard Target 2065 Composite Index</i>			5.4 (9)					7.9 (20)		

Note: The investor class shares through June 30, 2016; the institutional class shares thereafter.

# Tier II Performance Summary

As of 12/31/2017

	Allocation		Performance(%)							Inception Date
	Market Value (\$)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception		
<b>Tier II</b>	<b>588,937,478</b>	<b>19.1</b>								<b>03/01/2014</b>
Vanguard Total Bond Market Index Fund	25,090,164	0.8	0.4 (43)	3.6 (62)	2.2 (64)	2.0 (56)	4.0 (67)	5.2 (31)	10/01/1995	
<i>Performance Benchmark</i>			0.4 (42)	3.6 (57)	2.3 (55)	2.1 (51)	4.0 (60)	5.3 (25)		
Vanguard Total Stock Market Index Fund	40,698,034	1.3	6.3 (55)	21.2 (54)	11.1 (39)	15.6 (37)	8.7 (29)	7.6 (30)	08/01/1997	
<i>Performance Benchmark</i>			6.3 (55)	21.2 (54)	11.1 (38)	15.6 (37)	8.7 (29)	7.5 (30)		
Vanguard Institutional Index Fund	85,559,795	2.8	6.6 (43)	21.8 (49)	11.4 (32)	15.8 (31)	8.5 (34)	9.9 (31)	08/01/1990	
<i>S&amp;P 500 Index</i>			6.6 (43)	21.8 (49)	11.4 (31)	15.8 (31)	8.5 (34)	9.9 (32)		
Vanguard Extended Market Index Fund - Instl.	39,351,858	1.3	4.8 (81)	18.1 (94)	9.9 (49)	14.6 (40)	9.3 (24)	8.7 (51)	08/01/1997	
<i>Performance Benchmark</i>			4.8 (81)	18.1 (94)	9.8 (51)	14.5 (41)	9.2 (29)			
Vanguard Total International Stock Index	7,816,923	0.3	4.9 (15)	27.6 (31)	8.5 (25)	7.1 (51)	6.3 (64)	12/01/2010		
<i>Performance Benchmark</i>			5.4 (8)	27.4 (31)	8.5 (27)	7.4 (41)	6.4 (63)			
Vanguard Developed Market Index Fund	21,300,715	0.7	4.5 (26)	26.5 (39)	9.0 (18)	8.3 (13)	7.4 (33)	02/01/2010		
<i>Performance Benchmark</i>			5.0 (14)	26.7 (37)	9.0 (17)	8.5 (11)	7.3 (34)			
Vanguard Emerging Markets Stock Index Fund - Instl.	20,688,218	0.7	6.3 (54)	31.4 (68)	7.5 (64)	3.5 (65)	1.3 (58)	8.1 (72)	07/01/2000	
<i>Performance Benchmark</i>			6.7 (45)	31.5 (68)	7.5 (64)	3.9 (61)	1.5 (52)	8.0 (75)		
Vanguard Federal Money Market Fund	13,609,035	0.4	0.3 (17)	0.8 (20)	0.4 (20)	0.2 (21)	0.4 (24)	2.9 (24)	11/01/1989	
<i>Citigroup 3 Month T-Bill</i>			0.3 (15)	0.8 (18)	0.4 (21)	0.2 (20)	0.3 (47)	2.9 (43)		
TIAA Traditional - RC	71,196,948	2.3	1.0 (4)	4.1 (1)	4.2 (1)	4.3 (1)	4.4 (1)	4.5 (1)	08/01/2005	
<i>Hueler Stable Value Index</i>			0.5 (4)	2.0 (1)	1.8 (9)	1.8 (11)	2.5 (27)	2.9 (25)		
TIAA Traditional - RCP	55,097,806	1.8	0.8 (4)	3.3 (1)	3.5 (1)	3.5 (1)	3.6 (1)	3.7 (1)	06/01/2006	
<i>Hueler Stable Value Index</i>			0.5 (4)	2.0 (1)	1.8 (9)	1.8 (11)	2.5 (27)	2.8 (25)		
PIMCO Total Return Fund	15,510,013	0.5	0.1 (83)	5.1 (5)	2.8 (21)	2.2 (41)	5.2 (1)	7.3	06/01/1987	
<i>Blmbg. Barc. U.S. Aggregate</i>			0.4 (46)	3.5 (62)	2.2 (59)	2.1 (52)	4.0 (64)	6.4		
DFA Inflation-Protected Securities Portfolio	10,145,251	0.3	1.2 (51)	3.3 (28)	2.2 (19)	0.0 (40)	3.7 (12)	4.2 (16)	10/01/2006	
<i>Blmbg. Barc. Global Inflation-Linked: U.S. TIPS</i>			1.3 (39)	3.0 (39)	2.1 (21)	0.1 (20)	3.5 (28)	4.0 (26)		
American Century High Income	13,270,349	0.4	0.7 (33)	7.0 (48)	6.1 (22)	6.4 (6)	6.4 (6)	01/01/2013		
<i>BofAML US High Yield Master II Constrained</i>			0.4 (63)	7.5 (34)	6.4 (15)	5.8 (20)	5.8 (20)			
T. Rowe Price Instl. Large Cap Growth Fund	19,378,012	0.6	7.3 (19)	37.8 (4)	16.0 (2)	19.6 (4)	11.6 (4)	10.3 (4)	11/01/2001	
<i>Russell 1000 Growth Index</i>			7.9 (9)	30.2 (48)	13.8 (20)	17.3 (20)	10.0 (19)	8.3 (34)		



# Tier II Performance Summary (cont'd)

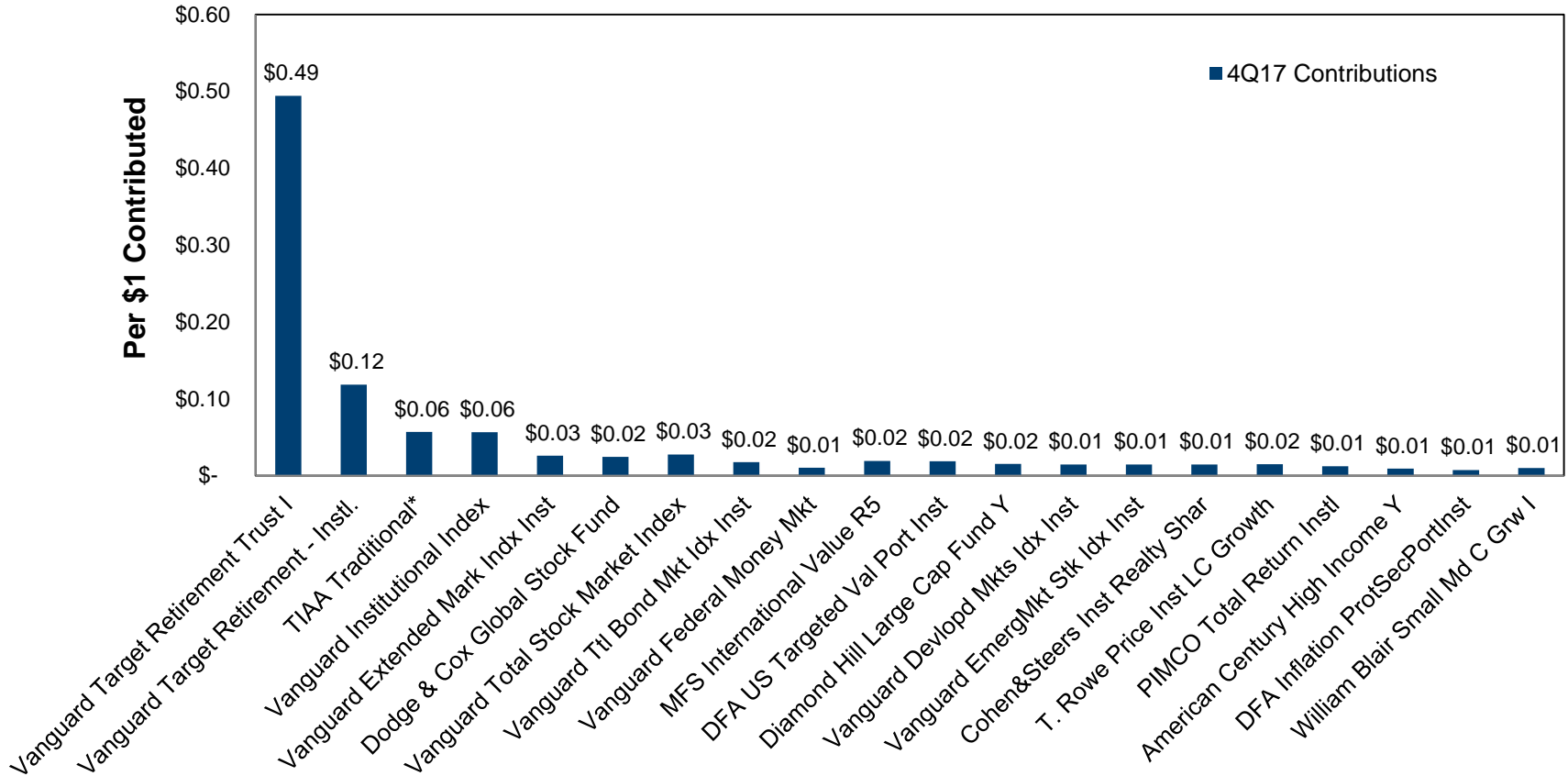
As of 12/31/2017

	Allocation		Performance(%)							Inception Date
	Market Value (\$)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception		
Diamond Hill Large Cap <i>Russell 1000 Value Index</i>	21,830,428	0.7	5.7 (58) 5.3 (69)	20.4 (9) 13.7 (82)	11.1 (4) 8.7 (62)	15.8 (5) 14.0 (45)		15.3 (19) 14.6 (39)	01/01/2012	
William Blair Small/Mid Cap Growth Fund <i>Russell 2500 Growth Index</i>	13,443,437	0.4	5.6 (39) 6.3 (26)	28.9 (17) 24.5 (43)	12.9 (13) 10.9 (40)	17.3 (12) 15.5 (27)	10.7 (13) 9.6 (25)	11.0 (5) 10.1 (22)	01/01/2004	
DFA U.S. Targeted Value <i>Russell 2500 Value Index</i>	24,446,531	0.8	4.5 (38) 4.3 (43)	9.6 (50) 10.4 (42)	9.4 (42) 9.3 (42)	14.1 (28) 13.3 (43)	9.3 (36) 8.8 (57)	11.8 (16) 10.6 (40)	03/01/2000	
Dodge & Cox Global Stock Fund <i>MSCI AC World Index (Net)</i>	35,965,670	1.2	3.4 (86) 5.7 (29)	21.5 (73) 24.0 (53)	9.4 (54) 9.3 (61)	13.3 (9) 10.8 (60)		6.4 (41) 5.3 (69)	05/01/2008	
Harding Loevner International Equity Instl. <i>MSCI AC World ex USA Growth (Net)</i>	8,991,634	0.3	4.5 (21) 5.8 (2)	29.9 (26) 32.0 (12)	10.4 (6) 9.3 (20)	8.6 (11) 8.0 (22)	5.1 (1) 2.4 (53)	6.7	06/01/1994	
MFS International Value Fund <i>MSCI AC World ex USA Value (Net)</i>	27,479,711	0.9	5.9 (1) 4.2 (38)	27.3 (33) 22.7 (84)	12.4 (1) 6.3 (90)	13.0 (1) 5.6 (97)	6.9 (3) 1.2 (81)	7.8 (1) 3.5 (68)	06/01/2006	
Laudus Mondrian Emerging Markets Instl. <i>MSCI Emerging Markets Index (Net)</i>	1,438,955	0.0	5.7 (63) 7.4 (25)	26.8 (81) 37.3 (38)	3.5 (88) 9.1 (40)	-0.4 (93) 4.3 (46)		0.5 (81) 2.1 (48)	05/01/2008	
Cohen and Steers Instl. Realty Shares <i>FTSE NAREIT Equity REIT Index</i>	16,627,991	0.5	3.0 (24) 1.5 (72)	7.4 (26) 5.2 (50)	6.2 (25) 5.6 (42)	10.0 (12) 9.5 (28)	8.2 (19) 7.4 (39)	12.2 (8) 11.6 (39)	03/01/2000	
<b>Tier III</b>	<b>6,467,378</b>	<b>0.2</b>							<b>03/01/2014</b>	
Mutual Fund Window	6,467,378	0.2							03/01/2014	
<b>Orphan Accounts</b>	<b>1,913,000,995</b>	<b>62.0</b>								
Fidelity Orphan Accounts	209,898,187	6.8								
TIAA Orphan Accounts	1,564,216,361	50.7								
T. Rowe Price Orphan Accounts	14,366,537	0.5								
VALIC Orphan Accounts	124,239,949	4.0								
American Century Orphan Accounts	279,960	0.0								
<b>Other Assets</b>	<b>1,292,413</b>	<b>0.0</b>							<b>03/01/2014</b>	
Loans	225,693	0.0							03/01/2014	
Loans Deemed Distributed	313,953	0.0							03/01/2014	
Plan Loan Default Fund	231,421	0.0							07/01/2014	
TIAA Money Market-Instl.	521,346	0.0	0.3 (31)	0.8 (35)	0.4 (28)	0.2 (28)	0.5 (20)	1.9 (13)	08/01/1999	
<i>iMoneyNet Prime Institutional Average</i>			0.3 (28)	0.9 (16)	0.4 (18)	0.3 (17)	0.4 (22)	1.8 (29)		

