

Nevada System of Higher Education

Third Quarter 2019 Discussion Guide

November 21, 2019

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Discussion Topics

Section 1	Capital Markets Review
Section 2	Performance Review
Section 3	Noteworthy Items
Section 4	Vanguard Flash Report
Section 5	Investment Structure Discussion
Section 6	Legal & Compliance Update

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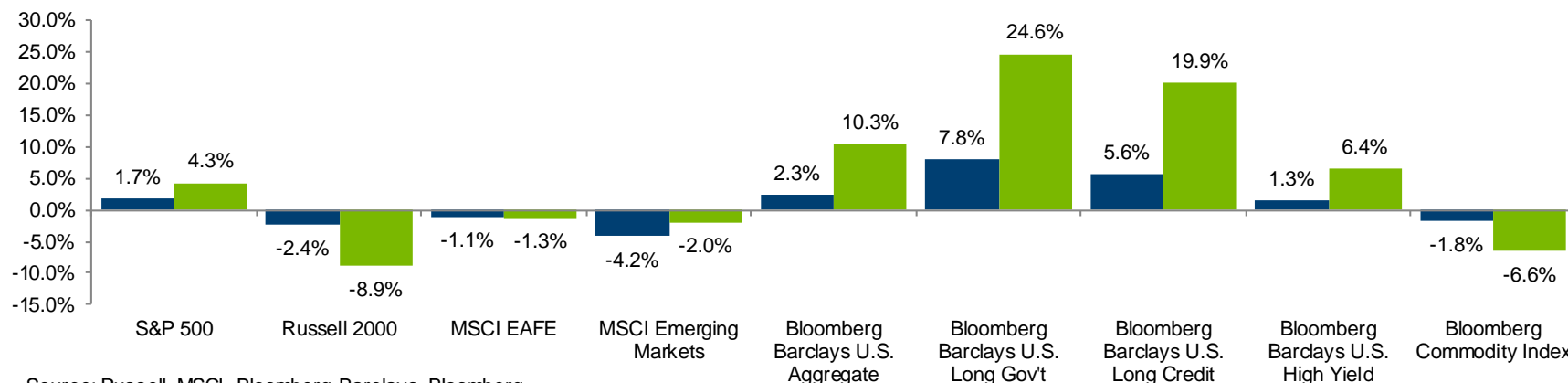
Discussion Topics

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Market Highlights

SHORT TERM RETURNS AS OF 09/30/2019

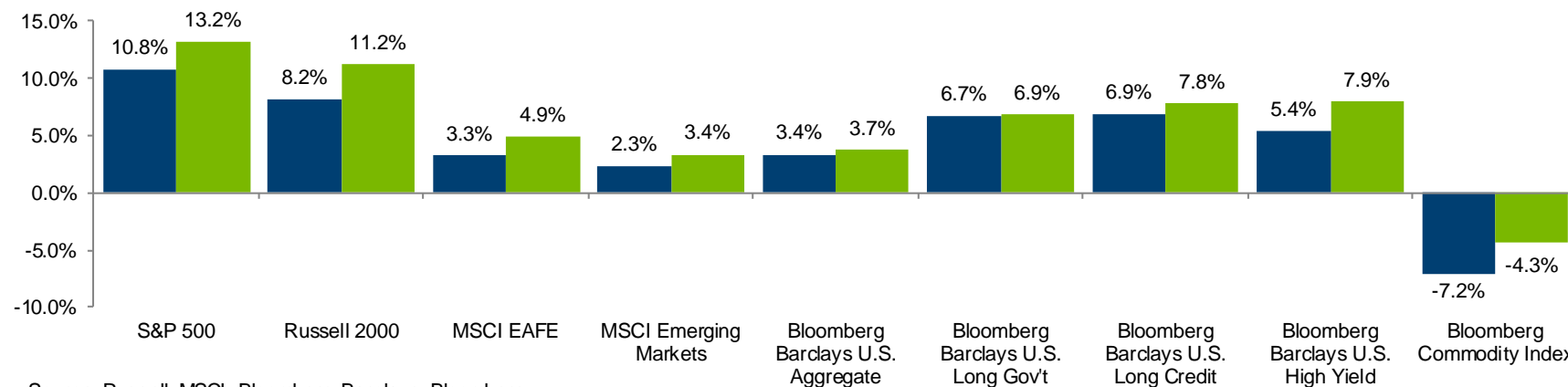
■ Third Quarter 2019 ■ One-Year



Source: Russell, MSCI, Bloomberg Barclays, Bloomberg

LONG TERM ANNUALIZED RETURNS AS OF 09/30/2019

■ Five-Year ■ Ten-Year



Source: Russell, MSCI, Bloomberg Barclays, Bloomberg

Market Highlights

Returns of the Major Capital Markets

Period Ending 09/30/2019

	Third Quarter	YTD	1-Year	3-Year ¹	5-Year ¹	10-Year ¹
Equity						
MSCI All Country World IMI	-0.18%	15.87%	0.48%	9.36%	6.61%	8.45%
MSCI All Country World	-0.03%	16.20%	1.38%	9.71%	6.65%	8.35%
Dow Jones U.S. Total Stock Market	1.14%	20.05%	2.81%	12.78%	10.40%	13.09%
Russell 3000	1.16%	20.09%	2.92%	12.83%	10.44%	13.08%
S&P 500	1.70%	20.55%	4.25%	13.39%	10.84%	13.24%
Russell 2000	-2.40%	14.18%	-8.89%	8.23%	8.19%	11.19%
MSCI All Country World ex-U.S. IMI	-1.72%	11.38%	-1.84%	6.10%	3.05%	4.66%
MSCI All Country World ex-U.S.	-1.80%	11.56%	-1.23%	6.33%	2.90%	4.45%
MSCI EAFE	-1.07%	12.80%	-1.34%	6.48%	3.27%	4.90%
MSCI EAFE (Local Currency)	1.75%	15.67%	1.56%	8.30%	6.02%	7.04%
MSCI Emerging Markets	-4.25%	5.89%	-2.02%	5.97%	2.33%	3.37%
Fixed Income						
Bloomberg Barclays Global Aggregate	0.71%	6.32%	7.60%	1.59%	1.99%	2.34%
Bloomberg Barclays U.S. Aggregate	2.27%	8.52%	10.30%	2.92%	3.38%	3.75%
Bloomberg Barclays U.S. Long Gov't	7.83%	19.61%	24.58%	4.11%	6.73%	6.86%
Bloomberg Barclays U.S. Long Credit	5.62%	21.92%	19.91%	6.46%	6.90%	7.78%
Bloomberg Barclays U.S. Long Gov't/Credit	6.58%	20.93%	21.88%	5.56%	6.81%	7.42%
Bloomberg Barclays U.S. TIPS	1.35%	7.58%	7.13%	2.21%	2.45%	3.46%
Bloomberg Barclays U.S. High Yield	1.33%	11.41%	6.36%	6.07%	5.37%	7.94%
Bloomberg Barclays Global Treasury ex U.S.	0.07%	5.07%	7.10%	0.33%	1.35%	1.28%
JP Morgan EMBI Global (Emerging Markets)	1.34%	12.08%	10.74%	3.84%	5.10%	6.51%
Commodities						
Bloomberg Commodity Index	-1.84%	3.13%	-6.57%	-1.50%	-7.18%	-4.32%
Goldman Sachs Commodity Index	-4.18%	8.61%	-16.31%	1.54%	-11.74%	-5.43%
Hedge Funds						
HFR1 Fund-Weighted Composite ²	-0.39%	6.81%	0.40%	3.78%	2.90%	3.97%
HFR1 Fund of Funds ²	-0.90%	5.21%	0.01%	3.16%	1.95%	2.67%
Real Estate						
NAREIT U.S. Equity REITS	7.80%	26.96%	18.42%	7.36%	10.26%	13.04%
NCREIF NFI - ODCE	1.31%	3.78%	5.59%	7.30%	9.34%	10.86%
FTSE Global Core Infrastructure Index	2.83%	21.70%	17.23%	11.35%	8.32%	11.02%
Private Equity						
Burgiss Private iQ Global Private Equity ³			11.96%	14.28%	11.83%	14.11%

MSCI Indices show net total returns. All other indices show gross total returns.

¹ Periods are annualized.

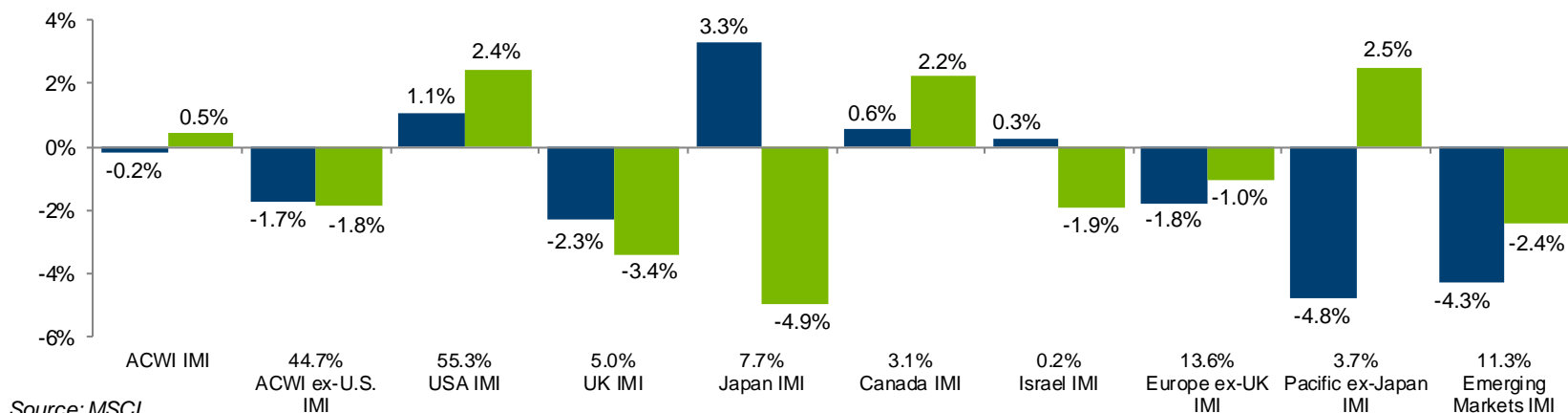
² Latest 5 months of HFR data are estimated by HFR and may change in the future.

³ Burgiss Private iQ Global Private Equity data is as at March 31, 2019

Global Equity Markets

**GLOBAL MSCI IMI INDEX RETURNS (USD)
AS OF 09/30/2019**

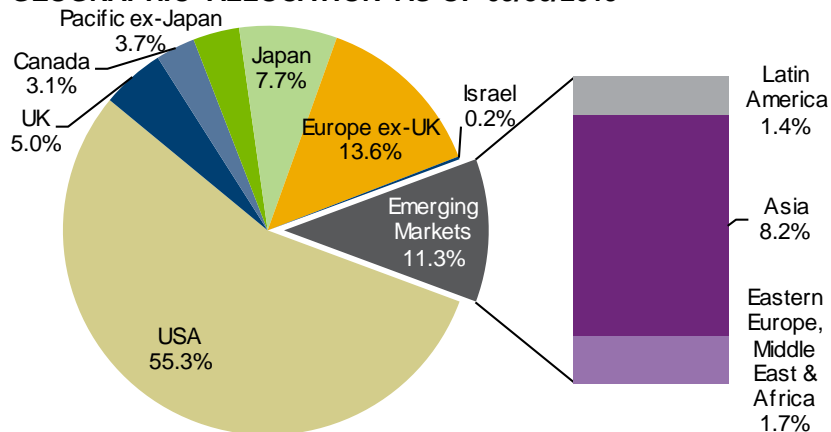
■ Third Quarter 2019 ■ One-Year



- Concerns of slowing global growth and trade wars ramped up significantly over the quarter before giving way to monetary stimulus that helped to bolster stocks. In local currency terms, the MSCI AC World Investable Market Index returned 1.1% but due to U.S. dollar appreciation, global equities returned -0.2% in USD terms.
- Japanese stocks were the strongest performers (3.3%) where significant multiple expansion saw cyclical sectors, such as the Consumer Discretionary sector, outperform strongly.
- Pacific ex-Japan was the worst performer with a return of -4.8%, significantly dragged down by double-digit decline in Hong Kong equity returns due to slowdown in China and heightened political unrest with growing protests triggered by a controversial extradition bill.
- Emerging Markets (EM) equities fell sharply at -4.3% as impact of trade concerns continues to be a strong headwind. In particular, a double-digit decline in Chinese stocks detracted from EM returns as both the rhetoric and size of tariffs increased. Much of the fall can be attributed however to the strong appreciation of the U.S. dollar with the MSCI EM IMI down by 1.9% in local currency terms.

Global Equity Markets

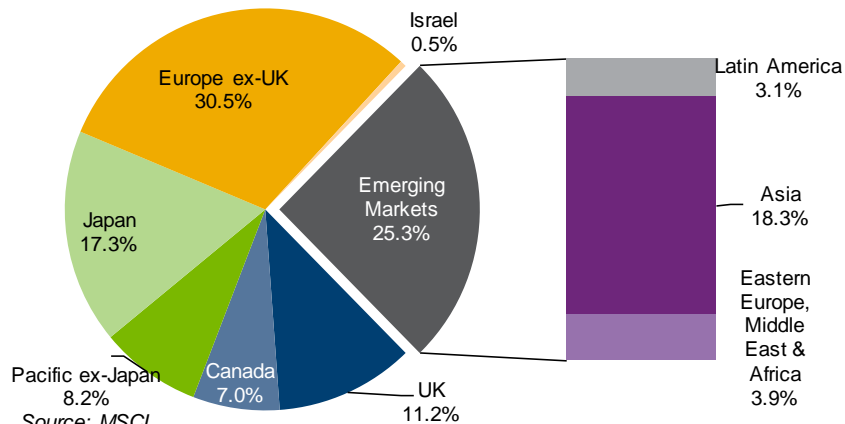
**MSCI ALL COUNTRY WORLD IMI INDEX
GEOGRAPHIC ALLOCATION AS OF 09/30/2019**



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.

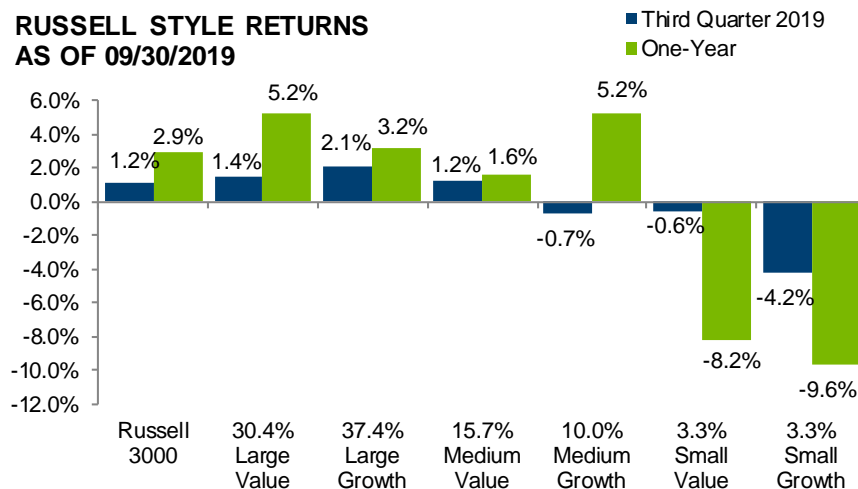
**MSCI ALL COUNTRY WORLD EX-U.S. IMI INDEX
GEOGRAPHIC ALLOCATION AS OF 09/30/2019**



Source: MSCI

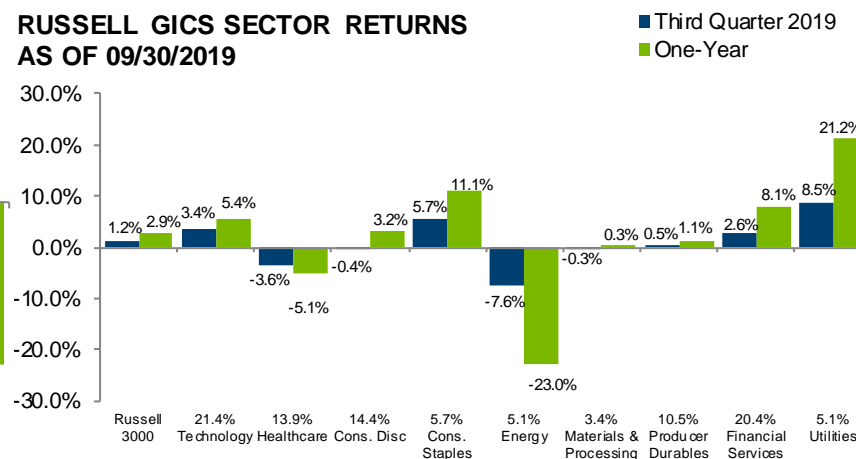
U.S. Equity Markets

**RUSSELL STYLE RETURNS
AS OF 09/30/2019**



Source: Russell Indexes

**RUSSELL GICS SECTOR RETURNS
AS OF 09/30/2019**

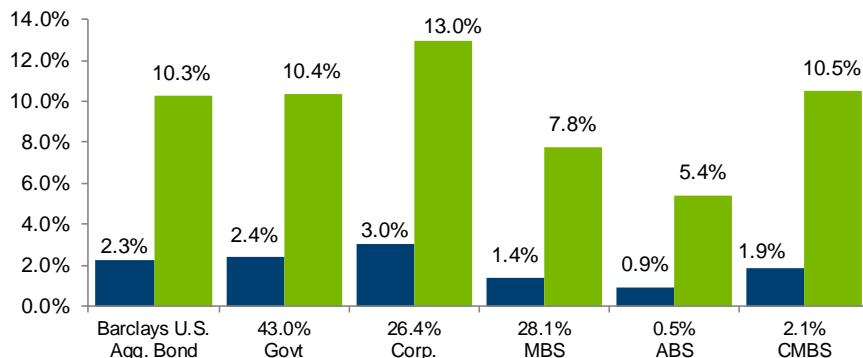


Source: Russell Indexes

- With expectations of corporate earnings turning lower, the positive return for U.S. equities was primarily driven by multiple expansion. In general, less economically-sensitive sectors outperformed which is not too surprising given the deteriorating outlook. The Russell 3000 Index rose 1.2% during the third quarter and 2.9% over the one-year period. Relative to their international peers, U.S. stocks broadly outperformed with particularly resilience from the Financials sector.
- Energy (-7.6%) and Healthcare (-3.6%) were the worst performers over the quarter. The former was affected by lower crude oil prices, while the latter despite its more defensive nature underperformed due to political headwinds. Meanwhile, Utilities (8.5%) and Consumer Staples (5.7%) were the best performing sectors in Q3 2019.
- Performance was mixed across the market capitalization spectrum over the quarter. In general, small cap stocks underperformed both large and medium cap stocks over the quarter. Small-cap stocks underperformed on a fairly broad basis, rather than any meaningful differences in sector allocations although the near double-digit decline in small-cap Health Care stocks was notable. Growth stocks generally underperformed their Value counterparts in Q3 2019 and over the last year.

U.S. Fixed Income Markets

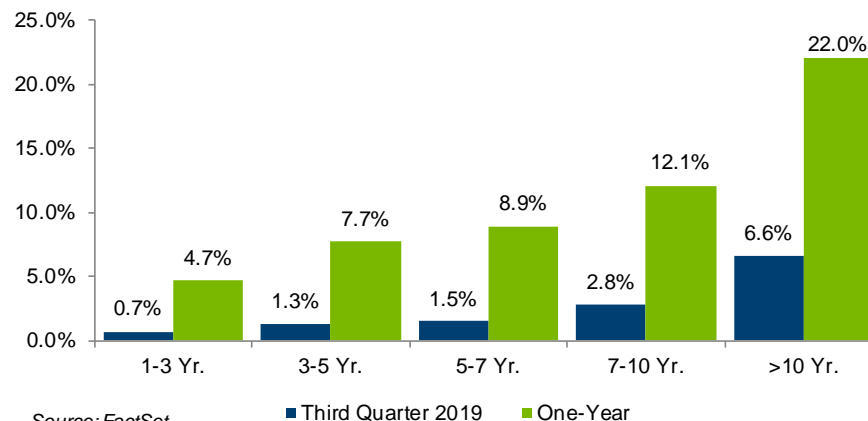
**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY SECTOR
AS OF 09/30/2019**



Source: FactSet

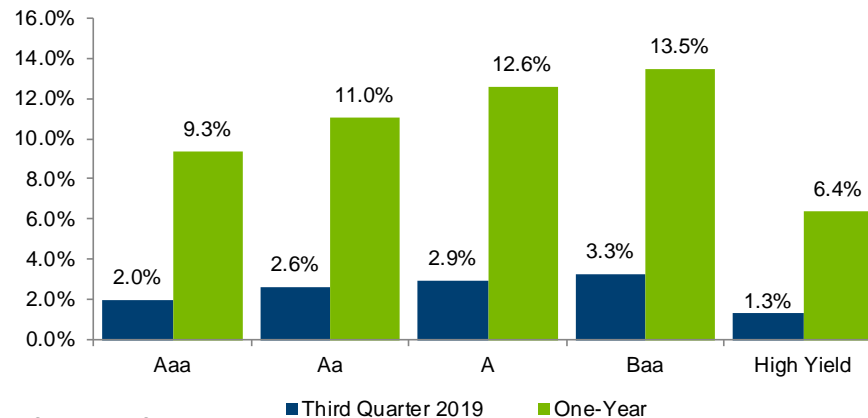
- The Bloomberg Barclays U.S. Aggregate Bond Index rose by 2.3% over the quarter. Corporate bonds were the best performers, returning 3.0%. Securitized debt underperformed other areas of the U.S. bond market with lower duration of the segment attributed to the more modest returns with a return of 0.9%.
- Within investment grade bonds, Baa bonds rose the most at 3.3%. High Yield bonds returned 1.3% with minimal movement in spreads over the quarter.
- As the U.S. yield curve flattened over the quarter, long-maturity bonds outperformed intermediate and short-maturity bonds. Long-maturity bonds returned 6.6% while short-maturity bonds returned only 0.7%.

**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY MATURITY
AS OF 09/30/2019**



Source: FactSet

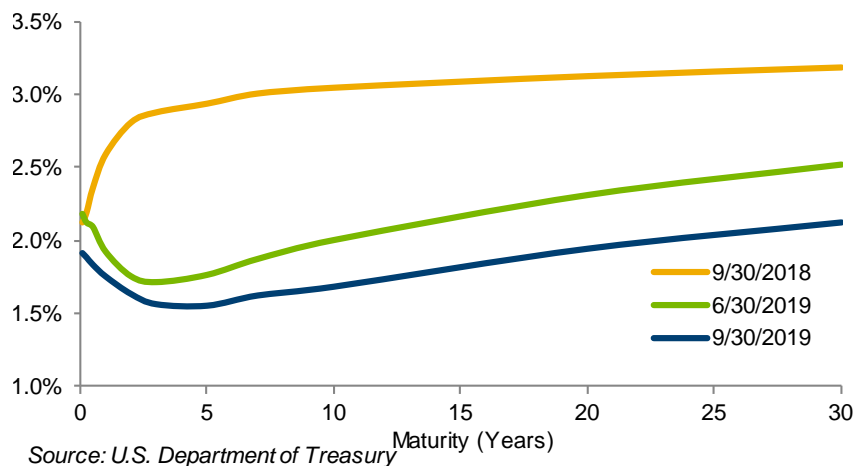
**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY QUALITY
AND HIGH YIELD RETURNS AS OF 09/30/2019**



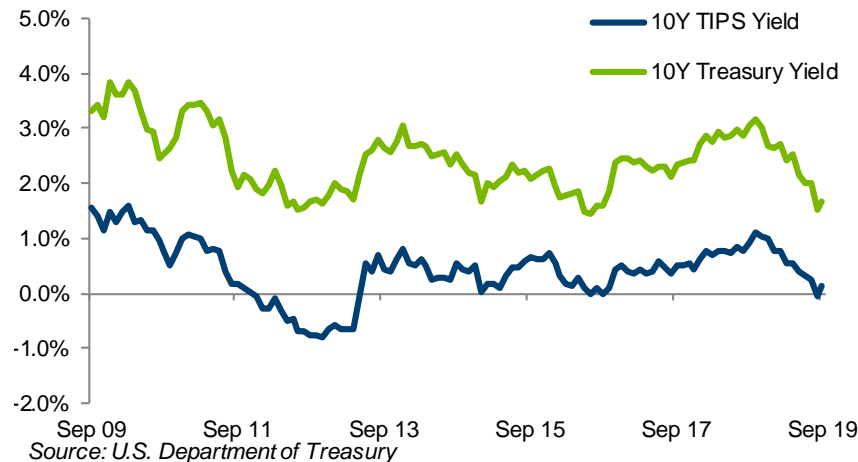
Source: FactSet

U.S. Fixed Income Markets

U.S. TREASURY YIELD CURVE



U.S. 10-YEAR TREASURY AND TIPS YIELDS



- The U.S. nominal yields fell across all maturities with the yield curve flattening over the quarter as longer-term yields decreased by more than short-term yields. Over the quarter, the widely watched spread between 10 and 2-year U.S. Treasury yields briefly fell into negative territory for the first time since 2007, a concerning development as a recession has followed every yield curve inversion since the 1960s.
- The 10-year U.S. Treasury yield ended the quarter at 1.68%, 32bps lower than at the start of the quarter in which the U.S. Federal Reserve (Fed) twice cut the interest rate by 25bps each to 1.75%-2.00%. Despite the two rate cuts, the Fed made it clear that it was not the beginning of a sustained easing cycle. This more conservative messaging was maintained at the September Fed meeting although the Federal Open Market Committee (FOMC) appeared to be divided on the future direction of rates with a member arguing for more aggressive cuts to be made.
- The weaker economic outlook was reflected in the downward movements in TIPS yields by 16bps over the quarter and ended the period at 0.15%, while lower inflation expectations led breakeven inflation lower by 16bps to 1.54%.

Credit Spreads

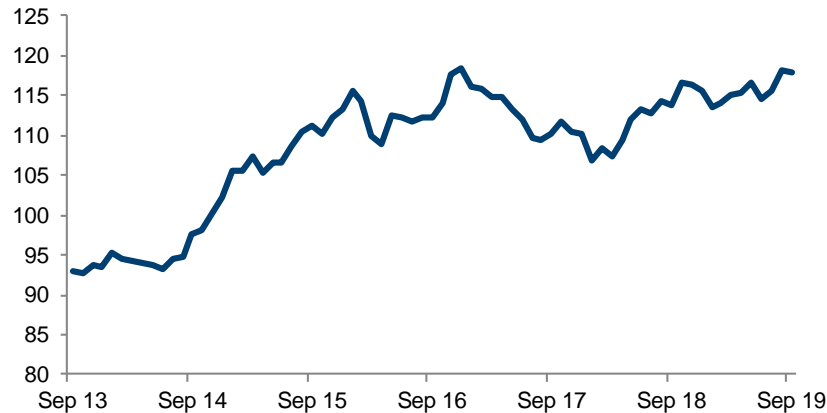
Spread (bps)	09/30/2019	06/30/2019	12/31/2018	Quarterly Change (bps)	One-Year Change (bps)
U.S. Aggregate	46	46	39	0	7
Long Gov't	1	1	2	0	-1
Long Credit	167	161	153	6	14
Long Gov't/Credit	95	92	90	3	5
MBS	46	46	28	0	18
CMBS	70	69	60	1	10
ABS	37	41	38	-4	-1
Corporate	115	115	106	0	9
High Yield	373	377	316	-4	57
Global Emerging Markets	312	282	273	30	39

Source: FactSet, Bloomberg Barclays

- Movements in credit spreads over U.S. Treasuries were mixed over the quarter. There were fairly muted movements in U.S. credit with modest narrowing in U.S. high yield spreads while U.S. corporate spreads were unchanged.
- Emerging market bond spreads widened significantly by 30bps over the quarter. The ongoing trade war, U.S. dollar debt vulnerabilities among certain EM countries given the increase in the 'greenback' and less risk appetite weighed on emerging market debt in general.

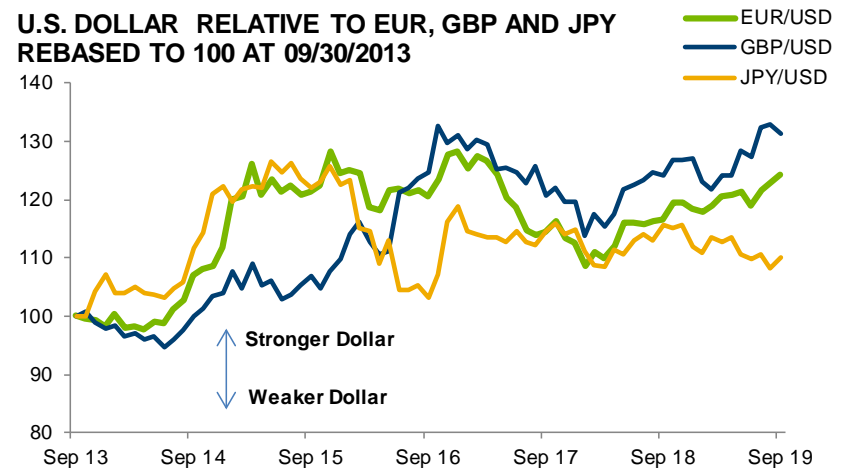
Currency

**TRADE WEIGHTED U.S. DOLLAR INDEX
(1973 = 100)**



Source: Federal Reserve

**U.S. DOLLAR RELATIVE TO EUR, GBP AND JPY
REBASED TO 100 AT 09/30/2013**

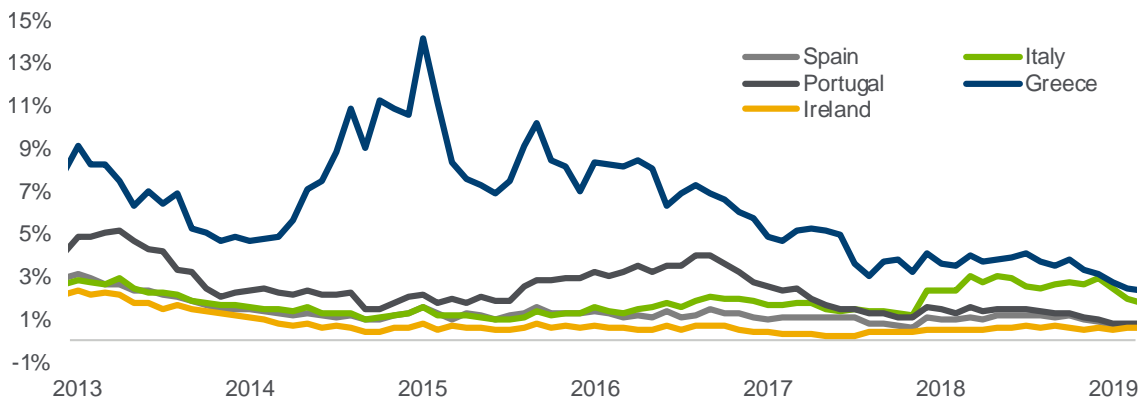


Source: FactSet

- The U.S. dollar continued on an upward trend with economic releases surprising to the upside in the U.S. and cyclical supports – a wide interest rate differential and relative economic strength – remaining intact. The U.S. dollar strengthened against major currencies over the quarter, rising by 2.8% on a trade-weighted basis over the quarter, supported by appreciation against sterling and the euro, up 3.3% and 4.5% respectively. The U.S. dollar appreciated less against the Japanese yen which benefited from some safe haven flows during bouts of market volatility.
- Once again, closely tied to Brexit developments, sterling slipped by just 0.1% on a trade weighted basis but fell by considerably more to a post-EU referendum low against the U.S. dollar. Sterling depreciated by 3.2% against the U.S. dollar.
- The euro was weak over the quarter as economic releases disappointed with data pointing to near-recessionary conditions in the bloc. With the region exposed to global economic activity, the ongoing trade war and decelerating growth weighed on the region and the currency. Further headwinds pushed the euro lower later in the quarter as the ECB eased monetary policy and lowered interest rates. Against this backdrop, the euro slid by c.4% against the U.S. dollar.