# Top Contributed Funds

As of 12/31/2017

## Top 20 Contributed Funds

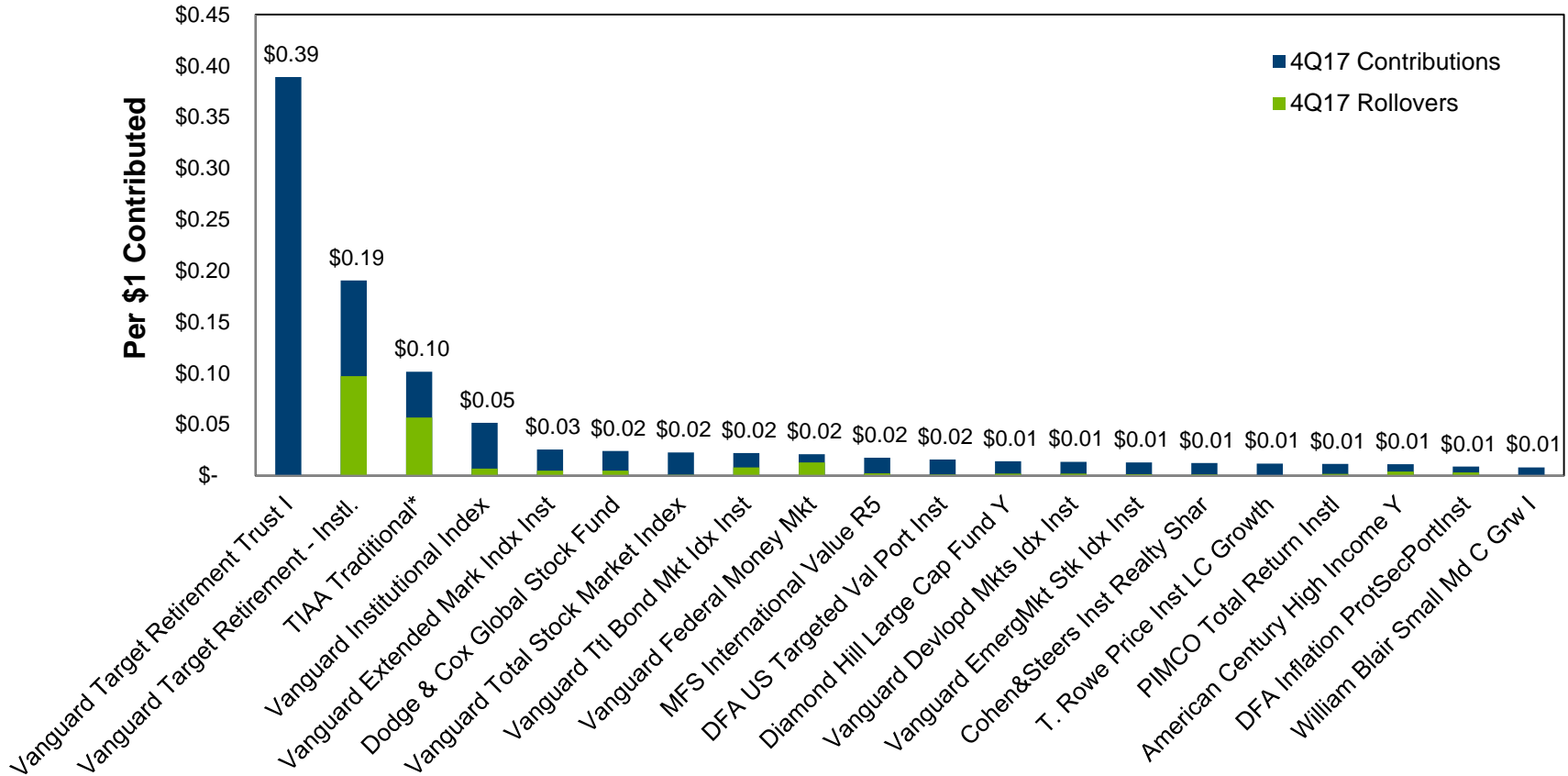


\*TIAA RC 73% / TIAA RCP 27% Contribution Split  
 Source: As reported by TIAA-CREF

# Top Contributed Funds (cont'd.)

As of 12/31/2017

## Top 20 Contributed Funds (Including Rollovers)



\*TIAA RC 68% / TIAA RCP 32% Contribution and Rollover Split  
Source: As reported by TIAA-CREF

# Quarterly Participant Transfers

As of 12/31/2017

Investment	Transfers In	Transfers Out	Net Transfers	Ending Balance (12/31/2017)	Number of Participants
Vanguard Target Retirement Trust I Funds	\$480,011,615	(\$482,431,493)	(\$2,419,878)	\$495,594,080	3,613
Vanguard Target Retirement Mutual Funds	\$135,747	(\$1,189,867)	(\$1,054,120)	\$78,624,044	1,468
Vanguard Total Bond Market Index Inst	\$586,905	(\$703,826)	(\$116,921)	\$25,090,164	875
Vanguard Total Stock Market Index Inst	\$2,703,554	(\$547,994)	\$2,155,560	\$40,698,034	611
Vanguard Institutional Index Inst	\$1,344,513	(\$4,176,418)	(\$2,831,905)	\$85,559,795	1,468
Vanguard Extended Market Index Inst	\$1,672,917	(\$961,975)	\$710,942	\$39,351,858	1,158
Vanguard Total International Stock Index Inst	\$266,299	(\$125,249)	\$141,049	\$7,816,923	160
Vanguard Developed Markets Index Ins	\$1,190,692	(\$444,626)	\$746,066	\$21,300,715	965
Vanguard Emerging Markets Stock Index Inst	\$787,024	(\$591,647)	\$195,376	\$20,688,218	1,198
Vanguard Federal Money Market Inv	\$1,562,933	(\$4,385,345)	(\$2,822,411)	\$13,609,035	174
TIAA Traditional	\$2,792,753	(\$657,416)	\$2,135,337	\$126,294,754	1,605
PIMCO Total Return Instl	\$1,112,221	(\$343,699)	\$768,522	\$15,510,013	669
DFA Inflation Protected Securities Portfolio Inst	\$422,132	(\$252,027)	\$170,105	\$10,145,251	751
American Century High Income	\$621,043	(\$145,697)	\$475,346	\$13,270,349	812
T. Rowe Price Inst LC Growth	\$1,595,479	(\$685,469)	\$910,010	\$19,378,012	370
Diamond Hill Large Cap Fund Y	\$1,506,743	(\$243,046)	\$1,263,696	\$21,830,428	1,102
William Blair Small Md C Grw I	\$521,794	(\$405,556)	\$116,238	\$13,443,437	691
DFA US Targeted Val Port Inst	\$153,741	(\$1,400,942)	(\$1,247,201)	\$24,446,531	970
Dodge & Cox Global Stock Fund	\$2,194,028	(\$286,579)	\$1,907,449	\$35,965,670	1,005
Harding International Equit Inst	\$287,857	(\$385,765)	(\$97,908)	\$8,991,634	791
MFS International Value R6	\$552,106	(\$984,345)	(\$432,239)	\$27,479,711	1,161
Laudus Mondrian Emerging Markets Ins	\$58,953	(\$74,834)	(\$15,881)	\$1,438,955	144
Cohen & Steers Inst Realty Shares	\$141,949	(\$479,449)	(\$337,500)	\$16,627,991	1,415
Mutual Fund Window	\$162,156	(\$481,887)	(\$319,731)	\$6,467,378	33
<b>Total</b>	<b>\$502,385,152</b>	<b>(\$502,385,152)</b>	<b>\$0</b>	<b>\$1,169,622,980</b>	

# Annual Investment Fee Transparency – As of December 31, 2017

Investment Option	Mgmt. Fee		Revenue		Total Expense		
	Market Value	(%)	Mgmt. Fee (\$)	Sharing (%)*	Sharing (\$)	(%)**	Total Expense (\$)
Vanguard Target Retirement Income Trust I	\$13,129,955	0.07%	\$9,191	0.00%	\$0	0.07%	\$9,191
Vanguard Target Retirement 2015 Trust I	\$30,905,765	0.07%	\$21,634	0.00%	\$0	0.07%	\$21,634
Vanguard Target Retirement 2020 Trust I	\$52,474,257	0.07%	\$36,732	0.00%	\$0	0.07%	\$36,732
Vanguard Target Retirement 2025 Trust I	\$58,206,528	0.07%	\$40,745	0.00%	\$0	0.07%	\$40,745
Vanguard Target Retirement 2030 Trust I	\$68,101,399	0.07%	\$47,671	0.00%	\$0	0.07%	\$47,671
Vanguard Target Retirement 2035 Trust I	\$81,690,866	0.07%	\$57,184	0.00%	\$0	0.07%	\$57,184
Vanguard Target Retirement 2040 Trust I	\$82,808,658	0.07%	\$57,966	0.00%	\$0	0.07%	\$57,966
Vanguard Target Retirement 2045 Trust I	\$63,848,113	0.07%	\$44,694	0.00%	\$0	0.07%	\$44,694
Vanguard Target Retirement 2050 Trust I	\$32,520,226	0.07%	\$22,764	0.00%	\$0	0.07%	\$22,764
Vanguard Target Retirement 2055 Trust I	\$9,098,621	0.07%	\$6,369	0.00%	\$0	0.07%	\$6,369
Vanguard Target Retirement 2060 Trust I	\$2,809,692	0.07%	\$1,967	0.00%	\$0	0.07%	\$1,967
Vanguard Target Retirement Income - Instl.	\$4,564,485	0.09%	\$4,108	0.00%	\$0	0.09%	\$4,108
Vanguard Target Retirement 2015 - Instl.	\$11,816,720	0.09%	\$10,635	0.00%	\$0	0.09%	\$10,635
Vanguard Target Retirement 2020 - Instl.	\$10,115,977	0.09%	\$9,104	0.00%	\$0	0.09%	\$9,104
Vanguard Target Retirement 2025 - Instl.	\$9,163,539	0.09%	\$8,247	0.00%	\$0	0.09%	\$8,247
Vanguard Target Retirement 2030 - Instl.	\$8,884,048	0.09%	\$7,996	0.00%	\$0	0.09%	\$7,996
Vanguard Target Retirement 2035 - Instl.	\$7,322,949	0.09%	\$6,591	0.00%	\$0	0.09%	\$6,591
Vanguard Target Retirement 2040 - Instl.	\$7,654,316	0.09%	\$6,889	0.00%	\$0	0.09%	\$6,889
Vanguard Target Retirement 2045 - Instl.	\$8,418,539	0.09%	\$7,577	0.00%	\$0	0.09%	\$7,577
Vanguard Target Retirement 2050 - Instl.	\$8,621,136	0.09%	\$7,759	0.00%	\$0	0.09%	\$7,759
Vanguard Target Retirement 2055 - Instl.	\$1,662,624	0.09%	\$1,496	0.00%	\$0	0.09%	\$1,496
Vanguard Target Retirement 2060 - Instl.	\$399,712	0.09%	\$360	0.00%	\$0	0.09%	\$360
Vanguard Total Bond Market Index Fund	\$25,090,164	0.04%	\$10,036	0.00%	\$0	0.04%	\$10,036
Vanguard Total Stock Market Index Fund	\$40,698,034	0.04%	\$14,244	0.00%	\$0	0.04%	\$14,244
Vanguard Institutional Index Fund	\$85,559,795	0.04%	\$34,224	0.00%	\$0	0.04%	\$34,224
Vanguard Extended Market Index Fund - Instl.	\$39,351,858	0.06%	\$23,611	0.00%	\$0	0.06%	\$23,611
Vanguard Total International Stock Index	\$7,816,923	0.09%	\$7,035	0.00%	\$0	0.09%	\$7,035
Vanguard Developed Market Index Fund	\$21,300,715	0.06%	\$12,780	0.00%	\$0	0.06%	\$12,780
Vanguard Emerging Markets Stock Index Fund - Instl.	\$20,688,218	0.11%	\$22,757	0.00%	\$0	0.11%	\$22,757
VANGUARD FEDERAL MONEY MARKET FUND	\$13,609,035	0.11%	\$14,970	0.00%	\$0	0.11%	\$14,970
TIAA Traditional - RC & RCP	\$126,294,754	0.32%	\$404,143	0.15%	\$189,442	0.47%	\$593,585
PIMCO Total Return Fund	\$15,510,013	0.51%	\$79,101	0.00%	\$0	0.51%	\$79,101
DFA Inflation-Protected Securities Portfolio	\$10,145,251	0.12%	\$12,174	0.00%	\$0	0.12%	\$12,174
American Century High Income	\$13,270,349	0.58%	\$76,968	0.00%	\$0	0.58%	\$76,968
T. Rowe Price Instl. Large Cap Growth Fund	\$19,378,012	0.56%	\$108,517	0.00%	\$0	0.56%	\$108,517
Diamond Hill Large Cap	\$21,830,428	0.58%	\$126,616	0.00%	\$0	0.58%	\$126,616
William Blair Small/Mid Cap Growth Fund	\$13,443,437	0.95%	\$127,713	0.15%	\$20,165	1.10%	\$147,878
DFA U.S. Targeted Value	\$24,446,531	0.37%	\$90,452	0.00%	\$0	0.37%	\$90,452
Dodge & Cox Global Stock Fund	\$35,965,670	0.53%	\$190,618	0.10%	\$35,966	0.63%	\$226,584
Harding Loevner International Equity Instl.	\$8,991,634	0.68%	\$61,143	0.15%	\$13,487	0.83%	\$74,631
MFS International Value Fund	\$27,479,711	0.66%	\$181,366	0.00%	\$0	0.66%	\$181,366
Laudus Mondrian Emerging Markets Instl.	\$1,438,955	1.20%	\$17,267	0.00%	\$0	1.20%	\$17,267
Cohen and Steers Instl. Realty Shares	\$16,627,991	0.75%	\$124,710	0.00%	\$0	0.75%	\$124,710
Mutual Fund Window	\$6,467,378	0.00%	\$0	0.00%	\$0	0.00%	\$0
<b>Total</b>	<b>\$1,169,622,980</b>	<b>0.18%</b>	<b>\$2,158,125</b>	<b>0.02%</b>	<b>\$259,060</b>	<b>0.21%</b>	<b>\$2,417,185</b>
<b>Without Brokerage</b>	<b>\$1,163,155,602</b>	<b>0.19%</b>	<b>\$2,158,125</b>	<b>0.02%</b>	<b>\$259,060</b>	<b>0.21%</b>	<b>\$2,417,185</b>

# Morningstar Model Portfolios – RC Performance

As of 12/31/2017

	Performance(%)				Inception Date
	1 Quarter	1 Year	3 Years	Since Inception	
<b>RC</b>					
Very Conservative RC	1.2	5.9	4.0	4.0	04/01/2014
<i>Very Conservative RC Benchmark</i>	1.4	5.8	4.0	4.0	
Conservative RC	2.2	9.2	5.5	5.2	04/01/2014
<i>Conservative RC Benchmark</i>	2.3	9.0	5.5	5.4	
Moderately Conservative RC	3.0	11.9	7.6	7.1	04/01/2014
<i>Moderately Conservative RC Benchmark</i>	3.0	11.9	6.7	6.5	
Moderate RC	3.7	14.9	7.9	7.5	04/01/2014
<i>Moderate RC Benchmark</i>	3.6	14.5	7.6	7.3	
Moderately Aggressive RC	4.4	17.4	8.7	8.1	04/01/2014
<i>Moderately Aggressive RC Benchmark</i>	4.3	17.0	8.4	8.0	
Aggressive RC	5.1	20.3	9.5	8.9	04/01/2014
<i>Aggressive RC Benchmark</i>	5.0	20.0	9.4	8.8	
Very Aggressive RC	5.7	22.9	10.1	9.5	04/01/2014
<i>Very Aggressive RC Benchmark</i>	5.6	22.6	10.0	9.3	
<b>RC Ex-TIAA</b>					
Very Conservative RC Ex-TIAA	0.9	5.3	3.1	3.3	04/01/2014
<i>Very Conservative Benchmark RC Ex-TIAA</i>	1.0	5.3	3.2	3.0	
Conservative RC Ex-TIAA	1.8	8.7	5.0	4.9	04/01/2014
<i>Conservative Benchmark RC Ex-TIAA</i>	2.0	7.8	4.0	3.6	
Moderately Conservative RC Ex-TIAA	2.3	11.1	6.8	6.5	04/01/2014
<i>Moderately Conservative Benchmark RC Ex-TIAA</i>	2.8	9.9	4.7	4.2	
Moderate RC Ex-TIAA	3.1	14.1	7.1	6.9	04/01/2014
<i>Moderate Benchmark RC Ex-TIAA</i>	3.6	12.0	5.3	4.7	
Moderately Aggressive RC Ex-TIAA	3.8	16.8	8.1	7.7	04/01/2014
<i>Moderately Aggressive Benchmark RC Ex-TIAA</i>	4.3	13.8	5.9	5.2	
Aggressive RC Ex-TIAA	4.4	19.6	9.1	8.5	04/01/2014
<i>Aggressive Benchmark RC Ex-TIAA</i>	5.0	16.0	6.6	5.7	
Very Aggressive RC Ex-TIAA	4.8	21.8	9.7	9.3	04/01/2014
<i>Very Aggressive Benchmark RC Ex-TIAA</i>	5.7	18.0	7.2	6.2	

# Morningstar Model Portfolios – RC Allocations

As of 12/31/2017

RC

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income	10%	8%	6%	5%	4%	4%	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	3%	3%	4%
DFA Inflation-Protected Securities I	9%	7%	6%	3%	3%	-	-
DFA US Targeted Value I	-	-	-	-	-	-	3%
Diamond Hill Large Cap Y	3%	8%	7%	11%	13%	11%	9%
Dodge & Cox Global Stock	-	7%	13%	12%	11%	9%	24%
Harding Loevner International Eq Instl	-	-	-	-	-	3%	3%
MFS International Value R6	-	-	3%	3%	6%	4%	5%
PIMCO Total Return Instl	12%	9%	10%	10%	5%	3%	-
TIAA Traditional	40%	34%	30%	22%	15%	7%	-
Vanguard Developed Markets Idx Instl	3%	5%	3%	9%	10%	12%	10%
Vanguard Emerging Mkts Stock Idx I	-	-	3%	4%	6%	8%	8%
Vanguard Extended Market Idx I	-	-	6%	11%	10%	13%	15%
Vanguard Federal Money Market Inv	-	3%	-	-	-	-	-
Vanguard Institutional Index I	-	-	-	-	3%	8%	3%
Vanguard Total Bond Market Index I	19%	9%	3%	-	-	-	-
Vanguard Total Stock Market Idx I	-	3%	3%	7%	7%	11%	13%
William Blair Small-Mid Cap Gr I	4%	7%	4%	-	4%	4%	3%

RC Ex-TIAA

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income	9%	8%	6%	4%	3%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	3%	3%	4%
DFA Inflation-Protected Securities I	10%	9%	6%	4%	4%	-	-
DFA US Targeted Value I	-	-	-	-	-	-	3%
Diamond Hill Large Cap Y	3%	8%	7%	11%	14%	12%	9%
Dodge & Cox Global Stock	-	7%	13%	13%	11%	13%	24%
Harding Loevner International Eq Instl	-	-	-	-	-	3%	3%
MFS International Value R6	-	-	3%	3%	6%	5%	5%
PIMCO Total Return Instl	9%	11%	10%	12%	10%	12%	-
Vanguard Developed Markets Idx Instl	3%	4%	3%	8%	9%	11%	10%
Vanguard Emerging Mkts Stock Idx I	-	-	3%	4%	6%	7%	8%
Vanguard Extended Market Idx I	-	-	7%	11%	10%	14%	15%
Vanguard Federal Money Market Inv	4%	3%	-	-	-	-	-
Vanguard Institutional Index I	-	-	-	-	3%	4%	3%
Vanguard Total Bond Market Index I	58%	40%	33%	20%	10%	-	-
Vanguard Total Stock Market Idx I	-	3%	3%	7%	7%	13%	13%
William Blair Small-Mid Cap Gr I	4%	7%	3%	-	4%	3%	3%

\*Full allocation history can be found in the Appendix of AHIC's Quarterly Investment Review.

# Morningstar Model Portfolios – RC Benchmarks

As of 12/31/2017

## RC Benchmarks

Index	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
Blmbg. Barc. Global Inflation-Linked US TIPS	9%	6%	6%	4%	3%	-	-
Blmbg. Barc. US Agg. Bond	29%	19%	13%	9%	6%	3%	-
Blmbg. Barc. US Corp HY	9%	8%	6%	5%	3%	3%	-
Citi Treasury Bill 3 Mo.	3%	3%	-	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	6%	11%	15%	18%	22%	25%
MSCI EM GR	-	3%	4%	6%	8%	10%	12%
Russell 1000 Growth	-	4%	7%	9%	10%	12%	14%
Russell 1000 Value	3%	8%	8%	11%	14%	16%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	4%	5%	6%	7%
Russell Mid Cap Growth	3%	3%	3%	3%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	6%	7%	8%	9%
TIAA Traditional	40%	34%	30%	22%	15%	7%	-

## RC Ex-TIAA Benchmarks

Index	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
Blmbg. Barc. Global Inflation-Linked US TIPS	9%	7%	6%	4%	3%	-	-
Blmbg. Barc. US Agg. Bond	65%	51%	40%	31%	21%	10%	-
Blmbg. Barc. US Corp HY	9%	8%	6%	5%	3%	3%	-
Citi Treasury Bill 3 Mo.	7%	4%	3%	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	6%	11%	15%	18%	22%	25%
MSCI EM GR	-	3%	4%	6%	8%	10%	12%
Russell 1000 Growth	-	4%	7%	9%	10%	12%	14%
Russell 1000 Value	3%	8%	8%	11%	14%	16%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	4%	5%	6%	7%
Russell Mid Cap Growth	3%	3%	3%	3%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	6%	7%	8%	9%

\*Full allocation history can be found in the Appendix of the Quarterly Investment Review.



# Morningstar Model Portfolios – RCP Performance

As of 12/31/2017

	Performance(%)				
	1 Quarter	1 Year	3 Years	Since Inception	Inception Date
<b>RCP</b>					
Very Conservative RCP	1.2	5.8	3.8	3.8	04/01/2014
<i>Very Conservative RCP Benchmark</i>	1.4	5.6	3.7	3.7	
Conservative RCP	2.2	9.1	5.1	4.9	04/01/2014
<i>Conservative RCP Benchmark</i>	2.3	8.9	5.3	5.1	
Moderately Conservative RCP	2.9	11.8	7.2	6.8	04/01/2014
<i>Moderately Conservative RCP Benchmark</i>	2.9	11.8	6.4	6.2	
Moderate RCP	3.7	14.8	7.5	7.1	04/01/2014
<i>Moderate RCP Benchmark</i>	3.7	14.6	7.4	7.1	
Moderately Aggressive RCP	4.3	17.3	8.6	8.1	04/01/2014
<i>Moderately Aggressive RCP Benchmark</i>	4.3	17.1	8.2	7.9	
Aggressive RCP	5.1	20.4	9.3	8.8	04/01/2014
<i>Aggressive RCP Benchmark</i>	5.0	20.2	9.4	8.8	
Very Aggressive RCP	5.7	22.9	10.2	9.5	04/01/2014
<i>Very Aggressive RCP Benchmark</i>	5.6	22.6	10.0	9.3	
<b>RCP Ex-TIAA</b>					
Very Conservative RCP Ex-TIAA	0.9	5.3	3.1	3.4	04/01/2014
<i>Very Conservative Benchmark RCP Ex-TIAA</i>	1.0	5.3	3.2	3.0	
Conservative RCP Ex-TIAA	1.8	8.7	4.9	4.9	04/01/2014
<i>Conservative Benchmark RCP Ex-TIAA</i>	2.0	7.8	4.0	3.6	
Moderately Conservative RCP Ex-TIAA	2.3	11.1	6.7	6.4	04/01/2014
<i>Moderately Conservative Benchmark RCP Ex-TIAA</i>	2.8	9.9	4.7	4.2	
Moderate RCP Ex-TIAA	3.1	14.1	7.0	6.8	04/01/2014
<i>Moderate Benchmark RCP Ex-TIAA</i>	3.6	12.0	5.3	4.7	
Moderately Aggressive RCP Ex-TIAA	3.8	16.8	8.0	7.6	04/01/2014
<i>Moderately Aggressive Benchmark RCP Ex-TIAA</i>	4.3	13.8	5.9	5.2	
Aggressive RCP Ex-TIAA	4.4	19.6	9.0	8.5	04/01/2014
<i>Aggressive Benchmark RCP Ex-TIAA</i>	5.0	16.0	6.6	5.7	
Very Aggressive RCP Ex-TIAA	4.8	21.8	9.8	9.3	04/01/2014
<i>Very Aggressive Benchmark RCP Ex-TIAA</i>	5.7	18.0	7.2	6.2	

# Morningstar Model Portfolios – RCP Allocations

As of 12/31/2017

## RCP

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income	10%	8%	7%	6%	4%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	3%	3%	4%
DFA Inflation-Protected Securities I	9%	7%	6%	4%	3%	-	-
DFA US Targeted Value I	-	-	-	-	-	-	3%
Diamond Hill Large Cap Y	3%	8%	7%	11%	13%	13%	9%
Dodge & Cox Global Stock	-	7%	13%	12%	11%	13%	24%
Harding Loevner International Eq Instl	-	-	-	-	-	3%	3%
MFS International Value R6	-	-	3%	3%	6%	5%	5%
PIMCO Total Return Instl	12%	9%	10%	10%	10%	7%	-
TIAA Traditional	40%	32%	25%	16%	10%	5%	-
Vanguard Developed Markets Idx Instl	3%	5%	3%	8%	9%	11%	10%
Vanguard Emerging Mkts Stock Idx I	-	-	3%	4%	6%	7%	8%
Vanguard Extended Market Idx I	-	-	7%	10%	10%	14%	15%
Vanguard Federal Money Market Inv	-	3%	-	-	-	-	-
Vanguard Institutional Index I	-	-	-	-	3%	4%	3%
Vanguard Total Bond Market Index I	19%	11%	7%	4%	-	-	-
Vanguard Total Stock Market Idx I	-	3%	3%	9%	8%	12%	13%
William Blair Small-Mid Cap Gr I	4%	7%	3%	-	4%	3%	3%

## RCP Ex-TIAA

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income	9%	8%	6%	4%	3%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	3%	3%	4%
DFA Inflation-Protected Securities I	10%	9%	6%	4%	4%	-	-
DFA US Targeted Value I	-	-	-	-	-	-	3%
Diamond Hill Large Cap Y	3%	8%	7%	11%	14%	12%	9%
Dodge & Cox Global Stock	-	7%	13%	13%	11%	13%	24%
Harding Loevner International Eq Instl	-	-	-	-	-	3%	3%
MFS International Value R6	-	-	3%	3%	6%	5%	5%
PIMCO Total Return Instl	9%	11%	10%	12%	10%	12%	-
Vanguard Developed Markets Idx Instl	3%	4%	3%	8%	9%	11%	10%
Vanguard Emerging Mkts Stock Idx I	-	-	3%	4%	6%	7%	8%
Vanguard Extended Market Idx I	-	-	7%	11%	10%	14%	15%
Vanguard Federal Money Market Inv	4%	3%	-	-	-	-	-
Vanguard Institutional Index I	-	-	-	-	3%	4%	3%
Vanguard Total Bond Market Index I	58%	40%	33%	20%	10%	-	-
Vanguard Total Stock Market Idx I	-	3%	3%	7%	7%	13%	13%
William Blair Small-Mid Cap Gr I	4%	7%	3%	-	4%	3%	3%

\*Full allocation history can be found in the Appendix of AHIC's Quarterly Investment Review.

# Morningstar Model Portfolios – RCP Benchmarks

As of 12/31/2017

## RCP Contract Portfolio Benchmarks

Index	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
Blmbg. Barc. Global Inflation-Linked US TIPS	9%	6%	6%	4%	3%	-	-
Blmbg. Barc. US Agg. Bond	29%	21%	18%	15%	11%	5%	-
Blmbg. Barc. US Corp HY	9%	8%	6%	5%	3%	3%	-
Citi Treasury Bill 3 Mo.	3%	3%	-	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	6%	11%	15%	18%	22%	25%
MSCI EM GR	-	3%	4%	6%	8%	10%	12%
Russell 1000 Growth	-	4%	7%	9%	10%	12%	14%
Russell 1000 Value	3%	8%	8%	11%	14%	16%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	4%	5%	6%	7%
Russell Mid Cap Growth	3%	3%	3%	3%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	6%	7%	8%	9%
TIAA Traditional	40%	32%	25%	16%	10%	5%	-

## RCP Ex-TIAA Benchmarks

Index	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
Blmbg. Barc. Global Inflation-Linked US TIPS	9%	7%	6%	4%	3%	-	-
Blmbg. Barc. US Agg. Bond	65%	51%	40%	31%	21%	10%	-
Blmbg. Barc. US Corp HY	9%	8%	6%	5%	3%	3%	-
Citi Treasury Bill 3 Mo.	7%	4%	3%	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	6%	11%	15%	18%	22%	25%
MSCI EM GR	-	3%	4%	6%	8%	10%	12%
Russell 1000 Growth	-	4%	7%	9%	10%	12%	14%
Russell 1000 Value	3%	8%	8%	11%	14%	16%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	4%	5%	6%	7%
Russell Mid Cap Growth	3%	3%	3%	3%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	6%	7%	8%	9%

\*Full allocation history can be found in the Appendix of the Quarterly Investment Review.