European Fixed Income Markets

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

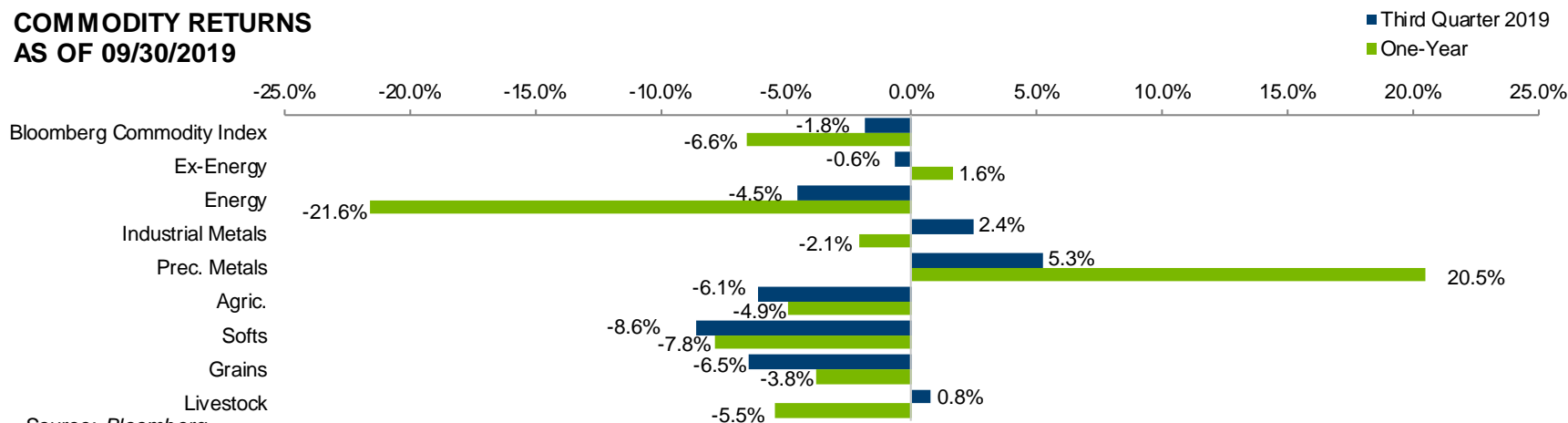


Source: FactSet

- European government bond spreads over 10-year German bunds generally fell across the Euro Area with the exception of Spanish and Irish government bonds. The European Central Bank (ECB) cut its deposit rate by 10bps to -0.5% and announced that its bond purchasing program will be restarted with the purchase of €20billion of bonds each month from November 2019. Furthermore, the ECB indicated that this policy would not be time limited but will be in place until their inflation target is reached.
- German government bund yields fell by 27bps to -0.58% over the quarter after the country's manufacturing sector dived deeper into contraction territory. Meanwhile, the 30-year German bund yield turned negative for the first time in history. Italian government bond yields fell by 129bps to a record low of 0.81% over the quarter as political uncertainty eased after a new coalition government was formally agreed.
- Greek government bond yields fell by 109bps over the quarter to a record low of 1.34%. Greece submitted a request to repay part of its expensive loans from the International Monetary Fund (IMF) early.

Commodities

COMMODITY RETURNS AS OF 09/30/2019



Source: Bloomberg

Note: Softs and Grains are part of the wider Agriculture sector

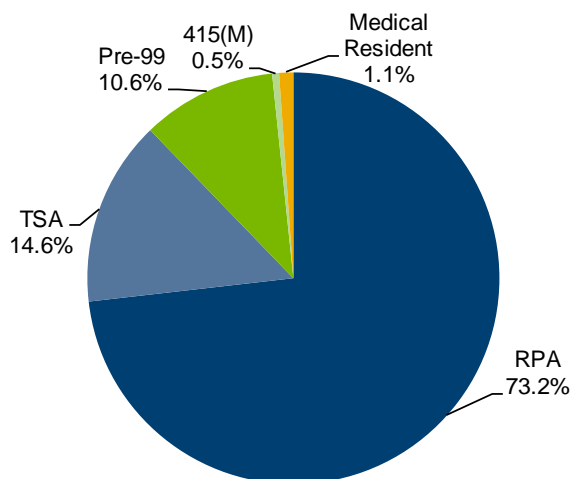
- Commodities fell over the quarter which saw the Bloomberg Commodity Index return -1.8%.
- Despite ongoing supply risks, exacerbated by the drone attacks on oil infrastructure in Saudi Arabia that accounts for nearly half of the Kingdom's production, crude oil prices ended the quarter lower. Weaker energy demand led to lower crude oil prices: the price of Brent crude oil fell by 8.7% to \$61/bbl while WTI crude oil spot price fell by 7.5% to \$54/bbl. Energy sector disappointed with a return of -4.5%.
- Supported partly by safe-haven buying over the quarter, Precious Metals was the best performing sector over the quarter with a return of 5.3%. This took the one-year return to over 20%. All other commodity sectors posted negative returns over the same period.
- Agriculture (-6.1%) was the worst performing sector in Q3 2019. Within the Agriculture sector, Softs fell by 8.6% whilst Grains fell by 6.5%.

Discussion Topics

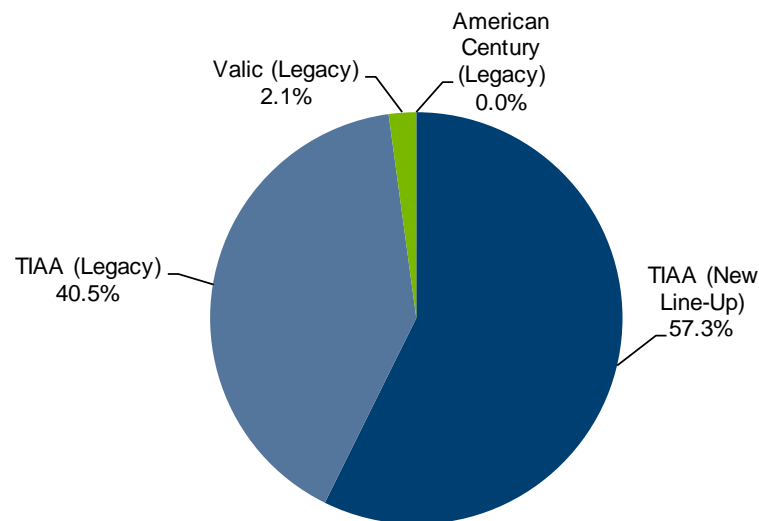
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Asset Allocation

Assets by Plan
As of September 30, 2019



Assets by Vendor
As of September 30, 2019



As of 9/30/2019

Plan	RPA		TSA		Pre-99		415(M)		Medical Resident		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
TIAA (New Line-Up)	\$ 1,518,236,179	61.9%	\$ 316,987,903	64.9%	\$ 40,052,034	11.3%	\$ 16,877,736	92.4%	\$ 27,281,845	73.5%	\$ 1,919,435,697	57.3%
TIAA (Legacy)	\$ 890,274,481	36.3%	\$ 152,109,546	31.1%	\$ 313,558,808	88.6%	\$ 1,395,776	7.6%	\$ 169,206	0.5%	\$ 1,357,507,818	40.5%
Valic (Legacy)	\$ 42,524,501	1.7%	\$ 19,525,285	4.0%	\$ -	0.0%	\$ -	0.0%	\$ 9,665,245	26.0%	\$ 71,715,032	2.1%
American Century (Legacy)	\$ -	0.0%	\$ -	0.0%	\$ 292,031	0.1%	\$ -	0.0%	\$ -	0.0%	\$ 292,031	0.0%
Total	\$ 2,451,035,161	100.0%	\$ 488,622,734	100.0%	\$ 353,902,873	100.0%	\$ 18,273,512	100.0%	\$ 37,116,297	100.0%	\$ 3,348,950,578	100.0%
Other Assets*											\$ 1,929,614	0.1%
Grand Total	\$ 2,451,035,161	73.1%	\$ 488,622,734	14.6%	\$ 353,902,873	10.6%	\$ 18,273,512	0.5%	\$ 37,116,297	1.1%	\$ 3,350,880,191	100.0%

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

Source: TIAA

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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			
							3rd Quarter 2019	2nd Quarter 2019	1st Quarter 2019	4th Quarter 2018
Vanguard Target Retirement Income Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2015 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2020 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2025 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2030 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2035 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2040 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2045 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2050 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2055 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2060 Trust Plus	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2065 Trust Plus*	No	No	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			
							3rd Quarter 2019	2nd Quarter 2019	1st Quarter 2019	4th Quarter 2018
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.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2025 - Instl.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2030 - Instl.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2035 - Instl.	No	No	No	No	No (Buy)	No				
Vanguard Target Retirement 2040 - Instl.	No	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	No	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			
							3rd Quarter 2019	2nd Quarter 2019	1st Quarter 2019	4th Quarter 2018
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 FTSE Social Index Fund	Yes	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	No	No	No	No	No (Buy)	No				
Vanguard Federal Money Market Fund	Yes	No	No	No	No (Buy)	No				
T. Rowe Price Stable Value Common Trust Fund A	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	No	No	No	No	No (Buy)	No				
American Century High Income	Yes	Yes	No	No	No (Buy)	No				
T. Rowe Price Instl. Large Cap Growth Fund	No	Yes	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	Yes	Yes	No	No	No (Buy)	No				
Dodge & Cox Global Stock Fund	Yes	Yes	No	No	No (Buy)	No				
Harding Loevner International Equity Instl.	No	Yes	No	No	No (Buy)	No				
MFS International Value Fund	No	No	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.

Tier I(a) Performance Summary

As of 9/30/2019

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Total Plan	3,350,880,191	100.0								03/01/2014
Tier I (a)	837,654,334	25.0								03/01/2014
Vanguard Target Retirement Income Trust Plus	24,211,058	0.7	1.5 (30)	10.4 (50)	6.8 (19)	5.1 (41)	4.6 (26)		5.3 (28)	09/01/2011
Vanguard Target Retirement Income Trust I			1.5 (37)	10.3 (50)	6.8 (19)	5.1 (41)	4.6 (27)	5.8	5.3 (28)	
Vanguard Target Retirement Income Trust II			1.5 (36)	10.3 (52)	6.8 (19)	5.1 (42)	4.6 (27)	5.8	5.3 (28)	
Vanguard Target Income Composite Index			1.5 (42)	10.4 (49)	6.8 (19)	5.2 (31)	4.7 (24)	5.9	5.4 (27)	
Vanguard Target Retirement 2015 Trust Plus	50,368,678	1.5	1.4 (13)	11.3 (45)	6.1 (14)	6.2 (31)	5.4 (24)		7.0 (19)	09/01/2011
Vanguard Target Retirement 2015 Trust I			1.4 (13)	11.3 (45)	6.1 (14)	6.2 (31)	5.4 (25)	7.3	7.0 (19)	
Vanguard Target Retirement 2015 Trust II			1.4 (14)	11.3 (45)	6.1 (20)	6.2 (32)	5.4 (26)	7.3	7.0 (21)	
Vanguard Target 2015 Composite Index			1.4 (19)	11.4 (44)	6.2 (12)	6.4 (28)	5.5 (21)	7.4	7.1 (15)	
Vanguard Target Retirement 2020 Trust Plus	89,206,007	2.7	1.2 (38)	12.7 (29)	5.4 (40)	7.2 (19)	6.1 (2)		7.9 (7)	09/01/2011
Vanguard Target Retirement 2020 Trust I			1.2 (38)	12.7 (29)	5.4 (43)	7.1 (19)	6.1 (3)	8.0	7.9 (8)	
Vanguard Target Retirement 2020 Trust II			1.2 (39)	12.7 (30)	5.3 (44)	7.1 (20)	6.0 (3)	8.0	7.9 (8)	
Vanguard Target 2020 Composite Index			1.2 (40)	12.7 (23)	5.4 (38)	7.3 (8)	6.2 (1)	8.2	8.0 (4)	
Vanguard Target Retirement 2025 Trust Plus	109,311,517	3.3	1.1 (41)	13.8 (20)	5.0 (40)	7.9 (15)	6.5 (1)		8.5 (10)	09/01/2011
Vanguard Target Retirement 2025 Trust I			1.1 (41)	13.8 (20)	5.0 (41)	7.8 (17)	6.5 (6)	8.6	8.5 (14)	
Vanguard Target Retirement 2025 Trust II			1.1 (42)	13.7 (21)	4.9 (42)	7.8 (17)	6.5 (6)	8.5	8.5 (17)	
Vanguard Target 2025 Composite Index			1.1 (44)	13.8 (19)	5.0 (34)	8.0 (8)	6.6 (1)	8.7	8.6 (5)	
Vanguard Target Retirement 2030 Trust Plus	133,531,653	4.0	0.9 (42)	14.3 (41)	4.3 (51)	8.4 (27)	6.8 (21)		9.0 (18)	09/01/2011
Vanguard Target Retirement 2030 Trust I			0.9 (41)	14.3 (41)	4.2 (51)	8.4 (31)	6.8 (22)	9.0	9.0 (19)	
Vanguard Target Retirement 2030 Trust II			0.9 (46)	14.3 (42)	4.2 (51)	8.4 (32)	6.7 (23)	9.0	9.0 (20)	
Vanguard Target 2030 Composite Index			0.9 (51)	14.4 (40)	4.3 (49)	8.5 (21)	6.9 (13)	9.2	9.2 (11)	
Vanguard Target Retirement 2035 Trust Plus	137,953,507	4.1	0.7 (40)	14.9 (49)	3.5 (42)	8.9 (33)	7.0 (23)		9.5 (14)	09/01/2011
Vanguard Target Retirement 2035 Trust I			0.7 (40)	14.9 (49)	3.5 (43)	8.9 (33)	7.0 (23)	9.4	9.5 (15)	
Vanguard Target Retirement 2035 Trust II			0.7 (43)	14.9 (50)	3.5 (45)	8.8 (34)	7.0 (25)	9.4	9.5 (15)	
Vanguard Target 2035 Composite Index			0.7 (43)	15.0 (44)	3.6 (37)	9.0 (23)	7.1 (19)	9.6	9.7 (11)	

Note: Trust II through October 31, 2017; Trust I through October 25, 2018; Trust Plus thereafter.

Tier I(a) Performance Summary (cont'd.)