# Morningstar Model Portfolios – Static Allocation Performance

As of 12/31/2017

	Performance(%)				Inception Date
	1 Quarter	1 Year	3 Years	Since Inception	
<b>RC</b>					
Very Conservative RC	1.2	5.9	4.0	4.0	04/01/2014
<i>Very Conservative RC Benchmark</i>	1.4	5.8	4.0	4.0	
Conservative RC	2.2	9.2	5.5	5.2	04/01/2014
<i>Conservative RC Benchmark</i>	2.3	9.0	5.5	5.4	
Moderately Conservative RC	3.0	11.9	7.6	7.1	04/01/2014
<i>Moderately Conservative RC Benchmark</i>	3.0	11.9	6.7	6.5	
Moderate RC	3.7	14.9	7.9	7.5	04/01/2014
<i>Moderate RC Benchmark</i>	3.6	14.5	7.6	7.3	
Moderately Aggressive RC	4.4	17.4	8.7	8.1	04/01/2014
<i>Moderately Aggressive RC Benchmark</i>	4.3	17.0	8.4	8.0	
Aggressive RC	5.1	20.3	9.5	8.9	04/01/2014
<i>Aggressive RC Benchmark</i>	5.0	20.0	9.4	8.8	
Very Aggressive RC	5.7	22.9	10.1	9.5	04/01/2014
<i>Very Aggressive RC Benchmark</i>	5.6	22.6	10.0	9.3	
<b>RC Ex-TIAA</b>					
Very Conservative RC Ex-TIAA	0.9	5.3	3.1	3.3	04/01/2014
<i>Very Conservative Benchmark RC Ex-TIAA</i>	1.0	5.3	3.2	3.0	
Conservative RC Ex-TIAA	1.8	8.7	5.0	4.9	04/01/2014
<i>Conservative Benchmark RC Ex-TIAA</i>	2.0	7.8	4.0	3.6	
Moderately Conservative RC Ex-TIAA	2.3	11.1	6.8	6.5	04/01/2014
<i>Moderately Conservative Benchmark RC Ex-TIAA</i>	2.8	9.9	4.7	4.2	
Moderate RC Ex-TIAA	3.1	14.1	7.1	6.9	04/01/2014
<i>Moderate Benchmark RC Ex-TIAA</i>	3.6	12.0	5.3	4.7	
Moderately Aggressive RC Ex-TIAA	3.8	16.8	8.1	7.7	04/01/2014
<i>Moderately Aggressive Benchmark RC Ex-TIAA</i>	4.3	13.8	5.9	5.2	
Aggressive RC Ex-TIAA	4.4	19.6	9.1	8.5	04/01/2014
<i>Aggressive Benchmark RC Ex-TIAA</i>	5.0	16.0	6.6	5.7	
Very Aggressive RC Ex-TIAA	4.8	21.8	9.7	9.3	04/01/2014
<i>Very Aggressive Benchmark RC Ex-TIAA</i>	5.7	18.0	7.2	6.2	

## Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update

## Vanguard Target Retirement Funds

---

- All of the Vanguard Target Retirement Funds posted positive results during the fourth quarter
  - The shorter-dated Funds, with their greater exposure to fixed income, posted the lowest absolute returns
  - The longer-dated Funds, with their greater exposure to equities, posted the highest absolute returns
- For the twelve months ended December 31, 2017, results were positive across the series and ranked favorably among their respective peer-groups
  - Returns ranged from 8.6% for the Income Fund to 21.5% for the 2065 Fund
- The Funds' longer-term performance continued to exhibit a modest level of tracking error
  - Primarily due to the underlying component Funds' investment management fee and the impact of "fair value" pricing adjustments
- The Vanguard Target Retirement Funds remain "Buy" rated by our Global Investment Management Research Team

## PIMCO Total Return Fund

---

- The Fund's performance trailed the return of its benchmark, the Barclays U.S. Aggregate Index, by 0.3 percentage points during the fourth quarter
- The Fund's relative underperformance was primarily attributable to:
  - Underweight positioning to investment grade corporate credit
  - Short exposure to a basket of Asian emerging market currencies
  - Short exposure to U.K. duration
- Partially offsetting the period's negative relative results were holdings in agency and non-agency Mortgage Backed Securities, exposure to high carry emerging market currencies, along with an out-of-benchmark allocation to high yield corporate bonds
- For the twelve months ended December 31, 2017, the Fund generated a return of 5.1% versus the benchmark's return of 3.5%
- Longer-term performance remained favorable relative to the Barclays U.S. Aggregate Index and the Fund's peer group average
- The strategy remains "Buy" rated by our Global Investment Management Research Team

## DFA Inflation-Protected Securities Portfolio Fund

---

- The Fund's performance trailed the return of its benchmark, the Bloomberg Barclays Global Inflation-Linked U.S. TIPS Index, by 0.1 percentage point during the fourth quarter
- The Fund's relative underperformance was primarily attributable to:
  - Underweight positioning to TIPS with maturities above twenty years
- Partially offsetting the period's negative relative results was an underweight positioning to TIPS with maturities less than five-years
- For the twelve months ended December 31, 2017, the Fund generated a return of 3.3% versus the benchmark's return of 3.0%
- Longer-term results remained favorable relative to the Fund's benchmark and peer group average
- The strategy remains "Buy" rated by our Global Investment Management Research Team



# Dimensional Fund Advisors (DFA) Flash Report

- On November 30, 2017, DFA announced the addition of three new members to its Investment Committee, effective October 31, 2017
  - Dave Butler, Co-CEO and Head of Global Financial Services
  - Ryan Wiley, Co-Head of Global Equity Trading
  - Savina Rizova, Head of Strategy Research
- Our Global Investment Management Research Team believes these changes are a natural evolution of responsibilities following the departure of Eduardo Repetto, the former Co-CEO, and Henry Gray, the former head of Global Equity Trading
- We recommend the Committee take no action as our “Buy” ratings for DFA’s emerging markets value portfolio remains unchanged
- A Flash report detailing our observations is included in Section 5 of this presentation

Aon Hewitt  
Retirement and Investment

November, 2017

## Flash Report

### Dimensional Fund Advisors LP

#### New appointments to the Investment Committee

**Recommendation**

Dimensional Fund Advisors LP, (“DFA”), has announced the addition of three new members to its Investment Committee, effective October 31, 2017.

DFA’s Investment Committee has a supervisory function of approving, reviewing, and determining the overall portfolio management rules and guidelines and defining the process used by each strategy in addition to providing oversight for overall portfolio compliance.

In particular, the following individuals were added to the Investment Committee:

- Dave Butler, Co-CEO and Head of Global Financial Services;
- Ryan Wiley, Co-Head of Global Equity Trading; and
- Savina Rizova, Head of Strategy Research.

We believe these changes are a natural evolution of responsibilities following the departure of Eduardo Repetto, the former Co-CEO and Henry Gray, the former head of Global Equity Trading.

In addition, Ms. Rivoza is one of the three research leaders at DFA. We believe the addition of a research oriented professional is a positive development and an acknowledgment of Gerard O’Reilly’s additional responsibilities as Co-CEO of the Firm.

We recommend existing clients take no action as a result of this news and our “Buy” ratings for DFA’s suite of equity strategies as well as the DFA Inflation-Protected Securities Portfolio, which is managed by the same group with a similar approach, remain unchanged.

**Background**

- In early 2017, DFA announced Dave Butler was named Co-CEO, serving alongside Eduardo Repetto. David Booth relinquished the Co-CEO role and continued as Executive Chairman. Mr. Butler retained his role as Head of Global Financial Advisor Services.
- In September 2017, following Mr. Repetto’s departure, Gerard O’Reilly, Co-CIO and Head of Research, was named Co-CEO alongside Mr. Butler. Mr. O’Reilly has also been appointed to the parent company’s board of directors and will retain his titles of CIO and Head of Research.

Please see below the full list of the DFA Investment Committee along with the new members’ bios. Please feel free to contact your Aon Hewitt investment consultant or a member of Aon Hewitt’s GIM Equity team with any questions.

Risk, Reinsurance, Human Resources.

**AON**  
Empower Results®

## T. Rowe Price Instl. Large Cap Growth Fund

---

- The Fund's performance lagged the return of its benchmark, the Russell 1000 Growth Index, by 0.6 percentage points during the fourth quarter
- The Fund's relative underperformance was primarily attributable to:
  - An underweight allocation to the consumer staples sector
  - Negative stock selection within the consumer staples and financial sectors
- Partially offsetting the period's negative relative results was positive stock selection within the health care sector
- For the twelve months ended December 31, 2017, the Fund generated a return of 37.8% versus the benchmarks return of 30.2%
- Longer-term results remain positive on both an absolute and relative basis
- The Fund remains "Buy" rated by our Global Investment Management Research Team

## William Blair Small/Mid Cap Growth Fund

---

- The Fund's performance lagged the return of its benchmark, the Russell 2500 Growth Index, by 0.7 percentage points during the fourth quarter
- The Fund's relative underperformance was primarily attributable to:
  - Negative stock selection within the consumer discretionary and health care sectors
  - Holdings within the material sector
    - Notable detractors included Ball Corporation, Acadia Healthcare, and Cambrex
- Partially offsetting the period's negative relative results was positive stock selection within the information technology sector and holdings with a larger market cap bias versus the index
- For the twelve months ended December 31, 2017, the Fund generated a return of 28.9% versus the benchmark's return of 24.5%
- Longer-term results remain favorable relative to the benchmark and peer group average

## Dodge & Cox Global Stock Fund

---

- The Fund's performance trailed the return of its benchmark, the MSCI All Country World Index, by 2.3 percentage points during the fourth quarter
- The Fund's relative performance was primarily attributable to:
  - Negative stock selection within the consumer discretionary sector where Altice (-48%) and Grupo Televisa (-24%) were notable detractors
  - An overweight allocation to the health care sector where Sanofi (-13%) was a notable detractor
  - Additional detractors included Magnit (-37%), Sprint (-24%), and Itau Unibanco (-6%)
- Partially offsetting the period's negative relative results were holdings within the financial sector along with an underweight allocation to the utilities sector
- For the twelve months ended December 31, 2017, the Fund generated a return of 21.5% versus the benchmark's return of 24.0%
  - The Fund's holdings in the energy and industrial sectors detracted from results
- Longer-term results remain positive on both an absolute and relative basis
- The strategy remains "Buy" rated by our Global Investment Management Research Team

# Dodge & Cox Organizational Flash Report

- Effective January 16, 2018, Dodge & Cox announced changes to their U.S., International, and Global Equity investment Committees
- Karol Marcin, a current member of the Global Equity Committee, will be added to the U.S. Equity Committee
  - He will remain a member of the Global Equity Committee
- Raymond Mertens will be added to the International Equity Committee and step down from the Global Equity Committee
- We recommend the Committee take no action as the strategy remains “Buy” rated by our Global Investment Management Research Team
- A Flash report detailing our observations is included in Section 6 of this presentation

Aon Hewitt  
Retirement and Investment

January, 2018

## Flash Report

---

### Dodge & Cox - Changes to the U.S., International and Global Equity Investment Committees

#### Recommendation


Dodge & Cox announced the following changes effective January 16<sup>th</sup>, 2018:

- Karol Marcin, who is currently a member of the Global Equity Investment Committee, will be added to the U.S. Equity Investment Committee.
- Raymond Mertens will be added to the International Equity Committee and step down from the Global Equity Investment Committee (GEIC) of which he had been a member since February 2014. There are no other changes to the Global Equity Investment Committee.

We recommend clients make no change at this time. We view one of the key strengths of Dodge & Cox to be the depth in talent and length of tenure across investors at the Firm. Each investment policy committee at Dodge & Cox includes the Firm's most experienced, tenured and talented investment professionals.

Please contact a member of the GIM Equity Team if you have any questions.

Risk. Reinsurance. Human Resources.



Empower Results<sup>®</sup>

## Harding Loevner International Equity Instl. Fund

---

- The Fund's performance lagged the return of its benchmark, the MSCI AC World ex USA Growth Index, by 1.3 percentage points during the fourth quarter
- The Fund's underperformance was primarily attributable to:
  - Negative stock selection within the information technology and consumer staples sectors
  - An underweight allocation to the emerging markets
  - An overweight allocation to the Middle East
- Partially offsetting the period's negative relative results was an overweight allocation to Japan along with positive stock selection within the health care, industrials, and consumer discretionary sectors
- For the twelve months ended December 31, 2017, the Fund generated a return of 29.9% versus the benchmark's return of 32.0%
  - A 2.2% allocation to cash detracted from results as international equities posted strong absolute returns during the period
- Longer-term results remained favorable relative to the benchmark and peer group average
- The strategy remains "Buy" rated by our Global Investment Management Research Team

## Laudus Mondrian Emerging Markets Instl. Fund

---

- The Fund continued to register “Orange” on the Watch List during the fourth quarter
  - Due to the manager’s historical underperformance relative to its benchmark over the trailing five-year period and in four of the most recent trailing calendar quarters
- The Fund’s performance lagged the return of its benchmark, the MSCI Emerging Markets Index, by 1.7 percentage points during the fourth quarter
- The Fund’s underperformance was primarily attributable to:
  - An underweight allocation to China
  - An overweight allocation to the utilities and telecommunication sectors
- Partially offsetting the period’s negative relative results was positive stock selection within Brazil and an overweight allocation to India
- For the twelve months ended December 31, 2017, the Fund generated a return of 26.8% versus the benchmark’s return of 37.3%
- As an important part of the due diligence process, AHIC completed a competitive review to identify alternative investment manager candidates that could serve as a potential replacement to the Fund using a best-in-class, open architecture investment philosophy
- Consistent with AHIC’s recommendation, the RPAC voted to map existing assets and ongoing contributions to the Vanguard Emerging Markets Index Fund (VEMIX) effective February 13, 2018

---

(This page left blank intentionally)





## Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update

# Special meeting of Vanguard shareholders

November 15, 2017

Preliminary results

# Summary of voting results

**The Vanguard Funds held a Special Meeting of Shareholders on November 15, 2017. Below are the preliminary voting results. These results are not final and are subject to change pending the final voting tabulation and audit.**