As of 9/30/2019

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Vanguard Target Retirement 2040 Trust Plus	123,800,025	3.7	0.5 (44)	15.4 (52)	2.7 (50)	9.4 (21)	7.3 (22)		9.9 (13)	09/01/2011
Vanguard Target Retirement 2040 Trust I			0.5 (44)	15.4 (53)	2.7 (51)	9.4 (21)	7.2 (23)	9.7	9.9 (13)	
Vanguard Target Retirement 2040 Trust II			0.5 (46)	15.4 (53)	2.7 (51)	9.3 (21)	7.2 (24)	9.7	9.9 (14)	
Vanguard Target 2040 Composite Index			0.5 (43)	15.5 (51)	2.8 (48)	9.5 (14)	7.4 (12)	9.9	10.1 (10)	
Vanguard Target Retirement 2045 Trust Plus	94,250,754	2.8	0.3 (53)	15.8 (56)	2.2 (55)	9.5 (24)	7.3 (24)		9.9 (14)	09/01/2011
Vanguard Target Retirement 2045 Trust I			0.3 (53)	15.8 (56)	2.2 (55)	9.5 (25)	7.3 (25)	9.8	9.9 (15)	
Vanguard Target Retirement 2045 Trust II			0.3 (53)	15.8 (56)	2.1 (56)	9.5 (25)	7.3 (26)	9.7	9.9 (15)	
Vanguard Target 2045 Composite Index			0.3 (52)	15.9 (47)	2.3 (52)	9.7 (15)	7.5 (15)	9.9	10.1 (11)	
Vanguard Target Retirement 2050 Trust Plus	52,597,157	1.6	0.3 (46)	15.8 (60)	2.2 (52)	9.5 (30)	7.3 (25)		10.0 (14)	09/01/2011
Vanguard Target Retirement 2050 Trust I			0.3 (51)	15.7 (61)	2.1 (53)	9.5 (33)	7.3 (25)	9.8	9.9 (14)	
Vanguard Target Retirement 2050 Trust II			0.3 (44)	15.7 (61)	2.1 (53)	9.5 (34)	7.3 (25)	9.7	9.9 (17)	
Vanguard Target 2050 Composite Index			0.3 (43)	15.9 (52)	2.3 (45)	9.7 (23)	7.5 (21)	9.9	10.1 (11)	
Vanguard Target Retirement 2055 Trust Plus	17,182,982	0.5	0.3 (41)	15.8 (65)	2.2 (45)	9.5 (35)	7.3 (30)			09/01/2011
Vanguard Target Retirement 2055 Trust I			0.3 (42)	15.8 (65)	2.1 (45)	9.5 (36)	7.3 (30)		9.9 (29)	
Vanguard Target Retirement 2055 Trust II			0.3 (42)	15.8 (65)	2.1 (45)	9.5 (36)	7.3 (33)		9.9 (30)	
Vanguard Target 2055 Composite Index			0.3 (40)	15.9 (54)	2.3 (40)	9.7 (28)	7.5 (22)		10.1 (16)	
Vanguard Target Retirement 2060 Trust Plus	5,227,633	0.2	0.3 (38)	15.8 (76)	2.1 (34)	9.5 (44)	7.3 (40)		9.2	04/01/2012
Vanguard Target Retirement 2060 Trust I			0.3 (38)	15.8 (76)	2.1 (34)	9.5 (46)	7.3 (40)		9.2	
Vanguard Target Retirement 2060 Trust II			0.3 (38)	15.8 (76)	2.1 (35)	9.5 (50)	7.3 (41)		9.2	
Vanguard Target 2060 Composite Index			0.3 (31)	15.9 (72)	2.3 (30)	9.7 (35)	7.5 (35)		9.3	
Vanguard Target Retirement 2065 Trust Plus	13,364	0.0	0.3 (36)	15.8 (75)	2.2 (31)				6.7 (29)	08/01/2017
Vanguard Target Retirement 2065 Trust I			0.3 (36)	15.8 (75)	2.3 (30)				6.7 (29)	
Vanguard Target Retirement 2065 Trust II			0.3 (36)	15.8 (75)	2.3 (30)				6.7 (29)	
Vanguard Target 2065 Composite Index			0.3 (31)	15.9 (72)	2.3 (30)				6.8 (27)	

Note: Trust II through October 31, 2017; Trust I through October 25, 2018; Trust Plus thereafter.

Tier I Performance Summary

As of 9/30/2019

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Tier I	142,005,796	4.2								02/01/2014
Vanguard Target Retirement Income - Instl.	9,928,547	0.3	1.5 (16)	10.3 (46)	6.7 (12)	5.1 (59)			4.9 (43)	07/01/2015
Vanguard Tgt Ret Inc;Inv (VTINX)			1.5 (15)	10.3 (45)	6.8 (12)	5.1 (59)	4.6	5.8	4.8 (44)	
Vanguard Target Income Composite Index			1.5 (17)	10.4 (42)	6.8 (11)	5.2 (50)	4.7	5.9	5.0 (38)	
Vanguard Target Retirement 2015 - Instl.	16,443,246	0.5	1.4 (16)	11.2 (47)	6.1 (17)	6.2 (32)			5.5 (31)	07/01/2015
Vanguard Tgt Ret2015;Inv (VTXVX)			1.4 (14)	11.3 (46)	6.1 (14)	6.2 (41)	5.3	7.3	5.5 (32)	
Vanguard Target 2015 Composite Index			1.4 (19)	11.4 (44)	6.2 (12)	6.4 (28)	5.5	7.4	5.7 (26)	
Vanguard Target Retirement 2020 - Instl.	21,687,506	0.6	1.2 (37)	12.6 (30)	5.3 (44)	7.1 (21)			6.1 (6)	07/01/2015
Vanguard Tgt Ret2020;Inv (VTWNX)			1.2 (39)	12.6 (31)	5.3 (48)	7.1 (23)	6.0	8.0	6.1 (9)	
Vanguard Target 2020 Composite Index			1.2 (40)	12.7 (23)	5.4 (38)	7.3 (8)	6.2	8.2	6.3 (1)	
Vanguard Target Retirement 2025 - Instl.	22,319,710	0.7	1.1 (41)	13.7 (24)	4.9 (44)	7.8 (17)			6.6 (9)	07/01/2015
Vanguard Tgt Ret2025;Inv (VTTVX)			1.1 (40)	13.7 (24)	4.9 (45)	7.8 (22)	6.4	8.5	6.5 (14)	
Vanguard Target 2025 Composite Index			1.1 (44)	13.8 (19)	5.0 (34)	8.0 (8)	6.6	8.7	6.7 (2)	
Vanguard Target Retirement 2030 - Instl.	20,797,611	0.6	0.9 (51)	14.3 (46)	4.2 (53)	8.3 (34)			6.8 (21)	07/01/2015
Vanguard Tgt Ret2030;Inv (VTHRX)			0.9 (48)	14.3 (43)	4.1 (53)	8.3 (35)	6.7	8.9	6.8 (22)	
Vanguard Target 2030 Composite Index			0.9 (51)	14.4 (40)	4.3 (49)	8.5 (21)	6.9	9.2	7.0 (15)	
Vanguard Target Retirement 2035 - Instl.	12,495,416	0.4	0.7 (40)	14.9 (49)	3.4 (46)	8.8 (34)			7.1 (26)	07/01/2015
Vanguard Tgt Ret2035;Inv (VTTHX)			0.7 (48)	14.8 (56)	3.4 (53)	8.8 (37)	6.9	9.3	7.0 (28)	
Vanguard Target 2035 Composite Index			0.7 (43)	15.0 (44)	3.6 (37)	9.0 (23)	7.1	9.6	7.2 (19)	

Note: Investor class shares through June 30, 2016; Institutional class shares thereafter.

Tier I Performance Summary (cont'd.)

As of 9/30/2019

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Vanguard Target Retirement 2040 - Instl.	11,490,815	0.3	0.5 (42)	15.4 (53)	2.7 (52)	9.3 (22)			7.3 (25)	07/01/2015
Vanguard Tgt Ret2040;Inv (VFORX)			0.5 (42)	15.4 (53)	2.6 (53)	9.3 (31)	7.2	9.6	7.3 (25)	
Vanguard Target 2040 Composite Index			0.5 (43)	15.5 (51)	2.8 (48)	9.5 (14)	7.4	9.9	7.5 (18)	
Vanguard Target Retirement 2045 - Instl.	10,885,010	0.3	0.3 (51)	15.8 (56)	2.1 (56)	9.5 (25)			7.4 (26)	07/01/2015
Vanguard Tgt Ret2045;Inv (VTIVX)			0.3 (59)	15.7 (59)	2.1 (59)	9.4 (31)	7.2	9.7	7.4 (28)	
Vanguard Target 2045 Composite Index			0.3 (52)	15.9 (47)	2.3 (52)	9.7 (15)	7.5	9.9	7.6 (18)	
Vanguard Target Retirement 2050 - Instl.	11,004,674	0.3	0.3 (42)	15.8 (60)	2.1 (54)	9.5 (34)			7.4 (29)	07/01/2015
Vanguard Tgt Ret2050;Inv (VFIFX)			0.3 (45)	15.7 (62)	2.1 (56)	9.4 (39)	7.2	9.7	7.4 (31)	
Vanguard Target 2050 Composite Index			0.3 (43)	15.9 (52)	2.3 (45)	9.7 (23)	7.5	9.9	7.6 (20)	
Vanguard Target Retirement 2055 - Instl.	4,388,088	0.1	0.3 (42)	15.8 (65)	2.2 (45)	9.5 (35)			7.4 (31)	07/01/2015
Vanguard Tgt Ret2055;Inv (VFFVX)			0.3 (46)	15.7 (66)	2.1 (49)	9.4 (41)	7.2		7.3 (38)	
Vanguard Target 2055 Composite Index			0.3 (40)	15.9 (54)	2.3 (40)	9.7 (28)	7.5		7.6 (22)	
Vanguard Target Retirement 2060 - Instl.	501,056	0.0	0.3 (31)	15.8 (75)	2.2 (33)	9.5 (52)			7.4 (43)	07/01/2015
Vanguard Tgt Ret2060;Inv (VTTSX)			0.3 (39)	15.7 (77)	2.1 (39)	9.4 (62)	7.2		7.3 (47)	
Vanguard Target 2060 Composite Index			0.3 (31)	15.9 (72)	2.3 (30)	9.7 (35)	7.5		7.6 (16)	
Vanguard Target Retirement 2065 - Instl.	64,116	0.0	0.3 (32)	15.9 (74)	2.2 (31)				6.6 (30)	08/01/2017
Vanguard Tgt Ret2065;Inv (VLXVX)			0.3 (40)	15.7 (77)	2.1 (38)				6.6 (31)	
Vanguard Target 2065 Composite Index			0.3 (31)	15.9 (72)	2.3 (30)				6.8 (27)	

Note: Investor class shares through June 30, 2016; Institutional class shares thereafter.

Tier II Performance Summary

As of 9/30/2019

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Tier II	916,033,440	27.3								03/01/2014
Vanguard Total Bond Market Index Fund - Inst.	43,781,267	1.3	2.4 (11)	8.7 (53)	10.5 (19)	2.9 (61)	3.4 (46)	3.7 (71)	5.2 (31)	10/01/1995
Performance Benchmark			2.3 (25)	8.7 (51)	10.4 (22)	3.0 (55)	3.4 (38)	3.8 (66)	5.2 (27)	
Vanguard Total Stock Market Index Fund - Inst.	52,091,054	1.6	1.1 (53)	20.0 (48)	2.9 (53)	12.8 (52)	10.4 (46)	13.1 (34)	7.6 (25)	08/01/1997
Performance Benchmark			1.1 (52)	20.0 (48)	2.9 (53)	12.8 (52)	10.4 (45)	13.1 (34)	7.5 (25)	
Vanguard Institutional Index Fund - Instl. Plus	144,642,248	4.3	1.7 (19)	20.6 (10)	4.2 (13)	13.4 (7)	10.8 (4)	13.2 (4)	7.3 (1)	08/01/1997
S&P 500 Index			1.7 (12)	20.6 (9)	4.3 (9)	13.4 (3)	10.8 (3)	13.2 (3)	7.3 (3)	
Vanguard FTSE Social Index Fund - Adm.	3,263,366	0.1	1.9 (27)	21.2 (32)	5.3 (25)	14.6 (29)	11.6 (27)	13.7 (24)	5.0 (75)	06/01/2000
FTSE 4Good U.S. Select Index			1.9 (26)	21.2 (32)	5.3 (24)	14.7 (28)	11.8 (25)	13.9 (20)		
S&P 500 Index			1.7 (32)	20.6 (40)	4.3 (33)	13.4 (42)	10.8 (37)	13.2 (30)	6.0 (46)	
Vanguard Extended Market Index Fund - Inst.	44,309,940	1.3	-1.6 (57)	17.6 (90)	-3.8 (82)	10.0 (91)	8.5 (80)	12.4 (67)	8.3 (52)	08/01/1997
Performance Benchmark			-1.6 (58)	17.5 (90)	-4.0 (82)	9.8 (92)	8.4 (81)	12.3 (71)		
Vanguard Total International Stock Index Fund - Inst.	10,062,410	0.3	-1.6 (56)	11.5 (78)	-1.5 (53)	6.1 (49)	3.2 (54)		4.5 (75)	12/01/2010
Performance Benchmark			-1.7 (58)	11.5 (78)	-1.7 (53)	6.2 (48)	3.2 (54)		4.5 (74)	
Vanguard Developed Market Index Fund - Inst.	49,770,224	1.5	-1.0 (34)	12.7 (61)	-2.0 (57)	6.3 (45)	3.6 (36)		5.6 (35)	02/01/2010
Performance Benchmark			-1.0 (34)	12.9 (61)	-2.0 (57)	6.6 (37)	3.8 (32)		5.6 (36)	
Vanguard Emerging Markets Stock Index Fund - Inst.	32,930,232	1.0	-3.6 (51)	8.1 (52)	1.3 (41)	5.3 (51)	2.1 (50)	3.2 (51)	6.9 (72)	07/01/2000
Performance Benchmark			-3.5 (49)	8.4 (49)	1.5 (39)	5.7 (40)	2.2 (46)	3.4 (49)	6.8 (72)	
Vanguard Federal Money Market Fund - Inv.	25,669,040	0.8	0.5 (21)	1.7 (22)	2.3 (21)	1.5 (19)	0.9 (20)	0.5 (26)	2.9 (25)	11/01/1989
FTSE 3 Month T-Bill			0.6 (7)	1.8 (14)	2.4 (15)	1.5 (17)	1.0 (17)	0.5 (20)	2.8 (39)	
T. Rowe Price Stable Value Common Trust Fund A	6,399,226	0.2	0.6 (53)	1.6 (47)	2.2 (42)				2.1 (31)	02/01/2018
Hueler Stable Value Index			0.6 (14)	1.9 (14)	2.5 (17)				2.4 (15)	
TIAA Traditional - RC	124,225,791	3.7	1.0 (6)	3.0 (9)	4.0 (7)	4.1 (1)	4.2 (1)	4.2 (1)	4.4 (1)	08/01/2005
Hueler Stable Value Index			0.6 (14)	1.9 (14)	2.5 (17)	2.2 (9)	2.0 (11)	2.2 (25)	2.9 (24)	
TIAA Traditional - RCP	83,465,640	2.5	0.8 (8)	2.4 (10)	3.3 (9)	3.3 (1)	3.4 (1)	3.5 (1)	3.7 (1)	06/01/2006
Hueler Stable Value Index			0.6 (14)	1.9 (14)	2.5 (17)	2.2 (9)	2.0 (11)	2.2 (25)	2.7 (24)	
PIMCO Total Return Fund - Inst.	22,463,483	0.7	2.4 (19)	8.6 (60)	10.1 (42)	3.6 (7)	3.6 (20)	4.3 (33)	7.2	06/01/1987
Bimbg. Barc. U.S. Aggregate			2.3 (38)	8.5 (63)	10.3 (30)	2.9 (59)	3.4 (42)	3.7 (67)	6.3	
DFA Inflation-Protected Securities Portfolio - I	22,359,877	0.7	1.0 (53)	7.9 (22)	7.8 (6)	2.2 (30)	2.6 (12)	3.7 (11)	4.1 (18)	10/01/2006
Bimbg. Barc. Global Inflation-Linked: U.S. TIPS			1.3 (31)	7.6 (38)	7.1 (24)	2.2 (27)	2.4 (13)	3.5 (18)	4.0 (23)	

Tier II Performance Summary (cont'd)

As of 9/30/2019

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
American Century High Income - Y	26,276,602	0.8	1.1 (58)	10.0 (63)	4.4 (78)	5.7 (32)	4.7 (36)		5.9 (8)	01/01/2013
ICE BofAML US High Yield Master II Constrained			1.2 (50)	11.5 (30)	6.3 (29)	6.1 (18)	5.4 (14)		5.6 (17)	
T. Rowe Price Instl. Large Cap Growth Fund	32,483,341	1.0	-1.1 (70)	16.8 (91)	1.8 (58)	19.6 (4)	14.7 (6)	15.9 (4)	10.5 (4)	11/01/2001
Russell 1000 Growth Index			1.5 (14)	23.3 (24)	3.7 (30)	16.9 (29)	13.4 (25)	14.9 (19)	8.6 (33)	
Diamond Hill Large Cap - Y	26,703,810	0.8	1.1 (61)	22.4 (2)	5.8 (13)	12.2 (6)	9.9 (2)		13.1 (8)	01/01/2012
Russell 1000 Value Index			1.4 (54)	17.8 (35)	4.0 (36)	9.4 (67)	7.8 (51)		12.3 (36)	
William Blair Small/Mid Cap Growth Fund - I	32,784,347	1.0	0.8 (2)	25.5 (9)	2.1 (6)	17.6 (10)	14.1 (8)	14.8 (11)	11.2 (1)	01/01/2004
Russell 2500 Growth Index			-3.2 (43)	20.0 (41)	-4.1 (37)	12.3 (52)	10.2 (48)	13.5 (36)	9.6 (30)	
DFA U.S. Targeted Value - I	34,943,126	1.0	-1.2 (55)	11.9 (66)	-10.5 (71)	5.4 (48)	5.1 (49)	10.5 (40)	10.4 (8)	03/01/2000
Russell 2500 Value Index			0.1 (31)	15.4 (32)	-4.4 (23)	6.9 (20)	7.0 (23)	11.0 (23)	9.7 (24)	
Dodge & Cox Global Stock Fund	27,335,664	0.8	-0.4 (63)	11.8 (93)	-2.4 (93)	8.3 (80)	4.7 (85)	8.7 (53)	5.2 (78)	05/01/2008
MSCI AC World Index (Net)			0.0 (56)	16.2 (70)	1.4 (67)	9.7 (62)	6.7 (56)	8.3 (57)	4.9 (82)	
Harding Loevner International Equity Instl.	11,756,243	0.4	-2.4 (87)	13.8 (84)	-3.3 (98)	6.7 (54)	5.4 (27)	7.2 (13)	6.1	06/01/1994
MSCI AC World ex USA Growth (Net)			-0.8 (35)	16.2 (60)	2.0 (43)	7.4 (36)	4.9 (32)	5.8 (36)		
MFS International Value Fund - R6	30,502,943	0.9	0.1 (15)	17.2 (5)	4.6 (4)	8.6 (4)	8.7 (1)	9.5 (1)	7.3 (1)	06/01/2006
MSCI AC World ex USA Value (Net)			-2.8 (95)	6.9 (96)	-4.5 (73)	5.2 (68)	0.9 (95)	3.1 (98)	2.4 (83)	
Cohen and Steers Instl. Realty Shares	27,813,567	0.8	9.3 (3)	32.5 (5)	23.7 (5)	9.7 (12)	11.8 (5)	13.4 (17)	12.4 (8)	03/01/2000
FTSE NAREIT Equity REIT Index			7.8 (29)	27.0 (52)	18.4 (48)	7.4 (46)	10.3 (33)	13.0 (32)	11.6 (36)	
Tier III	23,742,127	0.7								03/01/2014
Mutual Fund Window	23,742,127	0.7								03/01/2014
Orphan Accounts	1,429,514,881	42.7								
TIAA Orphan Accounts	1,357,507,818	40.5								
VALIC Orphan Accounts	71,715,032	2.1								
American Century Orphan Accounts	292,031	0.0								
Other Assets	1,929,614	0.1								03/01/2014
Loans	583,546	0.0								03/01/2014
Loans Deemed Distributed	624,871	0.0								03/01/2014
Plan Loan Default Fund	721,196	0.0								07/01/2014

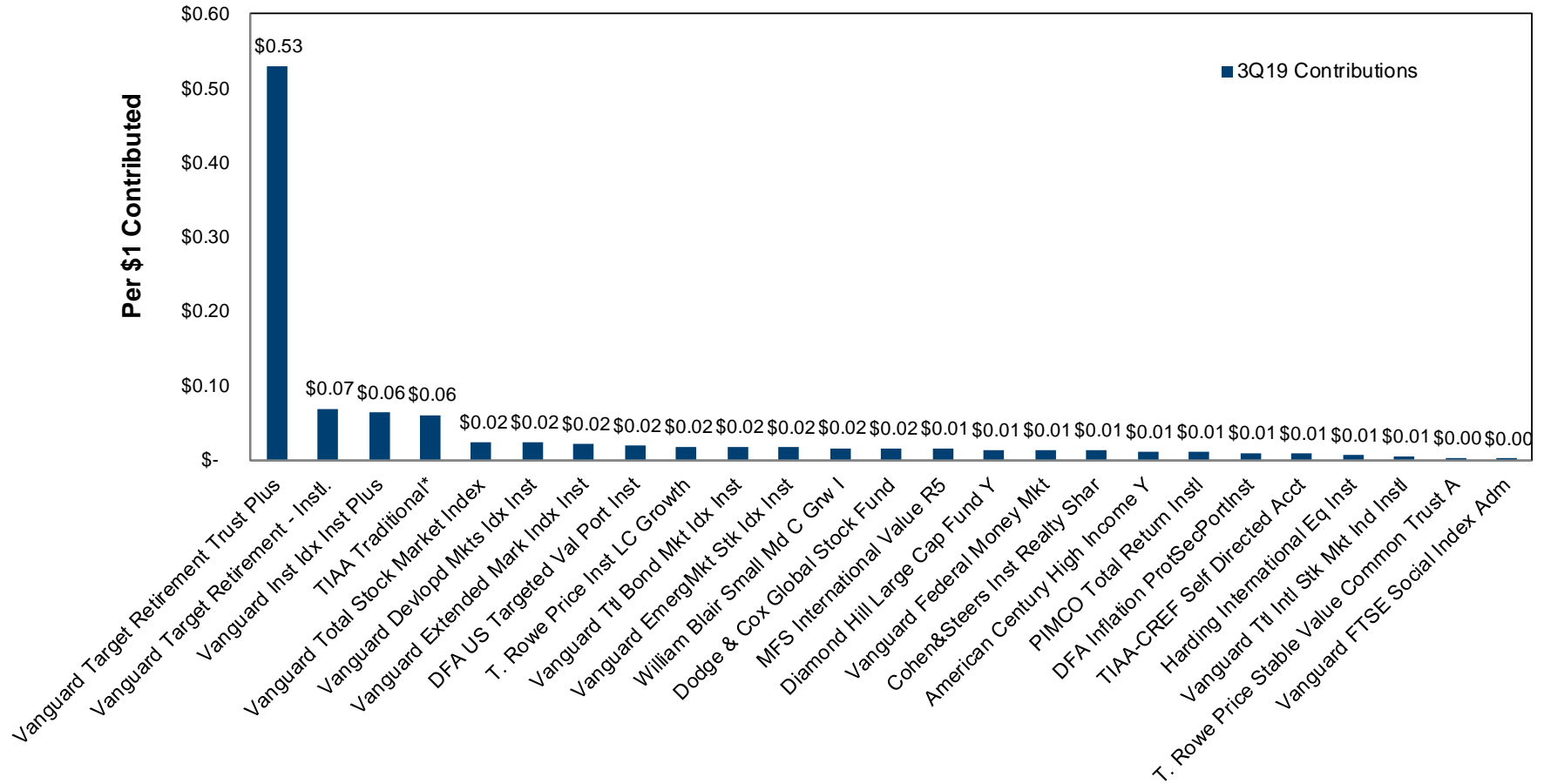
Source: TIAA

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Total Plan Contributions

As of 9/30/2019

Contributed Funds



*TIAA RC 78% / TIAA RCP 22% Contribution Split

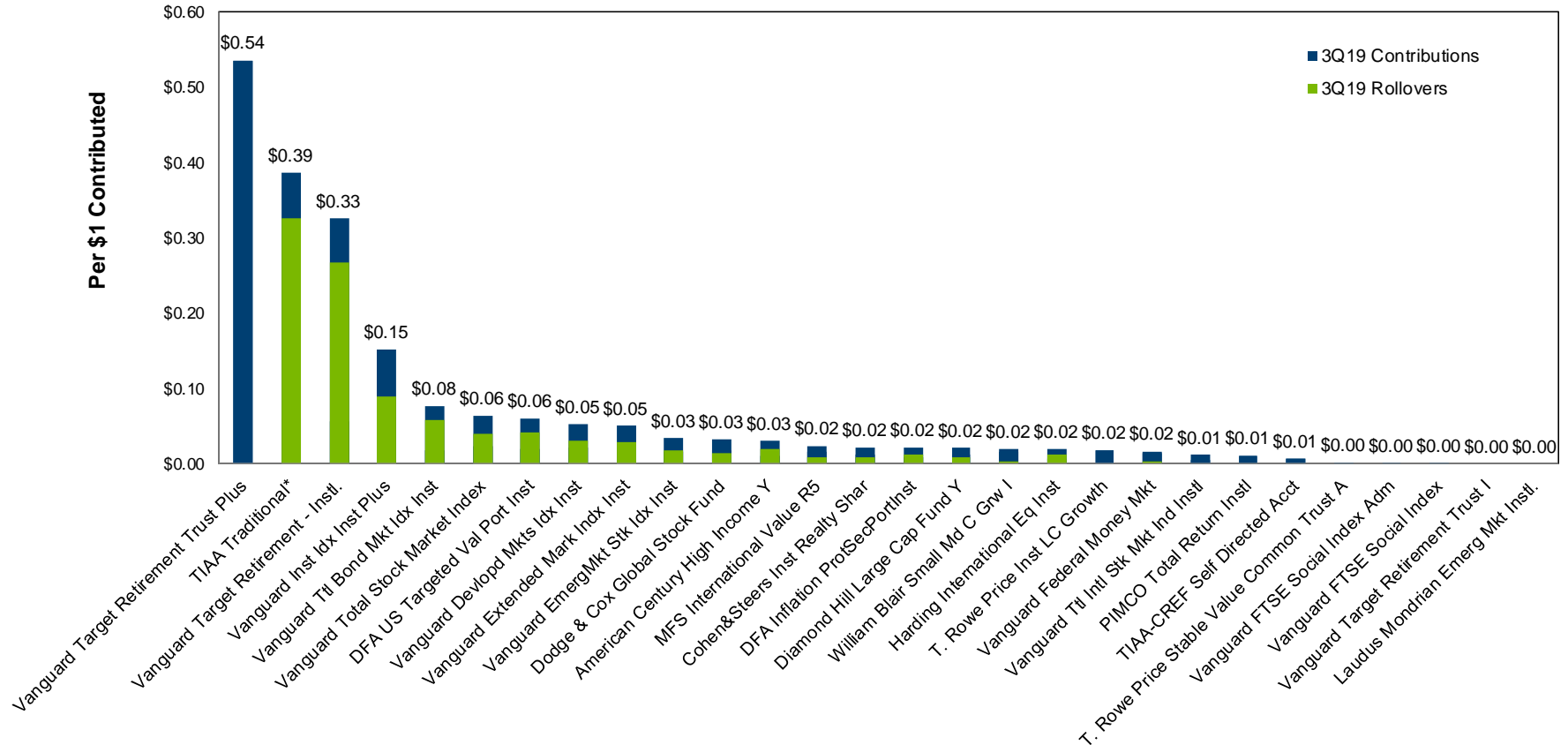
Source: TIAA

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Total Plan Contributions (Including Rollovers)

As of 9/30/2019

Contributed Funds (Including Rollovers)



*TIAA RC 51% / TIAA RCP 49% Contribution and Rollover Split

Source: TIAA

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Quarterly Participant Transfers

As of 9/30/2019

Investment	Transfers In	Transfers Out	Net Transfers	Ending Balance (9/30/2019)	Number of Participants
Vanguard Target Retirement Trust Plus Funds	\$2,840,426	(\$16,778,971)	(\$13,938,545)	\$837,654,334	4,157
Vanguard Target Retirement Mutual Funds	\$643,143	(\$3,390,162)	(\$2,747,019)	\$142,005,796	1,730
Vanguard Total Bond Market Index Inst	\$3,863,610	(\$615,394)	\$3,248,216	\$43,781,267	1,025
Vanguard Total Stock Market Index Inst	\$705,317	(\$1,884,857)	(\$1,179,541)	\$52,091,054	523
Vanguard Institutional Index Inst	\$4,611,681	(\$3,195,803)	\$1,415,877	\$144,642,248	1,611
Vanguard FTSE Social Index Fund	\$570,762	(\$145,247)	\$425,514	\$3,263,366	45
Vanguard Extended Market Index Inst	\$2,562,079	(\$1,177,975)	\$1,384,104	\$44,309,940	1,154
Vanguard Total International Stock Index Inst	\$191,743	(\$587,064)	(\$395,321)	\$10,062,410	164
Vanguard Developed Markets Index Ins	\$2,825,943	(\$1,035,003)	\$1,790,940	\$49,770,224	1,221
Vanguard Emerging Markets Stock Index Inst	\$1,622,834	(\$538,899)	\$1,083,935	\$32,930,232	1,404
Vanguard Federal Money Market Inv	\$4,261,959	(\$3,479,396)	\$782,563	\$25,669,040	212
T. Rowe Price Stable Value Common Trust A	\$943,673	(\$84,260)	\$859,413	\$6,399,226	268
TIAA Traditional	\$5,744,621	(\$1,088,589)	\$4,656,032	\$199,133,890	1,769
PIMCO Total Return Instl	\$1,015,766	(\$917,094)	\$98,672	\$22,463,483	652
DFA Inflation Protected Securities Portfolio Inst	\$1,895,286	(\$197,823)	\$1,697,463	\$22,359,877	953
American Century High Income	\$1,232,495	(\$511,256)	\$721,239	\$26,276,602	885
T. Rowe Price Inst LC Growth	\$1,143,834	(\$1,173,074)	(\$29,240)	\$32,483,341	389
Diamond Hill Large Cap Fund Y	\$1,348,424	(\$1,041,193)	\$307,232	\$26,703,810	996
William Blair Small Md C Grw I	\$1,834,867	(\$1,519,171)	\$315,696	\$32,784,347	1,046
DFA US Targeted Val Port Inst	\$1,162,106	(\$1,283,615)	(\$121,509)	\$34,943,126	1,208
Dodge & Cox Global Stock Fund	\$706,630	(\$1,647,839)	(\$941,209)	\$27,335,664	774
Harding International Equit Inst	\$208,460	(\$787,938)	(\$579,479)	\$11,756,243	730
MFS International Value R6	\$1,318,052	(\$677,705)	\$640,347	\$30,502,943	1,267
Cohen & Steers Inst Realty Shares	\$956,146	(\$610,107)	\$346,039	\$27,813,567	1,468
Mutual Fund Window	\$686,398	(\$527,819)	\$158,579	\$23,742,127	52
Total	\$44,896,255	(\$44,896,255)	\$0	\$1,910,878,157	