1. Proposal to elect trustees for each fund (trust level vote)

**All 37 trusts passed, meaning that trustees have been elected for all funds.**

2. Proposal to approve a manager-of-managers arrangement with third-party investment advisors

**All 147 funds passed EXCEPT:**

- Extended Duration Treasury Index Fund
- Institutional Target Retirement 2015 Fund
- Institutional Target Retirement 2020 Fund
- Institutional Target Retirement 2025 Fund
- Institutional Target Retirement 2030 Fund
- Institutional Target Retirement 2035 Fund
- Institutional Target Retirement 2040 Fund
- Institutional Target Retirement 2045 Fund
- Institutional Target Retirement 2050 Fund
- Institutional Target Retirement 2055 Fund
- Institutional Target Retirement 2060 Fund
- Institutional Target Retirement Income Fund
- S&P Small-Cap 600 Growth Index Fund
- S&P Small-Cap 600 Index Fund
- Target Retirement 2055 Fund

3. Proposal to approve a manager-of-managers arrangement with wholly owned subsidiaries of Vanguard

**All 195 funds passed EXCEPT:**

- Extended Duration Treasury Index Fund
- Institutional Target Retirement 2015 Fund
- Institutional Target Retirement 2020 Fund
- Institutional Target Retirement 2025 Fund
- Institutional Target Retirement 2030 Fund
- Institutional Target Retirement 2035 Fund
- Institutional Target Retirement 2040 Fund
- Institutional Target Retirement 2045 Fund
- Institutional Target Retirement 2050 Fund
- Institutional Target Retirement 2055 Fund
- Institutional Target Retirement 2060 Fund
- Institutional Target Retirement 2065 Fund
- Institutional Target Retirement Income Fund
- S&P Small-Cap 600 Growth Index Fund
- S&P Small-Cap 600 Index Fund
- Target Retirement 2055 Fund

4. Proposal to change the investment objective of Vanguard REIT Index Fund and Vanguard Variable Insurance Fund–REIT Index Portfolio
  - Passed by the fund and portfolio.
5. Proposal to reclassify the REIT Index Fund’s diversification status to nondiversified
  - Passed by the fund.
6. Proposal to adopt the Funds’ Service Agreement for Vanguard Institutional Index Fund and Vanguard Institutional Total Stock Market Index Fund
  - Passed by the funds.
7. Shareholder proposal: Genocide-free investing
  - Not passed by all impacted funds.

**All funds reached quorum, allowing us to hold the joint meeting of shareholders for all funds on November 15. The vast majority of funds received a sufficient level of favorable votes to pass management’s proposals. For some funds, although they received a large percentage of favorable votes, those votes fell short of the required threshold for passing these proposals. Weighing the potential benefit of continuing to solicit votes for some funds against the cost of such continued solicitation, we believe it is most prudent to discontinue solicitation.**

## Answers to questions about the proxy results

**As of November 15, 2017**

### Proposal to elect trustees for each fund

#### **When will the newly elected board of trustees become effective?**

The newly elected board will become effective on January 1, 2018.

Of the 12 fund trustees elected, three are new to the fund boards: Vanguard President Tim Buckley, who will become Vanguard CEO in January; Sarah Bloom Raskin, former U.S. deputy secretary of the Treasury; and Deanna Mulligan, president and CEO of The Guardian Life Insurance Company of America.

Nine other trustees remain on the fund boards: Vanguard Chairman and CEO Bill McNabb; Mark Loughridge, who is the lead independent trustee; Emerson U. Fullwood; Amy Gutmann; JoAnn Heffernan Heisen; F. Joseph Loughrey; Scott C. Malpass; André F. Perold; and Peter F. Volanakis. All except Mr. McNabb and Mr. Buckley are considered independent trustees.

### Proposal to approve a manager-of-managers arrangement with third-party investment advisors

#### **The fund I invest in approved this proposal. Will there be a change in the investment advisory arrangement of the fund as a result?**

Because Proposal 2 was approved, the fund may now enter into or materially amend investment advisory agreements with third-party investment advisors without first obtaining additional shareholder approval. However,

Vanguard has not recommended, and no fund's board of trustees has approved, any changes to a fund's advisory arrangements in anticipation of receiving approval of this proposal.

**The fund I invest in either did not obtain enough votes to pass or did not approve this proposal. What does that mean for the fund?**

Because the required number of shareholder votes was not received to pass this proposal, the fund will continue to need to obtain shareholder approval before entering into or materially amending an investment advisory agreement with third-party investment advisors.

## Proposal to approve a manager-of-managers arrangement with wholly owned subsidiaries of Vanguard

**The fund I invest in approved this proposal. Will there be a change in the investment advisory arrangement of the fund as a result?**

By passing Proposal 3, the fund may enter into or materially amend investment advisory agreements with wholly owned subsidiaries of Vanguard and third-party advisors without first obtaining additional shareholder approval. However, Vanguard has not recommended, and no fund's board of trustees has approved, any changes to a fund's advisory arrangements. Although the fund you invest in passed Proposal 3, it is not permitted to enter into or materially amend investment advisory agreements with wholly owned subsidiaries of Vanguard without obtaining additional shareholder approval until the U.S. Securities and Exchange Commission approves an application that the fund submitted to the SEC requesting permission to engage in such activities. If the SEC approves the fund's application, then the fund may enter into or materially amend investment advisory agreements with wholly owned subsidiaries of Vanguard without first obtaining additional shareholder approval.

**The fund I invest in either did not obtain enough votes to pass or did not approve this proposal. What does that mean for the fund?**

Because the required number of shareholder votes was not received to pass this proposal, the fund will need to obtain shareholder approval before entering into or materially amending an investment advisory agreement with wholly owned subsidiaries of Vanguard.

## Proposal to change the investment objective of Vanguard REIT Index Fund and Vanguard Variable Insurance Fund—REIT Index Portfolio

**With the passing of this proposal, when will the REIT Index Fund and the REIT Index Portfolio transition to their new target index?**

The REIT Index Fund will track a transition benchmark for approximately six months before transitioning completely to track the MSCI US Investable Market Real Estate 25/50 Index. The use of a transition index is expected to reduce the costs associated with trading large amounts of securities within a short period; higher costs would be incurred if the fund were to suddenly begin tracking the new index. The REIT Index Fund is expected to begin its transition to its new transition benchmark index in early 2018. We expect that the fund will begin to track its new destination benchmark index at the beginning of the third quarter of 2018.

The REIT Index Portfolio does not require the use of a transition benchmark, because the modest size of the portfolio enables the transition to the new destination benchmark index to take place within a shorter time and with minimal transaction costs. As a result, it will begin to track the new benchmark index in the first quarter of 2018.

## Proposal to reclassify Vanguard REIT Index Fund's diversification status to nondiversified

### **With the passing of this proposal, when will the REIT Index Fund change its status to nondiversified?**

With the proposal having passed, we expect to start the process of amending the fund documents to reflect the nondiversified status of the fund. Apart from the regulatory filing, there will be no other change to the fund related to Proposal 5.

## Proposal for Vanguard Institutional Total Stock Market Index Fund and Vanguard Institutional Index Fund to adopt the Funds' Service Agreement (FSA)

### **The fund I invest in approved this proposal. What is the timing for implementing the expense ratio reductions and minimum initial investment reductions?**

The fund will begin to accrue expenses based on the FSA's expense allocation methodologies immediately following the proposal's passage. Shortly thereafter, a supplement will be filed to the fund's prospectus noting the projected reduction in expense ratios. Following the filing, changes to the website information and all other collateral information will be made to reflect both the reduced projected expenses and changes to minimum initial investment amounts.

## Shareholder proposal: Genocide-free investing

### **The fund I invest in did not pass this proposal. What does that mean for my fund?**

All 48 of the funds affected by the shareholder proposal did not pass it. Therefore, no changes will be made to these funds in connection with this proposal.

All investing is subject to risk, including possible loss of principal.

Funds that concentrate on a relatively narrow market sector face the risk of higher share-price volatility.

**For more information about Vanguard funds and ETFs, visit [vanguard.com](http://vanguard.com) to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.**

© 2017 The Vanguard Group, Inc. All rights reserved. Vanguard Marketing Corporation, Distributor.

## Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update

# Flash Report

---

## Dimensional Fund Advisors LP

### New appointments to the Investment Committee

#### Recommendation

Dimensional Fund Advisors LP, (“DFA”), has announced the addition of three new members to its Investment Committee, effective October 31, 2017.

DFA’s Investment Committee has a supervisory function of approving, reviewing, and determining the overall portfolio management rules and guidelines and defining the process used by each strategy in addition to providing oversight for overall portfolio compliance.

In particular, the following individuals were added to the Investment Committee:

- Dave Butler, Co-CEO and Head of Global Financial Services;
- Ryan Wiley, Co-Head of Global Equity Trading; and
- Savina Rizova, Head of Strategy Research.

We believe these changes are a natural evolution of responsibilities following the departure of Eduardo Repetto, the former Co-CEO and Henry Gray, the former head of Global Equity Trading.

In addition, Ms. Rivoza is one of the three research leaders at DFA. We believe the addition of a research oriented professional is a positive development and an acknowledgment of Gerard O’Reilly’s additional responsibilities as Co-CEO of the Firm.

We recommend existing clients take no action as a result of this news and our "Buy" ratings for DFA’s suite of equity strategies as well as the DFA Inflation-Protected Securities Portfolio, which is managed by the same group with a similar approach, remain unchanged.

#### Background

- In early 2017, DFA announced Dave Butler was named Co-CEO, serving alongside Eduardo Repetto. David Booth relinquished the Co-CEO role and continued as Executive Chairman. Mr. Butler retained his role as Head of Global Financial Advisor Services.
- In September 2017, following Mr. Repetto’s departure, Gerard O’Reilly, Co-CIO and Head of Research, was named Co-CEO alongside Mr. Butler. Mr. O’Reilly has also been appointed to the parent company’s board of directors and will retain his titles of CIO and Head of Research.

Please see below the full list of the DFA Investment Committee along with the new members’ bios. Please feel free to contact your Aon Hewitt investment consultant or a member of Aon Hewitt’s GIM Equity team with any questions.



**DFA Investment Committee Members as of October 31, 2017**

1. David Booth, Founder and Executive Chairman
2. Joseph Kolerich, Senior Portfolio Manager
3. Gerard O'Reilly, PhD, Co-Chief Executive Officer and Chief Investment Officer
4. Mary Phillips, CFA, Senior Portfolio Manager
5. **David Butler, CFA, Co-Chief Executive Officer and Head of Global Financial Advisor Services**
6. David Plecha, CFA, Global Head of Fixed Income
7. Joseph Chi, CFA, Investment Committee Chairman and Co-Head of Portfolio Management
8. **Savina Rizova, PhD, Head of Strategy Research**
9. Robert Deere, Senior Investment Director
10. Karen Umland, CFA, Senior Portfolio Manager
11. Jed Fogdall, Co-Head of Portfolio Management
12. **Ryan Wiley, Co-Head of Global Equity Trading**

**Biographies:**

**Dave Butler, CFA**

Dave Butler serves as Co-Chief Executive Officer and Head of Global Financial Advisor Services and is a Dimensional Director. He joined Dimensional in 1995 and brings more than 20 years of experience working with financial advisors. He leads a worldwide team of Regional Directors and client services professionals who apply Dimensional's strategies and resources to help advisors provide investors with an outstanding client experience. Dave is on the firm's Executive Committee and has been involved with firmwide strategic vision and decision making for many years.

Dave attended the University of California, Berkeley, earning his BS in marketing and finance in 1986 and an MBA in 1990. He received the CFA® designation in 1998. Dave played basketball for Cal and was drafted by the Boston Celtics. In 2011, he was inducted into the Cal Athletics Hall of Fame, and in 2014, he was named to the Pac-12 Basketball Hall of Honor. Dave was also a Rhodes Scholar candidate.

**Ryan Wiley**

Ryan Wiley is Co-Head of Global Equity Trading. In this role, he oversees trade execution strategies and coordinates all equity trading operations across the firm's global trading desks. Ryan joined Dimensional in 1999 as an equity trading assistant, became a US equity Trader in 2001, and was Head of Americas Trading prior to his current role. During his tenure, Ryan has been involved in the development of electronic trading systems, algorithmic trading, and related trading technology systems and projects. Ryan is also a member of the Investment Research Committee.

Ryan earned an MBA in finance from the Anderson School of Business at the University of California, Los Angeles, and a BS in business administration from California State Polytechnic University, Pomona.

**Savina Rizova, PhD**

Savina Rizova applies a background in finance to research projects that Dimensional undertakes to improve the design and execution of new and existing strategies. She also examines a variety of empirical research questions. Prior to obtaining her PhD, Savina worked in the Research group at Dimensional. She conducted quantitative analysis used to explain strategies and performance to clients. Savina is also a member of the Investment Research Committee.

Savina completed her PhD in finance at the University of Chicago Booth School of Business and holds an MBA from the University of Chicago Booth School of Business as well as a BA in economics and mathematics from Dartmouth College.

## Disclaimer

This document has been produced by Aon Hewitt's Global Investment Management (GIM) Research Team, a division of Aon plc and is appropriate solely for institutional investors. Nothing in this document should be treated as an authoritative statement of the law on any particular aspect or in any specific case. It should not be taken as financial advice and action should not be taken as a result of this document alone. Consultants will be pleased to answer questions on its contents but cannot give individual financial advice. Individuals are recommended to seek independent financial advice in respect of their own personal circumstances. The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The delivery at any time shall not, under any circumstances, create any implication that there has been a change in the information set forth herein since the date hereof or any obligation to update or provide amendments hereto. The information contained herein is derived from proprietary and non-proprietary sources deemed by Aon Hewitt to be reliable and are not necessarily all inclusive. Aon Hewitt does not guarantee the accuracy or completeness of this information and cannot be held accountable for inaccurate data provided by third parties. Reliance upon information in this material is at the sole discretion of the reader.

This document does not constitute an offer of securities or solicitation of any kind and may not be treated as such, i) in any jurisdiction where such an offer or solicitation is against the law; ii) to anyone to whom it is unlawful to make such an offer or solicitation; or iii) if the person making the offer or solicitation is not qualified to do so. If you are unsure as to whether the investment products and services described within this document are suitable for you, we strongly recommend that you seek professional advice from a financial adviser registered in the jurisdiction in which you reside. We have not considered the suitability and/or appropriateness of any investment you may wish to make with us. It is your responsibility to be aware of and to observe all applicable laws and regulations of any relevant jurisdiction, including the one in which you reside.

Aon Hewitt Limited is authorized and regulated by the Financial Conduct Authority. Registered in England & Wales No. 4396810. When distributed in the US, Aon Hewitt Investment Consulting, Inc. ("AHIC") is a registered investment adviser with the Securities and Exchange Commission ("SEC"). AHIC is a wholly owned, indirect subsidiary of Aon plc. In Canada, Aon Hewitt Inc. and Aon Hewitt Investment Management Inc. ("AHIM") are indirect subsidiaries of Aon plc, a public company trading on the NYSE. Investment advice to Canadian investors is provided through AHIM, a portfolio manager, investment fund manager and exempt market dealer registered under applicable Canadian securities laws. Regional distribution and contact information is provided below.

Aon plc/Aon Hewitt Limited	Aon Hewitt Investment	Aon Hewitt Inc./Aon Hewitt
Registered office	Consulting, Inc.	Investment Management Inc.
The Aon Centre	200 E. Randolph Street	225 King Street West, Suite
The Leadenhall Building	Suite 1500	1600
122 Leadenhall Street	Chicago, IL 60601	Toronto, ON
London	USA	M5V 3M2
EC3V 4AN		Canada

Contact your local Aon representative for additional contact and/or registration information relevant to your local country if not included above.

Copyright © 2017 Aon plc

(This page left blank intentionally)

# Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update

# Flash Report

---

## Dimensional Fund Advisors LP

### New appointments to the Investment Committee

#### Recommendation

Dimensional Fund Advisors LP, (“DFA”), has announced the addition of three new members to its Investment Committee, effective October 31, 2017.

DFA’s Investment Committee has a supervisory function of approving, reviewing, and determining the overall portfolio management rules and guidelines and defining the process used by each strategy in addition to providing oversight for overall portfolio compliance.

In particular, the following individuals were added to the Investment Committee:

- Dave Butler, Co-CEO and Head of Global Financial Services;
- Ryan Wiley, Co-Head of Global Equity Trading; and
- Savina Rizova, Head of Strategy Research.

We believe these changes are a natural evolution of responsibilities following the departure of Eduardo Repetto, the former Co-CEO and Henry Gray, the former head of Global Equity Trading.

In addition, Ms. Rivoza is one of the three research leaders at DFA. We believe the addition of a research oriented professional is a positive development and an acknowledgment of Gerard O’Reilly’s additional responsibilities as Co-CEO of the Firm.

We recommend existing clients take no action as a result of this news and our "Buy" ratings for DFA’s suite of equity strategies as well as the DFA Inflation-Protected Securities Portfolio, which is managed by the same group with a similar approach, remain unchanged.

#### Background

- In early 2017, DFA announced Dave Butler was named Co-CEO, serving alongside Eduardo Repetto. David Booth relinquished the Co-CEO role and continued as Executive Chairman. Mr. Butler retained his role as Head of Global Financial Advisor Services.
- In September 2017, following Mr. Repetto’s departure, Gerard O’Reilly, Co-CIO and Head of Research, was named Co-CEO alongside Mr. Butler. Mr. O’Reilly has also been appointed to the parent company’s board of directors and will retain his titles of CIO and Head of Research.

Please see below the full list of the DFA Investment Committee along with the new members’ bios. Please feel free to contact your Aon Hewitt investment consultant or a member of Aon Hewitt’s GIM Equity team with any questions.

## **DFA Investment Committee Members as of October 31, 2017**

1. David Booth, Founder and Executive Chairman
2. Joseph Kolerich, Senior Portfolio Manager
3. Gerard O'Reilly, PhD, Co-Chief Executive Officer and Chief Investment Officer
4. Mary Phillips, CFA, Senior Portfolio Manager
5. **David Butler, CFA, Co-Chief Executive Officer and Head of Global Financial Advisor Services**
6. David Plecha, CFA, Global Head of Fixed Income
7. Joseph Chi, CFA, Investment Committee Chairman and Co-Head of Portfolio Management
8. **Savina Rizova, PhD, Head of Strategy Research**
9. Robert Deere, Senior Investment Director
10. Karen Umland, CFA, Senior Portfolio Manager
11. Jed Fogdall, Co-Head of Portfolio Management
12. **Ryan Wiley, Co-Head of Global Equity Trading**

### **Biographies:**

#### **Dave Butler, CFA**

Dave Butler serves as Co-Chief Executive Officer and Head of Global Financial Advisor Services and is a Dimensional Director. He joined Dimensional in 1995 and brings more than 20 years of experience working with financial advisors. He leads a worldwide team of Regional Directors and client services professionals who apply Dimensional's strategies and resources to help advisors provide investors with an outstanding client experience. Dave is on the firm's Executive Committee and has been involved with firmwide strategic vision and decision making for many years.

Dave attended the University of California, Berkeley, earning his BS in marketing and finance in 1986 and an MBA in 1990. He received the CFA® designation in 1998. Dave played basketball for Cal and was drafted by the Boston Celtics. In 2011, he was inducted into the Cal Athletics Hall of Fame, and in 2014, he was named to the Pac-12 Basketball Hall of Honor. Dave was also a Rhodes Scholar candidate.

#### **Ryan Wiley**

Ryan Wiley is Co-Head of Global Equity Trading. In this role, he oversees trade execution strategies and coordinates all equity trading operations across the firm's global trading desks. Ryan joined Dimensional in 1999 as an equity trading assistant, became a US equity Trader in 2001, and was Head of Americas Trading prior to his current role. During his tenure, Ryan has been involved in the development of electronic trading systems, algorithmic trading, and related trading technology systems and projects. Ryan is also a member of the Investment Research Committee.

Ryan earned an MBA in finance from the Anderson School of Business at the University of California, Los Angeles, and a BS in business administration from California State Polytechnic University, Pomona.

#### **Savina Rizova, PhD**

Savina Rizova applies a background in finance to research projects that Dimensional undertakes to improve the design and execution of new and existing strategies. She also examines a variety of empirical research questions. Prior to obtaining her PhD, Savina worked in the Research group at Dimensional. She conducted quantitative analysis used to explain strategies and performance to clients. Savina is also a member of the Investment Research Committee.

Savina completed her PhD in finance at the University of Chicago Booth School of Business and holds an MBA from the University of Chicago Booth School of Business as well as a BA in economics and mathematics from Dartmouth College.



## Disclaimer

This document has been produced by Aon Hewitt's Global Investment Management (GIM) Research Team, a division of Aon plc and is appropriate solely for institutional investors. Nothing in this document should be treated as an authoritative statement of the law on any particular aspect or in any specific case. It should not be taken as financial advice and action should not be taken as a result of this document alone. Consultants will be pleased to answer questions on its contents but cannot give individual financial advice. Individuals are recommended to seek independent financial advice in respect of their own personal circumstances. The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The delivery at any time shall not, under any circumstances, create any implication that there has been a change in the information set forth herein since the date hereof or any obligation to update or provide amendments hereto. The information contained herein is derived from proprietary and non-proprietary sources deemed by Aon Hewitt to be reliable and are not necessarily all inclusive. Aon Hewitt does not guarantee the accuracy or completeness of this information and cannot be held accountable for inaccurate data provided by third parties. Reliance upon information in this material is at the sole discretion of the reader.

This document does not constitute an offer of securities or solicitation of any kind and may not be treated as such, i) in any jurisdiction where such an offer or solicitation is against the law; ii) to anyone to whom it is unlawful to make such an offer or solicitation; or iii) if the person making the offer or solicitation is not qualified to do so. If you are unsure as to whether the investment products and services described within this document are suitable for you, we strongly recommend that you seek professional advice from a financial adviser registered in the jurisdiction in which you reside. We have not considered the suitability and/or appropriateness of any investment you may wish to make with us. It is your responsibility to be aware of and to observe all applicable laws and regulations of any relevant jurisdiction, including the one in which you reside.

Aon Hewitt Limited is authorized and regulated by the Financial Conduct Authority. Registered in England & Wales No. 4396810. When distributed in the US, Aon Hewitt Investment Consulting, Inc. ("AHIC") is a registered investment adviser with the Securities and Exchange Commission ("SEC"). AHIC is a wholly owned, indirect subsidiary of Aon plc. In Canada, Aon Hewitt Inc. and Aon Hewitt Investment Management Inc. ("AHIM") are indirect subsidiaries of Aon plc, a public company trading on the NYSE. Investment advice to Canadian investors is provided through AHIM, a portfolio manager, investment fund manager and exempt market dealer registered under applicable Canadian securities laws. Regional distribution and contact information is provided below.

Aon plc/Aon Hewitt Limited	Aon Hewitt Investment	Aon Hewitt Inc./Aon Hewitt
Registered office	Consulting, Inc.	Investment Management Inc.
The Aon Centre	200 E. Randolph Street	225 King Street West, Suite
The Leadenhall Building	Suite 1500	1600
122 Leadenhall Street	Chicago, IL 60601	Toronto, ON
London	USA	M5V 3M2
EC3V 4AN		Canada

Contact your local Aon representative for additional contact and/or registration information relevant to your local country if not included above.

Copyright © 2017 Aon plc

(This page left blank intentionally)

## Discussion Topics

---

<b>Section 1</b>	Capital Markets Review
<b>Section 2</b>	Performance Review
<b>Section 3</b>	Noteworthy Items
<b>Section 4</b>	Vanguard Proxy Vote Summary
<b>Section 5</b>	DFA Flash Report
<b>Section 6</b>	Dodge & Cox Flash Report
<b>Section 7</b>	Legal and Compliance Update



# Quarterly Update

*Aon Hewitt Retirement Legal Consulting & Compliance*

## In this Issue

- 2 Cybersecurity and the Role of Plan Fiduciaries
- 2 Game Changer—Pension Funding and Tax Reform
- 3 IRS Provides Model Language for Partial Lump Sums
- 4 Increased DOL Audits Target Pension Plan Payment Procedures
- 5 Long-Awaited Mortality Guidance Published by the IRS
- 5 Considerations in Using General Fee Benchmarking Data
- 6 2018 Limits for Benefit Plans
- 7 Plan Sponsors May Use Forfeitures for Plan Corrections
- 7 The Calm After the Storms—IRS, DOL, and PBGC Relief
- 8 Quarterly Roundup of Other New Developments
- 9 Recent Publications

## Prior Issues

Prior issues can be found on [aon.com](http://aon.com).

**Four most recent issues** - [Click here](#)

Select “Newsletters”

**Older editions** - [Click here](#)

Select “Retirement Practice  
Legal Consulting & Compliance  
Quarterly Update”

## Notes From Your Editor

Welcome to the latest *Quarterly Update*. We begin with an article highlighting concerns about the security of retirement plan data following the recent Equifax data breach. Our legal consultants are partnering with Aon’s data security team to review and test data security safeguards related to employee benefit plans.

Locating lost or missing participants and beneficiaries for payment of their retirement plan benefits has become a focal point for Department of Labor (DOL) audits. We cover the details of the DOL’s initiative and considerations for plan sponsors.

Tax reform proposals have started many conversations about defined benefit plan funding and whether it makes sense to accelerate plan contributions or borrow money to fund retirement plan contributions. While it’s uncertain what is going to happen, we encourage plan sponsors to consider taking action on this issue now.

The IRS has recently issued a lot of guidance of interest to qualified plan sponsors. This includes final mortality guidance, model plan language for plans that permit participants to elect to receive part of their benefit in a lump sum and part in an annuity, qualified plan limits for the 2018 plan year, and relaxed rules for funding of corrections of certain operational failures. In addition, we report on disaster relief after recent hurricanes and wild fires. Finally, in this issue we report on benchmarking fees for defined contribution plans against similar plans and on the status of several lawsuits regarding fees.

If you have any questions or need any assistance with the topics covered, please contact the author of the article or Tom Meagher, our practice leader.

Regards,

**Jennifer Ross Berrian**

Partner

Aon Hewitt

Jennifer.Ross.Berrian@aonhewitt.com

# Cybersecurity and the Role of Plan Fiduciaries

by Tom Meagher and Jennifer Ross Berrian

While plan fiduciaries have always had responsibility for protecting the data used to administer a retirement plan, the recent data breach involving Equifax has focused renewed attention on plan fiduciaries and the need to safeguard participant data.

Plan sponsors are continuously entering into relationships with vendors and other third parties that may involve employee data—pension plan data, defined contribution plan data, and/or health and welfare plan data. While health plans have long had definitive guidance regarding the obligation to protect individually identifiable health information under the Health Insurance Portability and Accountability Act (HIPAA), no explicit guidance addressed specifically to retirement plans has been issued. Nonetheless, the absence of definitive guidance does not relieve plan fiduciaries of their obligation to protect the participant data necessary for employer retirement plan administration.

From a fiduciary perspective, it is important that plan fiduciaries examine their plans' data security safeguards. At the risk of stating the obvious, it is not acceptable for plan fiduciaries to simply rely on statements made by their recordkeepers or third-party vendors (including payroll vendors) that participant data is secure. Rather, plan fiduciaries should be proactive in reviewing the data security safeguards in place (both within the plan sponsor organization and within third parties that have access to or control of the data).

This review should entail, among other things, conducting an assessment and gap analysis of existing safeguards, and the testing of such safeguards and related controls to ensure that they are operating appropriately. The outcome of this assessment should also entail a proactive plan for addressing any identified deficiencies in controls and a process for addressing any real or potential breaches involving participant data.

While a detailed discussion of data security safeguards is beyond the scope of this article, as part of a comprehensive risk management and assessment program, an effective assessment and gap analysis begins with an initial data protection assessment. This assessment should include confirmation of:

- Physical safeguards (physical methods, procedures, and policies intended to protect the maintained information from unauthorized access and natural and environmental hazards);
- Technical safeguards (the technology used to protect participant information maintained in electronic and other forms); and
- Administrative safeguards (actions, policies, and procedures used to manage the data security process).

Following the initial assessment, plan fiduciaries should be apprised of, among other things:

- The individuals or organizations who may have access to or control of participant data;
- How such data is stored, transmitted, and accessed; and
- What processes are in place to alert plan fiduciaries with respect to breaches (or potential breaches) of the data security systems.