Source: TIAA

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Historical Quarterly Participant Transfers

As of 9/30/2019

Investment	1Q18		2Q18		3Q18		4Q18		1Q19		2Q19		3Q19	
	Net Transfers (\$M)	# of Part.	Net Transfers (\$M)	# of Part.	Net Transfers (\$M)	# of Part.	Net Transfers (\$M)	# of Part.	Net Transfers (\$M)	# of Part.	Net Transfers (\$M)	# of Part.	Net Transfers (\$M)	# of Part.
Vanguard Target Retirement Trust Plus	\$0.00	0	\$0.00	0	\$0.00	0	\$740.97	4,042	-\$15.23	4,044	-\$16.42	4,014	-\$13.94	4,157
Vanguard Target Retirement Trusts I	-\$2.42	3,852	-\$15.86	3,836	\$164.98	4,017	-\$784.41	0	\$0.00	0	\$0.00	0	\$0.00	0
Vanguard Target Retirement Mutual Funds	-\$1.05	1,376	-\$6.56	1,378	\$37.28	1,575	-\$13.22	1,550	-\$5.36	1,498	-\$4.07	1,541	-\$2.75	1,730
Vanguard Total Bond Market Index Inst	-\$0.12	883	\$0.12	863	\$1.22	885	\$2.25	898	\$2.76	952	\$1.53	978	\$3.25	1,025
Vanguard Total Stock Market Index Inst	\$2.16	707	-\$1.04	683	-\$0.32	672	\$3.82	630	-\$1.44	599	-\$0.70	566	-\$1.18	523
Vanguard Institutional Index Inst	-\$2.83	1,436	\$4.45	1,486	\$6.01	1,546	\$10.14	1,531	\$5.59	1,578	\$4.71	1,590	\$1.42	1,611
Vanguard FTSE Social Index Fund	\$0.00	5	\$0.27	9	\$0.68	19	\$0.17	30	\$0.54	43	\$0.19	43	\$0.43	45
Vanguard Extended Market Index Inst	\$0.71	1,205	-\$1.77	1,190	-\$1.18	1,180	-\$2.20	1,116	-\$0.71	1,104	\$1.88	1,121	\$1.38	1,154
Vanguard Total International Stock Index Inst	\$0.14	176	\$0.13	172	-\$0.41	177	\$0.73	163	\$0.44	171	-\$0.19	169	-\$0.40	164
Vanguard Developed Markets Index Inst	\$0.75	1,011	\$4.08	1,048	\$4.95	1,113	\$4.26	1,131	\$2.82	1,171	\$4.33	1,190	\$1.79	1,221
Vanguard Emerging Markets Stock Index Inst	\$0.20	1,293	\$0.89	1,324	\$1.38	1,376	\$1.62	1,365	\$1.15	1,395	\$1.60	1,394	\$1.08	1,404
Vanguard Federal Money Market Inv	-\$2.82	188	\$0.66	188	-\$225.44	200	\$11.50	201	-\$1.62	214	\$0.91	210	\$0.78	212
T. Rowe Price Stable Value Common Trust A	\$0.00	4	\$0.94	51	\$0.58	96	\$1.26	145	\$1.06	202	\$1.09	236	\$0.86	268
TIAA Traditional	\$2.14	1,732	\$5.08	1,677	\$5.25	1,744	\$10.71	1,713	\$3.90	1,741	\$5.74	1,735	\$4.66	1,769
PIMCO Total Return Instl	\$0.77	729	\$2.54	757	-\$0.28	803	-\$0.62	778	\$0.02	738	-\$0.42	699	\$0.10	652
DFA Inflation Protected Securities Portfolio Inst	\$0.17	783	\$1.68	801	\$0.85	856	\$2.50	865	\$0.49	903	\$1.49	918	\$1.70	953
American Century High Income	\$0.48	847	\$1.37	848	\$1.55	883	\$2.56	882	\$1.39	880	\$1.18	879	\$0.72	885
T. Rowe Price Inst LC Growth	\$0.91	393	\$0.74	386	\$1.37	406	\$3.45	393	\$1.61	388	-\$3.91	389	-\$0.03	389
Diamond Hill Large Cap Fund Y	\$1.26	1,163	\$0.07	1,170	-\$1.21	1,159	-\$2.37	1,076	-\$1.32	989	\$0.10	947	\$0.31	996
William Blair Small Md C Grw I	\$0.12	773	\$3.38	835	\$2.13	941	\$2.84	980	\$0.83	1,048	-\$0.25	1,053	\$0.32	1,046
DFA US Targeted Val Port Inst	-\$1.25	974	\$1.44	1,007	\$2.37	1,085	\$2.35	1,110	\$0.61	1,177	\$0.54	1,184	-\$0.12	1,208
Dodge & Cox Global Stock Fund	\$1.91	1,063	-\$2.84	1,012	-\$2.01	946	-\$2.65	863	-\$2.76	788	-\$1.12	758	-\$0.94	774
Harding International Equit Inst	-\$0.10	804	-\$0.50	758	-\$0.44	725	\$0.62	729	\$0.59	783	-\$0.10	799	-\$0.58	730
MFS International Value R6	-\$0.43	1,207	\$0.33	1,231	-\$1.30	1,270	-\$0.71	1,221	-\$1.04	1,251	-\$1.23	1,252	\$0.64	1,267
Laudus Mondrian Emerg Mkts Ins	-\$0.02	137	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Cohen & Steers Inst Realty Shares	-\$0.34	1,443	\$0.51	1,440	\$0.42	1,470	\$0.41	1,446	-\$0.02	1,464	\$0.76	1,454	\$0.35	1,468
Mutual Fund Window	-\$0.32	34	\$0.42	35	\$1.59	37	\$4.01	39	\$5.70	46	\$2.37	49	\$0.16	52
TIAA-CREF Funds	\$0.00	0	-\$0.54	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Total	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	

Net Transfers In (Darker shades represent larger transfers while lighter shades represent smaller transfers)
 Net Transfers Out (Darker shades represent larger transfers while lighter shades represent smaller transfers)

Source: TIAA

Annual Investment Fee Monitoring & Transparency – As of 9/30/2019

Investment Option	Market Value	Total Expense (%)	Total Expense (\$)	Revenue Sharing (%)	Revenue Sharing (\$)	Mgmt. Fee (%)	Mgmt. Fee (\$)	Administrative Fee (%)	Administrative Fee (\$)	Total Fee (%)	Total Fee (\$)
Vanguard Target Retirement Income Trust Plus	\$24,211,058	0.06%	\$14,527	0.00%	\$0	0.06%	\$14,527	0.039%	\$9,442	0.10%	\$23,969
Vanguard Target Retirement 2015 Trust Plus	\$50,368,678	0.06%	\$30,221	0.00%	\$0	0.06%	\$30,221	0.039%	\$19,644	0.10%	\$49,865
Vanguard Target Retirement 2020 Trust Plus	\$89,206,007	0.06%	\$53,524	0.00%	\$0	0.06%	\$53,524	0.039%	\$34,790	0.10%	\$88,314
Vanguard Target Retirement 2025 Trust Plus	\$109,311,517	0.06%	\$65,587	0.00%	\$0	0.06%	\$65,587	0.039%	\$42,631	0.10%	\$108,218
Vanguard Target Retirement 2030 Trust Plus	\$133,531,653	0.06%	\$80,119	0.00%	\$0	0.06%	\$80,119	0.039%	\$52,077	0.10%	\$132,196
Vanguard Target Retirement 2035 Trust Plus	\$137,953,507	0.06%	\$82,772	0.00%	\$0	0.06%	\$82,772	0.039%	\$53,802	0.10%	\$136,574
Vanguard Target Retirement 2040 Trust Plus	\$123,800,025	0.06%	\$74,280	0.00%	\$0	0.06%	\$74,280	0.039%	\$48,282	0.10%	\$122,562
Vanguard Target Retirement 2045 Trust Plus	\$94,250,754	0.06%	\$56,550	0.00%	\$0	0.06%	\$56,550	0.039%	\$36,758	0.10%	\$93,308
Vanguard Target Retirement 2050 Trust Plus	\$52,597,157	0.06%	\$31,558	0.00%	\$0	0.06%	\$31,558	0.039%	\$20,513	0.10%	\$52,071
Vanguard Target Retirement 2055 Trust Plus	\$17,182,982	0.06%	\$10,310	0.00%	\$0	0.06%	\$10,310	0.039%	\$6,701	0.10%	\$17,011
Vanguard Target Retirement 2060 Trust Plus	\$5,227,633	0.06%	\$3,137	0.00%	\$0	0.06%	\$3,137	0.039%	\$2,039	0.10%	\$5,175
Vanguard Target Retirement 2065 Trust Plus	\$13,364	0.06%	\$8	0.00%	\$0	0.06%	\$8	0.039%	\$5	0.10%	\$13
Vanguard Target Retirement Income - Instl.	\$9,928,547	0.09%	\$8,936	0.00%	\$0	0.09%	\$8,936	0.039%	\$3,872	0.13%	\$12,808
Vanguard Target Retirement 2015 - Instl.	\$16,443,246	0.09%	\$14,799	0.00%	\$0	0.09%	\$14,799	0.039%	\$6,413	0.13%	\$21,212
Vanguard Target Retirement 2020 - Instl.	\$21,687,506	0.09%	\$19,519	0.00%	\$0	0.09%	\$19,519	0.039%	\$8,458	0.13%	\$27,977
Vanguard Target Retirement 2025 - Instl.	\$22,319,710	0.09%	\$20,088	0.00%	\$0	0.09%	\$20,088	0.039%	\$8,705	0.13%	\$28,792
Vanguard Target Retirement 2030 - Instl.	\$20,797,611	0.09%	\$18,718	0.00%	\$0	0.09%	\$18,718	0.039%	\$8,111	0.13%	\$26,829
Vanguard Target Retirement 2035 - Instl.	\$12,495,416	0.09%	\$11,246	0.00%	\$0	0.09%	\$11,246	0.039%	\$4,873	0.13%	\$16,119
Vanguard Target Retirement 2040 - Instl.	\$11,490,815	0.09%	\$10,342	0.00%	\$0	0.09%	\$10,342	0.039%	\$4,481	0.13%	\$14,823
Vanguard Target Retirement 2045 - Instl.	\$10,885,010	0.09%	\$9,797	0.00%	\$0	0.09%	\$9,797	0.039%	\$4,245	0.13%	\$14,042
Vanguard Target Retirement 2050 - Instl.	\$11,004,674	0.09%	\$9,904	0.00%	\$0	0.09%	\$9,904	0.039%	\$4,292	0.13%	\$14,196
Vanguard Target Retirement 2055 - Instl.	\$4,388,088	0.09%	\$3,949	0.00%	\$0	0.09%	\$3,949	0.039%	\$1,711	0.13%	\$5,661
Vanguard Target Retirement 2060 - Instl.	\$501,056	0.09%	\$451	0.00%	\$0	0.09%	\$451	0.039%	\$195	0.13%	\$646
Vanguard Target Retirement 2065 - Instl.	\$64,116	0.09%	\$58	0.00%	\$0	0.09%	\$58	0.039%	\$25	0.13%	\$83
Vanguard Total Bond Market Index Fund	\$43,781,267	0.04%	\$15,323	0.00%	\$0	0.04%	\$15,323	0.039%	\$17,075	0.07%	\$32,398
Vanguard Total Stock Market Index Fund	\$52,091,054	0.03%	\$15,627	0.00%	\$0	0.03%	\$15,627	0.039%	\$20,316	0.07%	\$35,943
Vanguard Institutional Index Fund - Instl. Plus	\$144,642,248	0.02%	\$28,928	0.00%	\$0	0.02%	\$28,928	0.039%	\$56,410	0.06%	\$85,339
Vanguard FTSE Social Index Fund - Adm.	\$3,263,366	0.14%	\$4,569	0.00%	\$0	0.14%	\$4,569	0.039%	\$1,273	0.18%	\$5,841
Vanguard Extended Market Index Fund - Instl.	\$44,309,940	0.06%	\$26,586	0.00%	\$0	0.06%	\$26,586	0.039%	\$17,281	0.10%	\$43,867
Vanguard Total International Stock Index Fund	\$10,062,410	0.08%	\$8,050	0.00%	\$0	0.08%	\$8,050	0.039%	\$3,924	0.12%	\$11,974
Vanguard Developed Market Index Fund	\$49,770,224	0.05%	\$24,885	0.00%	\$0	0.05%	\$24,885	0.039%	\$19,410	0.09%	\$44,295
Vanguard Emerging Markets Stock Index Fund - Instl.	\$32,930,232	0.10%	\$32,930	0.00%	\$0	0.10%	\$32,930	0.039%	\$12,843	0.14%	\$45,773
Vanguard Federal Money Market Fund	\$25,669,040	0.11%	\$28,236	0.00%	\$0	0.11%	\$28,236	0.039%	\$10,011	0.15%	\$38,247
T. Rowe Price Stable Value Common Trust Fund A	\$6,399,226	0.48%	\$30,716	0.00%	\$0	0.48%	\$30,716	0.039%	\$2,496	0.52%	\$33,212
TIAA Traditional - RC & RCP	\$207,691,431	0.49%	\$1,017,688	0.15%	(\$311,537)	0.34%	\$706,151	0.039%	\$81,000	0.63%	\$787,151
PIMCO Total Return Fund	\$22,463,483	0.46%	\$103,332	0.00%	\$0	0.46%	\$103,332	0.039%	\$8,761	0.50%	\$112,093
DFA Inflation-Protected Securities Portfolio	\$22,359,877	0.12%	\$26,832	0.00%	\$0	0.12%	\$26,832	0.039%	\$8,720	0.16%	\$35,552
American Century High Income	\$26,276,602	0.59%	\$155,032	0.00%	\$0	0.59%	\$155,032	0.039%	\$10,248	0.63%	\$165,280
T. Rowe Price Instl. Large Cap Growth Fund	\$32,483,341	0.56%	\$181,907	0.00%	\$0	0.56%	\$181,907	0.039%	\$12,669	0.60%	\$194,575
Diamond Hill Large Cap	\$26,703,810	0.55%	\$146,871	0.00%	\$0	0.55%	\$146,871	0.039%	\$10,414	0.59%	\$157,285
William Blair Small/Mid Cap Growth Fund	\$32,784,347	1.10%	\$360,628	0.15%	(\$49,177)	0.95%	\$311,451	0.039%	\$12,786	0.99%	\$324,237
DFA U.S. Targeted Value	\$34,943,126	0.37%	\$129,290	0.00%	\$0	0.37%	\$129,290	0.039%	\$13,628	0.41%	\$142,917
Dodge & Cox Global Stock Fund	\$27,335,664	0.62%	\$169,481	0.10%	(\$27,336)	0.52%	\$142,145	0.039%	\$10,661	0.56%	\$152,806
Harding Loevrer International Equity Instl.	\$11,756,243	0.81%	\$95,226	0.15%	(\$17,634)	0.66%	\$77,591	0.039%	\$4,585	0.70%	\$82,176
MFS International Value Fund	\$30,502,943	0.63%	\$192,169	0.00%	\$0	0.63%	\$192,169	0.039%	\$11,896	0.67%	\$204,065
Cohen and Steers Instl. Realty Shares	\$27,813,567	0.75%	\$208,602	0.00%	\$0	0.75%	\$208,602	0.039%	\$10,847	0.79%	\$219,449
Mutual Fund Window	\$23,742,127	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.039%	\$9,259	0.04%	\$9,259
Total	\$1,919,435,697	0.19%	\$3,633,305	-0.02%	(\$405,684)	0.17%	\$3,227,621	0.039%	\$748,580	0.21%	\$3,976,201
Without Brokerage	\$1,895,693,570	0.19%	\$3,633,305	-0.02%	(\$405,684)	0.17%	\$3,227,621	0.039%	\$739,320	0.21%	\$3,966,942

Source: TIAA

Morningstar Model Portfolios – RC Performance

As of 9/30/2019

	Performance(%)						
	1 Quarter	Year To Date	1 Year	3 Years	5 Years	Since Inception	Inception Date
RC							
Very Conservative RC	1.2	7.2	5.8	4.4	4.2	4.2	04/01/2014
<i>Very Conservative Benchmark RC</i>	1.3	7.3	6.2	4.4	4.1	4.1	
Conservative RC	0.7	8.6	3.9	5.4	4.7	4.7	04/01/2014
<i>Conservative Benchmark RC</i>	1.0	9.1	5.0	5.7	5.1	5.0	
Moderately Conservative RC	1.1	11.2	4.5	7.2	6.4	6.3	04/01/2014
<i>Moderately Conservative Benchmark RC</i>	0.8	11.0	4.4	6.8	5.9	5.8	
Moderate RC	0.4	12.3	2.9	7.4	6.4	6.3	04/01/2014
<i>Moderate Benchmark RC</i>	0.6	12.6	3.8	7.7	6.5	6.3	
Moderately Aggressive RC	0.7	14.3	2.8	8.3	6.8	6.6	04/01/2014
<i>Moderately Aggressive Benchmark RC</i>	0.3	13.9	3.0	8.3	6.9	6.6	
Aggressive RC	0.2	17.0	3.1	9.3	7.5	7.3	04/01/2014
<i>Aggressive Benchmark RC</i>	0.0	15.2	2.0	9.1	7.3	7.0	
Very Aggressive RC	0.4	17.5	1.5	9.6	7.5	7.3	04/01/2014
<i>Very Aggressive Benchmark RC</i>	-0.2	16.5	1.2	9.7	7.6	7.3	
RC Ex-TIAA							
Very Conservative RC Ex-TIAA	1.5	8.2	6.7	3.5	3.6	3.6	04/01/2014
<i>Very Conservative Benchmark RC Ex-TIAA</i>	1.9	9.7	9.0	4.0	3.9	3.8	
Conservative RC Ex-TIAA	0.9	9.6	5.4	5.0	4.6	4.5	04/01/2014
<i>Conservative Benchmark RC Ex-TIAA</i>	1.5	11.3	7.3	5.3	4.9	4.8	
Moderately Conservative RC Ex-TIAA	1.3	12.2	5.2	6.5	6.0	5.9	04/01/2014
<i>Moderately Conservative Benchmark RC Ex-TIAA</i>	1.2	12.8	6.3	6.5	5.7	5.6	
Moderate RC Ex-TIAA	0.9	13.5	4.2	7.0	6.1	6.0	04/01/2014
<i>Moderate Benchmark RC Ex-TIAA</i>	0.9	13.9	5.1	7.4	6.3	6.1	
Moderately Aggressive RC Ex-TIAA	0.2	14.2	2.7	7.5	6.4	6.3	04/01/2014
<i>Moderately Aggressive Benchmark RC Ex-TIAA</i>	0.6	14.9	3.9	8.1	6.8	6.5	
Aggressive RC Ex-TIAA	0.3	15.8	1.9	8.7	7.0	6.8	04/01/2014
<i>Aggressive Benchmark RC Ex-TIAA</i>	0.1	15.6	2.4	9.0	7.2	6.9	
Very Aggressive RC Ex-TIAA	0.3	17.1	1.2	9.5	7.4	7.3	04/01/2014
<i>Very Aggressive Benchmark RC Ex-TIAA</i>	-0.2	16.5	1.2	9.7	7.6	7.3	

Morningstar Model Portfolios – RC Allocations

As of 9/30/2019

RC

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	8%	6%	5%	4%	4%	-	-
Cohen & Steers Instl Realty Shares	-	-	4%	4%	4%	4%	5%
DFA Inflation-Protected Securities I	13%	8%	7%	5%	3%	5%	-
DFA US Targeted Value I	-	-	3%	3%	5%	5%	8%
Diamond Hill Large Cap Y	-	3%	-	4%	4%	5%	4%
Dodge & Cox Global Stock							
Harding International Eq Inst							
MFS International Value R6	3%	3%	4%	4%	4%	5%	5%
PIMCO Total Return Instl							
T. Rowe Price Stable Value Fund	10%	7%	5%	4%	-	-	-
TIAA Traditional	40%	34%	30%	22%	15%	7%	-
Vanguard Developed Markets Idx Instl	-	3%	7%	11%	16%	18%	21%
Vanguard Emerging Mkts Stock Idx I	-	3%	4%	6%	8%	11%	13%
Vanguard Extended Market Idx I	-	3%	3%	5%	7%	8%	8%
Vanguard Institutional Index Instl Pl	3%	11%	16%	20%	23%	27%	29%
Vanguard Total Bond Market Index I	19%	15%	7%	4%	4%	-	-
William Blair Small-Mid Cap Gr I	4%	4%	5%	4%	3%	5%	7%

RC Ex-TIAA

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	7%	6%	5%	4%	4%	-	-
Cohen & Steers Instl Realty Shares	-	-	4%	4%	4%	4%	5%
DFA Inflation-Protected Securities I	13%	9%	6%	6%	4%	4%	-
DFA US Targeted Value I	-	-	3%	4%	4%	5%	8%
Diamond Hill Large Cap Y	-	3%	-	3%	4%	5%	3%
Dodge & Cox Global Stock							
Harding International Eq Inst							
MFS International Value R6	3%	3%	3%	4%	5%	5%	6%
PIMCO Total Return Instl	19%	-	-	-	-	-	-
T. Rowe Price Stable Value Fund	24%	19%	15%	11%	7%	4%	-
Vanguard Developed Markets Idx Instl	-	3%	7%	11%	14%	18%	20%
Vanguard Emerging Mkts Stock Idx I	-	3%	4%	6%	8%	11%	13%
Vanguard Extended Market Idx I	-	3%	3%	3%	7%	8%	8%
Vanguard Institutional Index Instl Pl	3%	9%	16%	20%	24%	27%	30%
Vanguard Total Bond Market Index I	28%	37%	29%	19%	11%	4%	-
William Blair Small-Mid Cap Gr I	3%	5%	5%	5%	4%	5%	7%

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

Morningstar Model Portfolios – RC Benchmarks

As of 9/30/2019

RC Benchmarks

Index	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
Blmbg. Barc. Global Inflation-Linked US TIPS	11%	7%	7%	5%	3%	3%	-
Blmbg. Barc. US Agg. Bond	29%	20%	13%	10%	6%	3%	-
Blmbg. Barc. US Corp HY	7%	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%	7%	11%	15%	19%	23%	26%
MSCI EM GR	-	3%	4%	6%	8%	11%	13%
Russell 1000 Growth	-	4%	7%	9%	11%	13%	14%
Russell 1000 Value	3%	7%	8%	12%	13%	15%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	3%	4%	5%	6%
Russell Mid Cap Growth	3%	3%	3%	4%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	5%	7%	7%	8%
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	11%	8%	6%	5%	3%	3%	-
Blmbg. Barc. US Agg. Bond	72%	56%	44%	32%	21%	10%	-
Blmbg. Barc. US Corp HY	7%	6%	5%	3%	3%	-	-
Citi Treasury Bill 3 Mo.	-	-	-	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	7%	11%	15%	19%	23%	26%
MSCI EM GR	-	3%	4%	6%	8%	11%	13%
Russell 1000 Growth	-	4%	7%	9%	11%	13%	14%
Russell 1000 Value	3%	7%	8%	12%	14%	15%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	3%	4%	5%	6%
Russell Mid Cap Growth	3%	3%	3%	4%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	5%	6%	7%	8%

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

Morningstar Model Portfolios – RCP Performance

As of 9/30/2019

	Performance(%)						
	1 Quarter	Year To Date	1 Year	3 Years	5 Years	Since Inception	Inception Date
RCP							
Very Conservative RCP	1.4	7.2	6.1	4.2	4.0	4.0	04/01/2014
<i>Very Conservative Benchmark RCP</i>	1.2	6.7	5.5	3.9	3.8	3.7	
Conservative RCP	0.8	9.1	4.6	5.4	4.5	4.5	04/01/2014
<i>Conservative Benchmark RCP</i>	1.0	9.0	4.7	5.3	4.8	4.7	
Moderately Conservative RCP	1.0	11.4	4.4	6.7	6.0	5.9	04/01/2014
<i>Moderately Conservative Benchmark RCP</i>	0.9	11.1	4.4	6.5	5.7	5.5	
Moderate RCP	0.6	13.0	3.6	7.2	6.2	6.0	04/01/2014
<i>Moderate Benchmark RCP</i>	0.8	13.1	4.2	7.5	6.3	6.1	
Moderately Aggressive RCP	0.5	14.4	2.9	8.0	6.7	6.6	04/01/2014
<i>Moderately Aggressive Benchmark RCP</i>	0.5	14.4	3.3	8.2	6.7	6.5	
Aggressive RCP	0.3	15.7	2.1	8.8	7.1	7.0	04/01/2014
<i>Aggressive Benchmark RCP</i>	0.2	15.6	2.4	9.1	7.3	7.0	
Very Aggressive RCP	-0.2	16.5	0.7	9.3	7.3	7.2	04/01/2014
<i>Very Aggressive Benchmark RCP</i>	-0.2	16.5	1.2	9.7	7.6	7.3	
RCP Ex-TIAA							
Very Conservative RCP Ex-TIAA	1.9	9.6	8.8	4.1	4.0	4.0	04/01/2014
<i>Very Conservative Benchmark RCP Ex-TIAA</i>	1.8	9.3	8.5	3.8	3.8	3.8	
Conservative RCP Ex-TIAA	1.2	10.8	6.6	5.3	4.7	4.7	04/01/2014
<i>Conservative Benchmark RCP Ex-TIAA</i>	1.4	11.0	7.0	5.3	4.8	4.7	
Moderately Conservative RCP Ex-TIAA	1.8	13.7	6.7	6.9	6.2	6.0	04/01/2014
<i>Moderately Conservative Benchmark RCP Ex-TIAA</i>	1.2	12.6	6.1	6.4	5.6	5.5	
Moderate RCP Ex-TIAA	0.9	14.0	4.8	7.1	6.1	6.0	04/01/2014
<i>Moderate Benchmark RCP Ex-TIAA</i>	0.9	13.9	5.1	7.4	6.3	6.1	
Moderately Aggressive RCP Ex-TIAA	0.9	15.4	3.9	7.9	6.6	6.5	04/01/2014
<i>Moderately Aggressive Benchmark RCP Ex-TIAA</i>	0.6	14.9	3.9	8.1	6.8	6.5	
Aggressive RCP Ex-TIAA	0.4	16.1	2.2	8.8	7.1	6.9	04/01/2014
<i>Aggressive Benchmark RCP Ex-TIAA</i>	0.1	15.6	2.4	9.0	7.2	6.9	
Very Aggressive RCP Ex-TIAA	-0.2	16.5	0.7	9.3	7.4	7.2	04/01/2014
<i>Very Aggressive Benchmark RCP Ex-TIAA</i>	-0.2	16.5	1.2	9.7	7.6	7.3	

Morningstar Model Portfolios – RCP Allocations

As of 9/30/2019

RCP

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	7%	7%	4%	4%	4%	-	-
Cohen & Steers Instl Realty Shares	-	-	4%	4%	4%	4%	5%
DFA Inflation-Protected Securities I	9%	7%	8%	5%	3%	-	-
DFA US Targeted Value I	-	4%	4%	3%	5%	5%	8%
Diamond Hill Large Cap Y	3%	13%	4%	4%	4%	4%	4%
Dodge & Cox Global Stock							
Harding International Eq Inst							
MFS International Value	-	4%	12%	5%	4%	6%	6%
PIMCO Total Return Instl	27%	18%	9%	-	-	-	-
TIAA Traditional	40%	32%	25%	16%	10%	5%	-
Vanguard Developed Markets Idx Instl	3%	3%	-	10%	15%	18%	20%
Vanguard Emerging Mkts Stock Idx I	-	3%	4%	6%	8%	11%	13%
Vanguard Extended Market Idx I	-	3%	-	5%	8%	8%	8%
Vanguard Federal Money Market Inv	5%	3%	-	-	-	-	-
Vanguard Institutional Index Instl PI	-	-	12%	20%	23%	27%	29%
Vanguard Total Bond Market Index I	3%	3%	8%	14%	9%	7%	-
William Blair Small-Mid Cap Gr I	3%	-	6%	4%	3%	5%	7%

RCP Ex-TIAA

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	7%	6%	5%	3%	3%	-	-
Cohen & Steers Instl Realty Shares	-	-	4%	4%	4%	4%	5%
DFA Inflation-Protected Securities I	12%	9%	7%	6%	3%	4%	-
DFA US Targeted Value I	-	-	4%	3%	5%	5%	8%
Diamond Hill Large Cap Y	-	3%	-	4%	5%	4%	4%
Dodge & Cox Global Stock							
Harding International Eq Inst							
MFS International Value	3%	6%	4%	4%	4%	5%	5%
PIMCO Total Return Instl							
Vanguard Developed Markets Idx Instl	-	-	6%	11%	15%	18%	21%
Vanguard Emerging Mkts Stock Idx I	-	3%	4%	6%	8%	11%	13%
Vanguard Extended Market Idx I	-	3%	-	5%	7%	8%	8%
Vanguard Federal Money Market Inv	3%	3%	-	-	-	-	-
Vanguard Institutional Index Instl PI	3%	9%	17%	20%	23%	28%	29%
Vanguard Total Bond Market Index I	68%	53%	43%	30%	20%	8%	-
William Blair Small-Mid Cap Gr I	4%	5%	6%	4%	3%	5%	7%

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

Morningstar Model Portfolios – RCP Benchmarks

As of 9/30/2019

RCP Benchmarks

Index	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
Blmbg. Barc. Global Inflation-Linked US TIPS	11%	7%	7%	5%	3%	-	-
Blmbg. Barc. US Agg. Bond 1-3 Years	22%	16%	13%	10%	7%	4%	-
Blmbg. Barc. US Corp HY	7%	6%	5%	3%	3%	-	-
Blmbg. Barc. US Long Govt./Credit	7%	6%	5%	6%	4%	4%	-
Citi Treasury Bill 3 Mo.	3%	3%	-	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	7%	11%	15%	19%	23%	26%
MSCI EM GR	-	3%	4%	6%	8%	11%	13%
Russell 1000 Growth	-	4%	7%	9%	11%	13%	14%
Russell 1000 Value	3%	7%	8%	12%	13%	15%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	3%	4%	5%	6%
Russell Mid Cap Growth	3%	3%	3%	4%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	5%	7%	7%	8%
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	11%	8%	6%	5%	3%	3%	-
Blmbg. Barc. US Agg. Bond	66%	52%	41%	32%	21%	10%	-
Blmbg. Barc. US Corp HY	7%	6%	5%	3%	3%	-	-
Citi Treasury Bill 3 Mo.	6%	4%	3%	-	-	-	-
FTSE NAREIT All Equity REITs	-	-	3%	3%	3%	3%	4%
MSCI EAFE GR	4%	7%	11%	15%	19%	23%	26%
MSCI EM GR	-	3%	4%	6%	8%	11%	13%
Russell 1000 Growth	-	4%	7%	9%	11%	13%	14%
Russell 1000 Value	3%	7%	8%	12%	13%	15%	17%
Russell 2000 Growth	-	-	3%	3%	3%	4%	5%
Russell 2000 Value	-	3%	3%	3%	4%	5%	6%
Russell Mid Cap Growth	3%	3%	3%	4%	5%	6%	7%
Russell Mid Cap Value	-	3%	3%	5%	7%	7%	8%