While the scope of a data security assessment and gap analysis may be scaled to the particular plan, it is critical for plan fiduciaries to establish a written record of having examined their data security safeguards and having provided appropriate data security training to those who may have access to participant data. Plan fiduciaries should not rely solely upon the statements of their recordkeepers or other service providers that these actions have been taken.

Aon has a comprehensive data security team that can assist with the review and testing of data security safeguards that apply (or should apply) to employee benefit plans. We would be pleased to discuss how plan sponsors and fiduciaries should move forward to examine such safeguards in an effort to mitigate improper or unauthorized disclosures and ultimately establish a record of prudent plan administration.

---

## Game Changer—Pension Funding and Tax Reform

by Kristen Cook and Alan Parikh

On the morning of November 2, 2017, the first draft of the “Tax Cuts and Jobs Act” (TCJA) was released by the House Ways and Means Committee. We expect that this bill will be debated intensely over the next several weeks or months, as it moves through the House, the Senate, and the reconciliation process. Key provisions could easily change from the existing draft.

While not definitive, this first draft of the TCJA puts some important parameters around what the Trump administration and congressional Republicans hope to achieve by overhauling the U.S. tax code and has important implications for corporate sponsors considering how to finance their pension deficits. Key aspects applicable to corporate defined benefit (DB) pension plans include reducing the corporate tax

rate from 35% to 20% and partially limiting the deductibility of net interest expense. If corporate pension plan sponsors think these provisions could survive largely intact through future legislative negotiations, now is a critical time to consider discretionary pension contributions and funding alternatives.

What might these changes imply for DB plan sponsors? The potential drop in the corporate income tax rate is a big deal, and DB plan sponsors that are in a taxpaying position in 2017 may wish to consider accelerated pension funding to pick up the potential additional 15% federal income tax deduction. As we expected, debt-financed pension contributions have surged in 2017, largely driven by rising Pension Benefit Guaranty Corporation (PBGC) premiums and sponsors taking advantage of low credit spreads to finance contributions. See our blog post from 2016 foretelling this trend [here](#). To the extent tax reform reduces or eliminates the interest deduction, it would make debt financing less attractive.

Would limiting the federal income tax deduction for interest payments—when combined with a drop in the tax rate—make borrowing to fund less attractive? Over the near term, we think the answer for most sponsors is “no.” In fact, our modeling finds that under some circumstances, taking advantage of the 35% deduction currently available could be financially attractive even if interest payments on debt used to finance that contribution are not deductible. Once the lower tax rate goes into effect, however, we expect that corporate pension contributions, regardless of how they are financed, will drop significantly.

Finally, we note that the TCJA includes a “deemed repatriation” tax of 12% on accumulated earnings and profits held by U.S. multinationals overseas in cash or cash equivalents, and a lower rate

on earnings held in remaining assets. This potentially frees up billions of dollars for these multinationals to use to shore up their U.S. pension plans. But with the drop in the tax rate to 20%, there is a much smaller incentive to do so. Companies might consider a short-term borrow-to-fund strategy, accelerating deductions into 2017 in anticipation of repatriated cash arriving in 2018.

▶ “The potential drop in the corporate income tax rate is a big deal, and DB plan sponsors that are in a taxpaying position in 2017 may wish to consider accelerated funding (whether cash or debt financing) to pick up the potential additional 15% federal income tax deduction.”

Sponsors in the middle of analyzing pension funding and investment strategies may want to consider more refined modeling to capture:

- Alternative corporate tax rates;
- Alternative tax treatments of interest payments; and
- Appropriate liability measures (PBGC, plan termination, or other) to fund against, bearing in mind future mortality improvements.

These topics can be complex, but there is a real opportunity for plan sponsors if action is taken during 2017. Plan sponsors should be working with their actuaries, investment consultants, and legal consultants to model scenarios and compare the return on investment of pension contributions to other opportunities.

---

## IRS Provides Model Language for Partial Lump Sums

by Hitz Burton

On August 20, 2017, the Internal Revenue Service (IRS) issued Notice 2017-44, which provides model amendment language for defined benefit (DB) plans that permit participants to receive a portion of their accrued benefit as a lump sum and the remaining portion as an annuity. The IRS published final regulations in September 2016 and has now followed up with model language.

If a plan sponsor wishes to offer this opportunity, the language reflected in one of the two model amendments (or other compliant language) should be adopted. If a plan already offers this opportunity but the plan language is not compliant with the latest guidance, the plan sponsor should amend the plan before January 1, 2018, to receive relief from rules prohibiting amendments that reduce benefits that have already accrued.

Additionally, plan sponsors should confirm that split benefit calculations are performed in a manner that is compliant with the 2016 regulations and the terms of the plan. Please note that no plan amendment is required if the plan already includes compliant language.

Plan sponsors of DB plans offering partial lump-sum payments should ensure that the plan documents are timely updated to reflect regulatory requirements and should confirm that their plan documents and administrative procedures comply with these regulations. Aon Hewitt’s Retirement Legal Consulting & Compliance consultants can help clients both with drafting required plan amendments and assessing whether plans are being administered in compliance with these new rules.

# Increased DOL Audits Target Pension Plan Payment Procedures

by Monica Gajdel and Susan Motter

The Department of Labor (DOL) has increased its audit activity and is investigating pension plans to determine whether vested benefits are being paid in a timely way. In 2015, the DOL began a regional initiative to investigate a small selection of large pension plans in regard to unpaid benefits owed to terminated vested participants who were over normal retirement age. The DOL has now expanded its investigation nationwide to plans of all sizes.

## Overview of the DOL Initiative

The current DOL investigations focus on retirement plan procedures in three key areas: (i) locating missing participants; (ii) informing terminated vested participants that a retirement benefit is payable; and (iii) starting benefit payments on time. The DOL is examining whether the procedures are sufficient and being followed in practice. In addition, the DOL is closely scrutinizing participant data for missing and incorrect data.

Upon audit, plan sponsors should anticipate being asked to provide census data; actuarial reports; participant forms and notices; and information about service providers, fees, and board or committee members. The plan's procedures for determining participant counts for IRS Form 5500, making plan distributions, and locating missing participants may also be requested.

## Early DOL Findings

The DOL's posture appears to be increasing in aggressiveness with respect to unpaid pension plan benefits and missing participants who are due benefits. In some cases, the DOL requires the application of DOL Field Assistance Bulletin 2014-01 (related to missing participants in terminated defined contribution plans) more broadly to defined benefit plans. Among the criteria described in the bulletin are the use of free internet searches and social media to find participants who are deemed "missing."

The following additional findings have come out of the recent audits.

- The use of a private locator firm alone is not enough if the plan has no internal procedures for locating participants.
- Plan sponsors should use alternative methods to find participants, such as listing the names of missing participants in employee newsletters or questioning other coworkers and former employees.
- Some participant communications cannot be easily understood by the average participant.
- Some plan sponsors are missing important data such as dates of birth, hire, termination, or death.

## Internal IRS Guidance

The IRS appears to have also increased its interest in benefit payment issues and missing participants. On October 19, 2017, the IRS issued internal guidance to assist its agents in the examinations of retirement plans related to the application of the required minimum distribution (RMD) rules. Specifically, the guidance directs its agents not to challenge a plan for an RMD violation if the plan has undertaken certain missing participant search procedures.

Under the guidance, if a retirement plan has completed all of the following search procedures, the examining agent will not challenge the plan for a failure to timely make RMDs to participants deemed missing.

- Searched alternative contact information in plan, plan sponsor, and publicly-available records.
- Sent certified mail to the payee's last known mailing address and attempted contact through other means (including email addresses and telephone numbers).
- Used a commercial locator service, a credit reporting agency, or a proprietary internet search tool for locating payees.

Although this guidance is intended for internal IRS use, it is a helpful indication of the missing participant search methods that may satisfy IRS scrutiny under audit.

## Considerations

Plan sponsors should ensure they have robust processes in place to commence benefits to eligible participants and locate participants who are unresponsive. Those processes should be documented and followed to demonstrate compliance with the Code's tax qualification rules and ERISA's fiduciary obligations.

While the DOL and IRS have suggested that plan sponsors should use publicly-available records or directories, free internet searches and social media, plan sponsors should balance the risks of using these unverified approaches. Providing pension information to the wrong person may result in fraud. Plan sponsors should also be cautious in questioning other former employees and sharing confidential information.

Aon Hewitt's Retirement Legal Consulting & Compliance consultants are here to work with plan sponsors in reviewing and revising their plan procedures to ensure their plans make timely plan distributions and promptly locate missing participants. In addition, our actuaries and other consultants can help plan sponsors evaluate participant data and procedures for missing participants.

# Long-Awaited Mortality Guidance Published by the IRS

by Grant Martin

The Internal Revenue Service (IRS) released its final mortality regulations on October 3, 2017, generally effective starting with the 2018 plan year. The regulations update certain prescribed mortality assumptions to reflect increases in U.S. life expectancies that have occurred since the prior assumptions were developed. The final regulations, and accompanying guidance in Notice 2017-60 and Revenue Procedure 2017-55, address:

- Benefit calculations using the minimum lump-sum conversion basis under Internal Revenue Code (Code) Section 417(e);
- Funding calculations, such as required cash contributions, Pension Benefit Guaranty Corporation variable-rate premiums, and the determination of whether additional reporting is required under Section 4010 of the Employee Retirement Income Security Act of 1974; and
- Plan-specific adjustments to mortality tables for funding purposes.

**Benefit calculations.** The new mortality assumptions will apply starting with the 2018 plan year. The new tables increase lump-sum factors by around 3% to 5% compared to the prior basis; this results in an increase in the cost of lump sums for traditional pension plans and can reduce the cost of annuities for certain hybrid plans (e.g., cash balance and pension equity plans).

The guidance is timely, as plan sponsors that use an early “lookback” month under Code Section 417(e) had been waiting for the guidance to prepare January 2018 commencement kits. Now that the applicable mortality table for 2018 is known, these plan sponsors can calculate actual benefit amounts rather than providing estimates.

**Funding calculations.** The new prescribed mortality tables will increase typical plan liabilities by around 3% to 5%, although hybrid plans and those planning to use custom tables may see a smaller impact.

The new mortality tables will generally apply for plan years beginning in 2018. However, the final regulations include a provision for plan sponsors to defer adoption of the new funding tables to 2019 if the plan sponsor determines that the use of the new tables would be “administratively impracticable” or “result in an adverse business impact that is greater than de minimis.” No regulatory guidance was provided on how to make these determinations.

**Plan-specific adjustments.** The new regulations provide additional flexibility for plan sponsors to voluntarily reflect their own experience in funding mortality assumptions. This provides a potential opportunity to reduce reported liabilities and associated plan costs with a return on investment that could be many times the cost of the necessary experience study.

For calendar-year plans, the deadlines to apply to the IRS for approval of plan-specific mortality assumptions are February 28, 2018 for the 2018 plan year and June 1, 2018 for the 2019 plan year. A mortality study can take a few months or more (depending on the level of data scrubbing required), creating urgency for eligible plans to act now to realize savings. Plan sponsors should consult with their actuaries and investment consultants to understand the impact of final regulations on their pension plans and whether a mortality study may be warranted.

---

## Considerations in Using General Fee Benchmarking Data

by Bridget Steinhart and Eric Brager



An interest in managing cost-effective defined contribution plans—and mitigating the potential of a Department of Labor (DOL) audit or participant litigation—leads many plan fiduciaries to wisely ask whether they are paying appropriate investment and recordkeeping fees for their 401(k) plans. Should plan fiduciaries rely on general survey data to benchmark whether plan fees are reasonable? In our view, no. While broad views of trends in

fees may be instructive, managing plan investment and recordkeeping

fees requires benchmarking against data involving comparable asset sizes, asset classes, and required services.

To illustrate, Bloomberg recently published an article entitled, “How Does Your 401(k) Compare?” (August 23, 2017), which addresses the latest annual defined contribution survey from NEPC, an independent advisory firm. The survey included 123 large defined contribution plans with an average of \$1.15 billion in total assets and approximately 12,000 participants. The survey indicated that from 2013 to 2017, median investment fees dropped from 0.52% to 0.41%. Does this mean that 0.41% is the target goal? No; this particular survey does not address whether the respondents’ holdings are invested in passively or actively managed funds, or if there are special investments



that might incur higher fees. In this case, benchmarking fund fees individually against peer fund medians on a current basis is a much more prudent course of action for plan fiduciaries.

In addressing defined contribution plan recordkeeping fees, NEPC's survey shows that the median per-head fee dropped to \$59 in 2017 from \$103 in 2010. While the downward administrative fee trend is encouraging, a key consideration in addressing administrative fees includes the number of plan participants—a significant factor in the administrative costs assumed by the recordkeeper. If all else is equal, for the recordkeeper to cover its fixed costs on a per-participant basis, a plan with 500 lives will be more expensive to administer than a plan with 5,000 lives. Considering the complexity of plan administration, two plans with the same number of participants will likely pay very different fees if one is a traditional 401(k) plan with a standard match and the other uses complex formulas and grandfathered provisions from previous plan mergers or to reflect collective bargaining negotiations.

Finally, different levels of service needed by plan sponsors can mean significant differences in plan cost. These recordkeeper services may include, for example, communicating with participants in multiple languages, providing live employee meetings, or having a single sign-on for the client's intranet.

Despite the trends, the most judicious approach for plan fiduciaries to take is benchmarking plan administrative fees and investment fees (separately) against similar cohorts. Aon Hewitt Investment Consulting's Defined Contribution Plan Consulting Practice can assist plan sponsors and fiduciaries in addressing their plans' fee structures, benchmarking fee levels, and assisting in fee (and service) negotiations. In addition, Aon's investment advisory teams—as fiduciaries to the plan with respect to the investment advice delivered—can address fund structures, holdings, and fund expenses to best position plan sponsors and fiduciaries to mitigate the risk of adverse DOL audit findings or the threat of participant litigation.

## 2018 Limits for Benefit Plans

by Necia Crlenjak and Linda M. Lee



Employee benefit plans are subject to many dollar limits established annually by the Internal Revenue Service (IRS). There are limits on the amount of contributions that may be made to defined contribution plans, on the annual amount that can be paid from defined benefit plans, on the amount of compensation that can be used when calculating benefits, and many more. The limits are updated based upon price and wage inflation and changes

in the law. As a result, the administration of qualified retirement plans must be adapted annually to accommodate the applicable limits under the Internal Revenue Code (Code).

### Highlights of Changes

- The employee contribution limit to 401(k) and 403(b) plans increased from \$18,000 to \$18,500.
- The annual addition limit for defined contribution plans under Code Section 415 increased from \$54,000 to \$55,000.

- The annual benefit limit for defined benefit plans under Code Section 415 increased from \$215,000 to \$220,000.
- The qualified plan annual compensation limit under Code Section 401(a)(17) increased from \$270,000 to \$275,000.

### Unchanged Limitations

- The limit on catch-up contributions in 401(k) and 403(b) plans for employees age 50 or older remained at \$6,000.
- The pay threshold for highly compensated employees under Code section 414(q) remained at \$120,000.

Each year, Aon Hewitt publishes a report that summarizes the new limits and includes additional helpful tax information. Our clients have found this summary to be an extremely useful and easy-to-use reference document. A copy of the 2018 benefit limits summary (including prior limits for years 2015–2017) can be downloaded [here](#). Please contact your Aon Retirement consultant if you have any questions regarding the limitations for 2018.

# Plan Sponsors May Use Forfeitures for Plan Corrections

by Dan Schwallie

Prior to the release of proposed regulations in January 2017, defined contribution plan forfeitures could not be used as qualified nonelective contributions (QNECs) for the purpose of making corrective contributions under the Employee Plans Compliance Resolution System (EPCRS). This was because prior regulations required that the funds be nonforfeitable (fully vested) when originally contributed to the plan, rather than when allocated to participant accounts.

Under the proposed regulations, employer contributions can qualify as QNECs if they are nonforfeitable at the time they are allocated to participants' accounts, and need not have been nonforfeitable when originally contributed to the plan. (As noted in the Second Quarter 2017 issue of the *Aon Hewitt Retirement*

*Legal Consulting & Compliance Quarterly Update*, the proposed regulations also permit use of forfeitures to fund ADP/ACP safe harbor plan contributions.) The regulations are proposed to apply to plan years beginning on or after the date the regulations are made final, but may be relied upon before then.

Many 401(k) and 403(b) plans contain language consistent with the prior regulations that would prohibit the use of forfeitures to fund QNECs. In particular, many pre-approved plans were amended to expressly incorporate such prohibition on the use of forfeitures. Aon Hewitt's Retirement Legal Consulting & Compliance consultants can help plan sponsors review their plan documents and evaluate the advantages of amending the plan documents to permit maximum flexibility in the use of forfeitures.

---

## The Calm After the Storms—IRS, DOL, and PBGC Relief

by Linda M. Lee

Following the aftermath of three major hurricanes and devastating wildfires in Northern California, several programs were announced by the Internal Revenue Service (IRS), the Department of Labor (DOL), and the Pension Benefit Guaranty Corporation (PBGC) to provide regulatory relief to plan sponsors, employers, and individuals in certain affected areas. The different types of relief and guidance that have been issued include:

- Liberalized rules for qualified plan hardship withdrawals and loans;
- Compliance guidance for employee benefit plans whose administrative processes and procedures have been disrupted;
- Leave-based donation programs for employees who wish to voluntarily waive the use of their paid time off in exchange for employer cash contributions to certain charitable organizations that provide relief to victims;

- Relief for taxpayers in Puerto Rico;
- Waivers of certain PBGC penalties; and
- Form 5500 filing extensions.

Although these programs have been put in place to help mitigate the effects of the above-mentioned natural catastrophes, the agencies involved have not standardized their responses to disasters, and it cannot be assumed that a program granted in response to one disaster applies to any of the others.

If a plan sponsor has been impacted by one of these events or has employees or plan participants who have been adversely affected, contact any of the colleagues in Aon's Retirement Legal Consulting & Compliance group to learn more about what types of relief are available and what steps are required to utilize the assistance provided.

# Quarterly Roundup of Other New Developments

by Jan Raines and Bridget Steinhart

## University Wins Complete Dismissal of Fee Suit

In the midst of many similar suits alleging fiduciary breaches by private university fiduciary committees, the University of Pennsylvania (Penn) won a complete dismissal of all of claims brought against Penn and its Vice President of Human Resources.

The plaintiffs alleged that fiduciary duties regarding Penn's 403(b) plan were breached by the plan sponsor contracting with TIAA-CREF to retain two specific funds in the fund lineup; charging excessive fees by allowing the companies providing the investments to also serve as recordkeepers; charging excessive fees because they were calculated based upon plan assets rather than per participant; including some retail funds instead of institutional funds; providing too many investment options (alleging the lineup to be "confusing"); and choosing a high percentage of funds (60%) that underperformed their benchmarks.

Judge Gene E.K. Pratter dismissed all claims. Some of the highlights from the ruling include the following.

- Referencing *Renfro v. Unisys Corp.*, a 401(k) fee case heard in the U.S. Court of Appeals for the Third Circuit that directed district courts to look at a plan's offerings on the whole rather than singling out one fund—the judge noted that plaintiffs can't just show "sub-optimality" of a fund but must prove "systemic mismanagement."
- Considering Penn's diverse population of over 21,000 employees in addressing the number of funds (ranging from 76 to 118) that were described as a "dizzying array" by plaintiffs, the judge noted that "a duty to offer choice is more pronounced in plans as large as Penn's." The funds were offered in four tiers, which the judge commented were addressed in descriptive guidance to assist participants.
- Indicating that locking in some mandated funds with TIAA, one of the plan's recordkeepers, is not an uncommon practice to secure lower fees or better terms. She also quashed the complaint that Penn engaged in a prohibited transaction by allowing TIAA and Vanguard to "bundle services," and thus charge higher recordkeeping fees, by likening the process to bundling internet and cable to landline services, as the overall value can outweigh the cost of an unnecessary service.
- Addressing the claim that asset-based participant fees for recordkeeping should have been assessed as per-participant fees, by writing that, "The plan administrators are fiduciaries to every plan member, whether she invests \$10 or \$10 million. It is not up to courts to second-guess how fiduciaries allocate that cost, only that the fiduciary 'discharge his duties with respect to a plan solely in the interest of the participants and beneficiaries' as a whole."

While this decision isn't binding on other lawsuits and is on appeal, it does suggest that some courts may be willing to side with universities on these issues.

## Judge Refuses to Dismiss Fee Lawsuit

A recent case entitled *Morin v. Essentia Health* presents a slightly different scenario than other contemporary recordkeeping fee cases. Essentia Health (Essentia) offers both a 401(k) plan and a 403(b) plan to its employees. From 2009 to 2011, the two plans were administered by separate recordkeepers. As with many other recordkeeping fee cases, the plaintiffs argue that the recordkeeper fees were too high and were not fully disclosed to participants. The claim further alleges that since fees for a plan are driven by assets and the number of participants in a plan, had the plans been combined "administratively" the fees would have been lower due to the combined participant count and assets.

While it appears as if the plaintiffs have ignored the differences between 401(k) and 403(b) plans in asserting that they should have been combined for recordkeeping purposes, the district court judge denied the defendants' motion to dismiss the claims. This denial does not give any insight into the judge's opinion on whether the claims will be successful, just that he's allowing the plaintiffs to move forward.

It is important to note that ERISA indicates that plan assets can be used only to pay permissible and reasonable fees and expenses for that particular plan, assuming the plan document permits it. Fiduciaries should be mindful that an "equal" fee for multiple plans with the same recordkeeper may or may not be appropriate. They also should question (and benchmark) those types of arrangements to ensure that one plan's fees are not subsidizing another plan's, and that fees are reasonable for the services being provided for each plan.

## Small Defined Contribution Plan Is Target of Fee Lawsuit

In a change from the strategy of most other recordkeeping fee lawsuits against plan fiduciaries, *Goetz v. Voya Financial, Inc.* targets the recordkeeper—Voya Financial (Voya)—for charging excessive fees to a small plan, the Cornerstone Pediatric Profit Sharing Plan (Cornerstone Plan), which had only 21 participants and approximately \$2.8 million in assets.

The claim alleges that Voya hid its fees by adding asset-based fees to the plan investment funds' operating expenses and charged fees based on assets, rather than the number of participants. Referencing a survey published by NEPC, an independent investment consulting firm, the plaintiff compared the fees charged in the Cornerstone Plan (\$1,466 per participant) to the median fee of \$64 per participant reported by the NEPC survey, which generally surveys much larger plans.

While lawsuits involving small plans have been relatively uncommon, this lawsuit attempts to claim that per-participant administrative fees for small plans should be consistent with those of large plans. It is hard to believe that an administrative fee of \$64 per participant (which would have amounted to total plan recordkeeper fees of \$1,344 for an entire plan year) would cover the costs of the recordkeeper. If such was the result, sponsors of small plans would have a very difficult time procuring recordkeeper services for their plans. A decision in favor of the plaintiff would have a strong negative impact on the viability of small retirement plans and would likely preclude most recordkeepers from offering services to small employer plans.

This case is only in the pleading stages; we will have to wait for the merits to be addressed in future proceedings. A ruling on this question may help to clarify how to determine whether fees are reasonable for small plans.

◆ "It is important to note that ERISA indicates that plan assets can be used only to pay permissible and reasonable fees and expenses for that particular plan, assuming the plan document permits it. Fiduciaries should be mindful that an 'equal' fee for multiple plans with the same recordkeeper may or may not be appropriate."

#### Recognizing (and Solving) Common Loan Errors

While participant loan programs are a fairly typical defined contribution plan offering, they are not without complexity. Changes in a participant's pay frequency (e.g., biweekly to semi-monthly), changes in payroll systems or plan recordkeepers, and poor communication between multiple recordkeepers for a given plan can all give rise to loan errors.

The more common errors occurring in recordkeeping and payroll functions can include general purpose loans with a final repayment date later than five years after the loan's issuance, loans for active

participants in default at the expiration of the cure period, and confusion in handling repayment periods for participants on military leave and other leaves of absence.

Corrections generally include collecting accrued interest on defaulted loans and reamortizing the loans (if permitted). It is important to recognize the potential for an adverse taxable event for the impacted participant, regardless of how the error occurred, and to take action to mitigate such a result to the extent possible.

#### Further Delay for Portions of the DOL Fiduciary Regulations

As reported previously, portions of the Department of Labor's (DOL's) fiduciary rule took effect on June 9, 2017, with the remainder scheduled to take effect on January 1, 2018. However, the DOL has proposed that the January 1, 2018 effective date for the portions of the regulation that have yet to take effect be pushed out to July 1, 2019. Changes to these parts of the rules could still be made. We will continue to monitor the developments associated with these rules and keep plan sponsors updated.

#### Disability Claims Procedure Changes may be Delayed

New regulations related to the ERISA claims procedures for disability claims (including claims for benefits triggered by disability under certain retirement plans) were scheduled to take effect January 1 for claims made on and after January 1, 2018. These rules impact plan sponsors that do not outsource (to a third party) the determination of whether a participant satisfies the requirements to be considered disabled.

On October 12, 2017, the DOL proposed a rule to delay for 90 days—through April 1, 2018—the applicability of the final rule amending the disability claims procedure requirements applicable to ERISA-covered employee benefit plans. The delay is intended to permit additional comments regarding the rule and possible alternatives that may be less likely to increase disability benefit plan costs or the prospect for litigation. If the disability claim procedure regulations are finalized in their current form, they would apply to claims for disability benefits filed after April 1, 2018.

Aon Hewitt's Retirement Legal Consulting & Compliance consultants will continue to monitor developments in the coming months to confirm how best to proceed.

## Recent Publications

### Retirement Plan Record Retention Review

By Dan Schwallie

*Journal of Pension Planning & Compliance* 43 (Winter 2018)

Employers sometimes ask how long they should retain retirement plan records. This article reviews relevant rules under the Internal Revenue Code and the Employee Retirement Income Security Act (ERISA) and related guidance, as well as related court decisions.

[Click here to read the article.](#)



# Aon Hewitt Retirement Legal Consulting & Compliance Consultants

**Tom Meagher**

Practice Leader  
Somerset, NJ  
732.302.2188  
thomas.meagher@aonhewitt.com

**David Alpert**

Somerset, NJ  
732.302.2502  
david.alpert@aonhewitt.com

**Hitz Burton**

Irvine, CA  
949.823.7417  
hitz.burton@aonhewitt.com

**Ron Gerard**

Norwalk, CT  
203.523.8266  
ron.gerard@aonhewitt.com

**Elizabeth Groenewegen**

San Francisco, CA  
415.486.6934  
elizabeth.groenewegen@aonhewitt.com

**Dick Hinman**

San Francisco, CA  
415.486.6935  
dick.hinman@aonhewitt.com

**Clara Kim**

Somerset, NJ  
732.537.4068  
clara.kim@aonhewitt.com

**Linda M. Lee**

Irvine, CA  
949.823.7664  
linda.lee.2@aonhewitt.com

**Meghan Lynch**

Washington, D.C.  
202.969.3290  
meghan.lynch@aonhewitt.com

**Susan Motter**

Atlanta, GA  
770.690.7443  
susan.motter@aonhewitt.com

**Beverly Rose**

Austin, TX  
512.241.2115  
beverly.rose@aonhewitt.com

**Jennifer Ross Berrian**

San Francisco, CA  
415.486.6959  
jennifer.ross.berrian@aonhewitt.com

**Dan Schwallie**

Hudson, OH  
330.221.4155  
dan.schwallie@aonhewitt.com

**John Van Duzer**

Lincolnshire, IL  
847.442.3155  
john.van.duzer@aonhewitt.com

**About Aon**

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance. For further information on our capabilities and to learn how we empower results for clients, please visit [aon.mediaroom.com](http://aon.mediaroom.com).

**© 2017 Aon plc.**

This document is intended for general information purposes only and should not be construed as advice or opinions on any specific facts or circumstances. The comments in this summary are based upon Aon Hewitt's preliminary analysis of publicly available information. The content of this document is made available on an "as is" basis, without warranty of any kind. Aon Hewitt disclaims any legal liability to any person or organization for loss or damage caused by or resulting from any reliance placed on that content. Aon Hewitt reserves all rights to the content of this document. Information is presented by the Aon Hewitt Retirement Legal Consulting & Compliance practice, an Aon Hewitt affiliated entity.

(This page left blank intentionally)