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

Morningstar Model Portfolios – Static Allocation Performance

As of 9/30/2019

	Performance(%)						
	1 Quarter	Year To Date	1 Year	3 Years	5 Years	Since Inception	Inception Date
RC							
Very Conservative RC (Static)	1.4	7.0	6.2	4.3	4.2	4.2	04/01/2014
Very Conservative Benchmark RC (Static)	1.2	6.8	5.7	4.3	4.0	4.0	
Conservative RC (Static)	1.0	9.1	4.5	5.7	5.1	5.1	04/01/2014
Conservative Benchmark RC (Static)	1.0	9.2	4.9	5.8	5.1	5.0	
Moderately Conservative RC (Static)	1.1	11.2	4.6	7.0	6.0	6.0	04/01/2014
Moderately Conservative Benchmark RC (Static)	1.1	11.4	4.8	6.8	5.9	5.8	
Moderate RC (Static)	0.9	13.0	4.0	8.0	6.7	6.6	04/01/2014
Moderate Benchmark RC (Static)	0.7	12.9	3.7	7.6	6.5	6.3	
Moderately Aggressive RC (Static)	0.7	14.4	3.2	8.9	7.2	7.2	04/01/2014
Moderately Aggressive Benchmark RC (Static)	0.6	14.5	3.2	8.4	7.0	6.7	
Aggressive RC (Static)	0.4	15.6	2.3	10.1	7.9	7.8	04/01/2014
Aggressive Benchmark RC (Static)	0.3	16.0	2.4	9.2	7.4	7.1	
Very Aggressive RC (Static)	0.1	16.5	0.8	10.1	7.5	7.5	04/01/2014
Very Aggressive Benchmark RC (Static)	0.0	17.1	1.4	9.8	7.7	7.3	
RCP							
Very Conservative RCP (Static)	1.3	7.3	5.9	4.2	4.0	4.0	04/01/2014
Very Conservative Benchmark RCP (Static)	1.2	6.6	5.4	4.0	3.7	3.7	
Conservative RCP (Static)	1.0	9.0	4.4	5.5	4.9	4.8	04/01/2014
Conservative Benchmark RCP (Static)	1.0	9.2	4.8	5.5	4.9	4.8	
Moderately Conservative RCP (Static)	1.2	11.4	4.8	6.7	5.8	5.8	04/01/2014
Moderately Conservative Benchmark RCP (Static)	1.1	11.6	5.0	6.5	5.7	5.6	
Moderate RCP (Static)	0.9	13.3	4.3	7.8	6.6	6.5	04/01/2014
Moderate Benchmark RCP (Static)	0.8	13.2	4.0	7.5	6.3	6.1	
Moderately Aggressive RCP (Static)	0.8	14.6	3.4	8.8	7.1	7.0	04/01/2014
Moderately Aggressive Benchmark RCP (Static)	0.6	14.7	3.3	8.3	6.8	6.6	
Aggressive RCP (Static)	0.4	15.7	2.4	10.0	7.9	7.8	04/01/2014
Aggressive Benchmark RCP (Static)	0.4	16.3	2.7	9.2	7.4	7.1	
Very Aggressive RCP (Static)	0.1	16.5	0.8	10.1	7.5	7.5	04/01/2014
Very Aggressive Benchmark RCP (Static)	0.0	17.1	1.4	9.8	7.7	7.3	

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Discussion Topics

Section 1	Capital Markets Review
Section 2	Performance Review
Section 3	Noteworthy Items
Section 4	Vanguard Flash Report
Section 5	Investment Structure Discussion
Section 6	Legal & Compliance Update

Vanguard Target Retirement Trusts/Funds

- Each of the Vanguard Target Retirement Trusts/Funds posted a positive return that closely approximated the return of its respective performance benchmark during the third quarter
 - The Vanguard Institutional Target Retirement Income Trust, with its greater proportion of fixed income assets, returned 1.5%
 - The longer-dated, more equity-heavy Vanguard Institutional Target Retirement 2065 Trust returned 0.3%
- For the twelve months ended September 30, 2019, all the Target Retirement Trusts/Funds advanced
 - The Institutional Target Retirement Income Trust returned 6.8% while the Institutional Target Retirement 2065 Fund returned 2.2%
 - The Funds exhibited a modest level of tracking error across the series due to “fair value” pricing adjustments and the negative impact of fees
- Longer-term results continued to exhibit a modest level of tracking error but ranked favorably among their respective peer-group averages
 - Fair value pricing adjustments along with the impact of statistical sampling and the underlying component Fund’s investment management fees detracted from results
- The Vanguard Target Retirement Funds remain “Buy” rated by our Global Investment Management Research Team

Vanguard Target Retirement Trusts Investment Change

- Vanguard recently announced changes regarding the underlying international equity allocation within its Target Retirement Trusts (Trusts)
- This allocation, currently accessed through a U.S. '40-act mutual fund vehicle, will change to be invested through a collective trust vehicle in early 2020
- This change is based on the preferential tax treatment collective trusts receive on international dividends compared to mutual funds
- Clients invested in the Trusts should receive notice from Vanguard regarding documentation needed to remain invested in the Trusts
- We recommend no changes as a result of this announcement as the Vanguard Target Retirement Trusts remain “Buy” rated by our Investment Management Research Team
- A Flash report detailing our observations is included in Section 4 of this presentation

August 2019

Flash Report

Vanguard Target Retirement Trusts Investment Change

Recommendation

Aon was recently informed about a change Vanguard is making regarding the underlying international equity allocation within its U.S. domiciled Target Retirement Trusts (Trusts). This allocation, currently accessed through a U.S. '40-act mutual fund (mutual fund) vehicle, will change to be invested through a collective trust vehicle. This change is expected to occur in early 2020 and is based on the preferential tax treatment collective trusts receive on international dividends compared to mutual funds. It will not affect the CUSIPs of the existing Trusts. Following previous conversations with Vanguard to implement such a move, we are supportive of this change. There is no change to our existing “Buy” rating for Vanguard’s U.S. domiciled suite of target date funds because of this news.

With this announcement, and given legal requirements it arises, clients who are invested in the Trusts should receive notice from Vanguard regarding potential documentation needed to allow clients to remain invested in the Trusts. Aon recommends clients follow these instructions and complete the necessary form(s) to stay invested in the Trusts. If clients fail to provide the necessary documentation, existing assets invested in the Trusts will be liquidated and held uninvested until Vanguard receives appropriate direction. Certain plan types, notably Solely Qualified Puerto Rico plans, will no longer be able to invest through the Trusts. We advise those clients to work with Vanguard to move into the most appropriate alternative investment vehicle.

Background

Further detailed in the below referenced link, preferential withholding tax treatment towards international dividends exists for some private institutional investment vehicles compared to other investment vehicles, such as mutual funds. Currently, the Vanguard Retirement Trusts access international equities through an underlying mutual fund. This vehicle has a lessened ability to reclaim international dividends withheld for tax purposes on behalf of tax-exempt organizations. Thus, there can be a performance drag for international equity mutual funds compared to other similarly positioned institutional vehicles. After becoming aware of this issue, we have held multiple conversations with Vanguard about potential changes to the Trusts to address this, as for many clients it can be a material impact.

For further information, feel free to reference the “Consider International Taxation on Dividends When Selecting an Investment Vehicle for Passive Equity” article in the following link from the Q1 2019 AHIC Pathways Newsletter:

[Q1 2019 AHIC Pathways Newsletter](#)

This change, and the resulting positive impact it should provide, helps reiterate the importance of understanding the various inner workings and portfolio construction behind a target date series rather than making decisions solely based on a single characteristic such as the stated fee.

Aon
Empower Results®

PIMCO – Expense Ratio Update

- Due to a change in regulatory guidance, 1940 Act mutual funds must now report certain investment expenses as part of their gross expense ratio
- This requirement applies to the following types of trades that PIMCO utilizes in their strategies:
 - Forward contracts
 - Reverse repurchase agreements
- In October 2019, PIMCO informed us they have received permission from FINRA to use a new expense ratio, called the Adjusted Expense Ratio (AER), along with the gross expense ratio
- The AER is the Gross Expense Ratio (or Net Expense Ratio if fee waivers are applicable) minus certain transaction costs, such as interest expense from borrowings and repurchase agreements and dividend expense from short sales
- Our Global Investment Management research team recommends use of the AER as it is more applicable and makes it easier to compare fees across

As of 9/30/2019

Product	Gross Expense Ratio	Net Expense Ratio ¹	Adjusted Expense Ratio
PIMCO Total Return	0.71%	0.71%	0.46%

¹ The Net Expense Ratio reflects a contractual fee waiver, which is in place through 7/31/2020 and renews automatically for a full year unless terminated by PIMCO

American Century High Income Fund

- The Fund registered “Orange” on the Watch List during the third quarter
 - Due to the Fund’s historical underperformance relative to its benchmark over the trailing five-year period and in three of the four most recent trailing calendar quarters
- The Fund’s performance trailed the return of its benchmark, the ICE BofAML US High Yield Master II Constrained Index, by 0.1 percentage point during the third quarter
- The Fund’s relative underperformance was primarily attributable to:
 - An overweight allocation to defensive sectors and higher quality issuers
 - Holding in the telecommunication, health care, and gas distribution sectors
- Partially offsetting the period’s negative relative results was an underweight allocation to the pharmaceuticals, support-services, and media sectors
- For the twelve months ended September 30, 2019, the Fund generated a return of 4.4% versus the benchmark’s return of 6.3%
- Longer-term results remained mixed relative to the Fund’s benchmark and peer group average
- The strategy remains “Buy” rated by our Global Investment Management Research Team
- We continue to closely monitor the Fund’s positioning and performance but recommend the Committee take no action as the investment team remains consistent and continues to execute on its historic philosophy and process

DFA U.S. Targeted Value Fund

- The Fund registered “Orange” on the Watch List during the third quarter
 - Due to the Fund’s historical underperformance relative to its benchmark over the trailing five-year period and in three of the four most recent trailing calendar quarters
- The Fund’s performance trailed the return of its benchmark, the Russell 2500 Value Index, by 1.3 percentage point during the third quarter
- The Fund’s relative underperformance was primarily attributable to:
 - A general exclusion of real estate investment trusts (REITs) and highly regulated utilities
 - An overweight allocation to small cap stocks as mid caps outperformed
- For the twelve months ended September 30, 2019, the Fund generated a return of -10.5% versus the benchmark’s return of -4.4%
 - An emphasis on the lowest relative price (deep value) stocks detracted from results
- Longer-term results remain mixed relative to the Fund’s benchmark and peer group average
- We continue to closely monitor the Fund’s positioning and performance but recommend the Committee take no action as the investment team remains consistent and continues to execute on its historic philosophy and process
- The strategy remains “Buy” rated by our Global Investment Management Research Team

Dodge & Cox Global Stock Fund

- The Fund continued to register “Orange” on the Watch List during the third quarter
 - Due to the manager’s historical underperformance relative to its benchmark over the trailing five-year period and in three of the four most recent trailing calendar quarters
- The Fund’s performance trailed the return of its benchmark, the MSCI All Country World Index, by 0.4 percentage points during the third quarter
- The Fund’s relative underperformance was primarily attributable to:
 - Negative stock selection within the information technology sector
 - An overweight allocation to the financial sector
- For the twelve months ended September 30, 2019, the Fund generated a return of -2.4% versus the benchmark’s return of 1.4%
 - The manager’s value-oriented approach detracted from results as growth stocks outperformed
- Longer-term performance remained mixed relative to the Fund’s benchmark and peer group average
- The strategy remains “Buy” rated by our Global Investment Management Research Team
- As an important part of the ongoing due diligence process, we recommend the Committee initiate a “competitive review” to compare the Fund’s positioning, historical performance, fees, etc. to other viable candidates

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Flash Report

Vanguard Target Retirement Trusts Investment Change

Recommendation

Aon was recently informed about a change Vanguard is making regarding the underlying international equity allocation within its U.S. domiciled Target Retirement Trusts (Trusts). This allocation, currently accessed through a U.S. '40-act mutual fund (mutual fund) vehicle, will change to be invested through a collective trust vehicle. This change is expected to occur in early 2020 and is based on the preferential tax treatment collective trusts receive on international dividends compared to mutual funds. It will not affect the CUSIPs of the existing Trusts. Following previous conversations with Vanguard to implement such a move, we are supportive of this change. There is no change to our existing "Buy" rating for Vanguard's U.S. domiciled suite of target date funds because of this news.

With this announcement, and given legal requirements it arises, clients who are invested in the Trusts should receive notice from Vanguard regarding potential documentation needed to allow clients to remain invested in the Trusts. Aon recommends clients follow these instructions and complete the necessary form(s) to stay invested in the Trusts. If clients fail to provide the necessary documentation, existing assets invested in the Trusts will be liquidated and held uninvested until Vanguard receives appropriate direction. Certain plan types, notably Solely Qualified Puerto Rico plans, will no longer be able to invest through the Trusts. We advise those clients to work with Vanguard to move into the most appropriate alternative investment vehicle.

Background

Further detailed in the below referenced link, preferential withholding tax treatment towards international dividends exists for some private institutional investment vehicles compared to other investment vehicles, such as mutual funds. Currently, the Vanguard Retirement Trusts access international equities through an underlying mutual fund. This vehicle has a lessened ability to reclaim international dividends withheld for tax purposes on behalf of tax-exempt organizations. Thus, there can be a performance drag for international equity mutual funds compared to other similarly positioned institutional vehicles. After becoming aware of this issue, we have held multiple conversations with Vanguard about potential changes to the Trusts to address this, as for many clients it can be a material impact.

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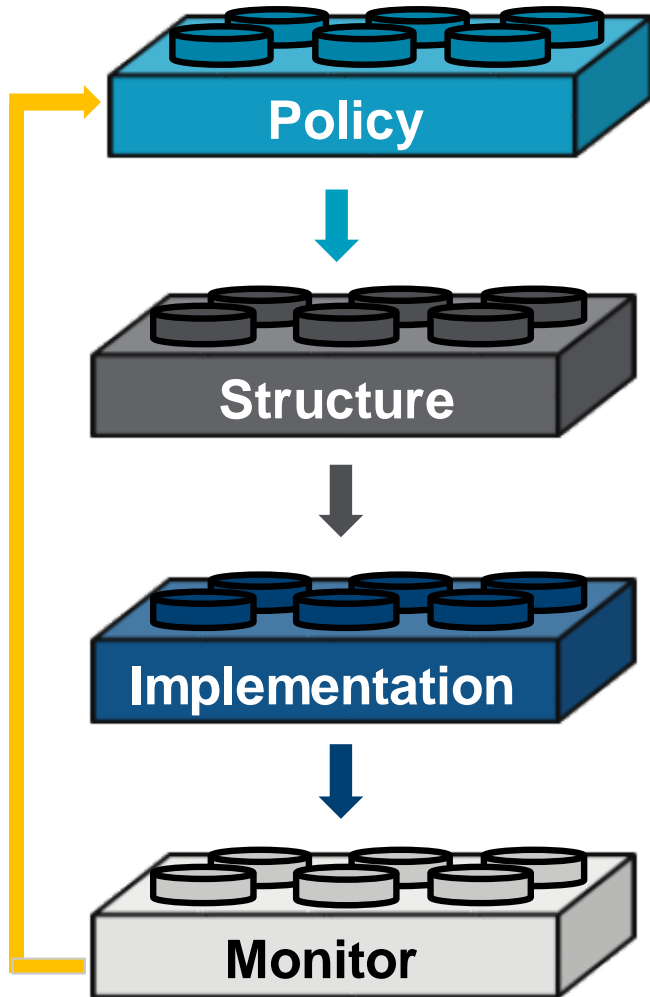
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Discussion Topics

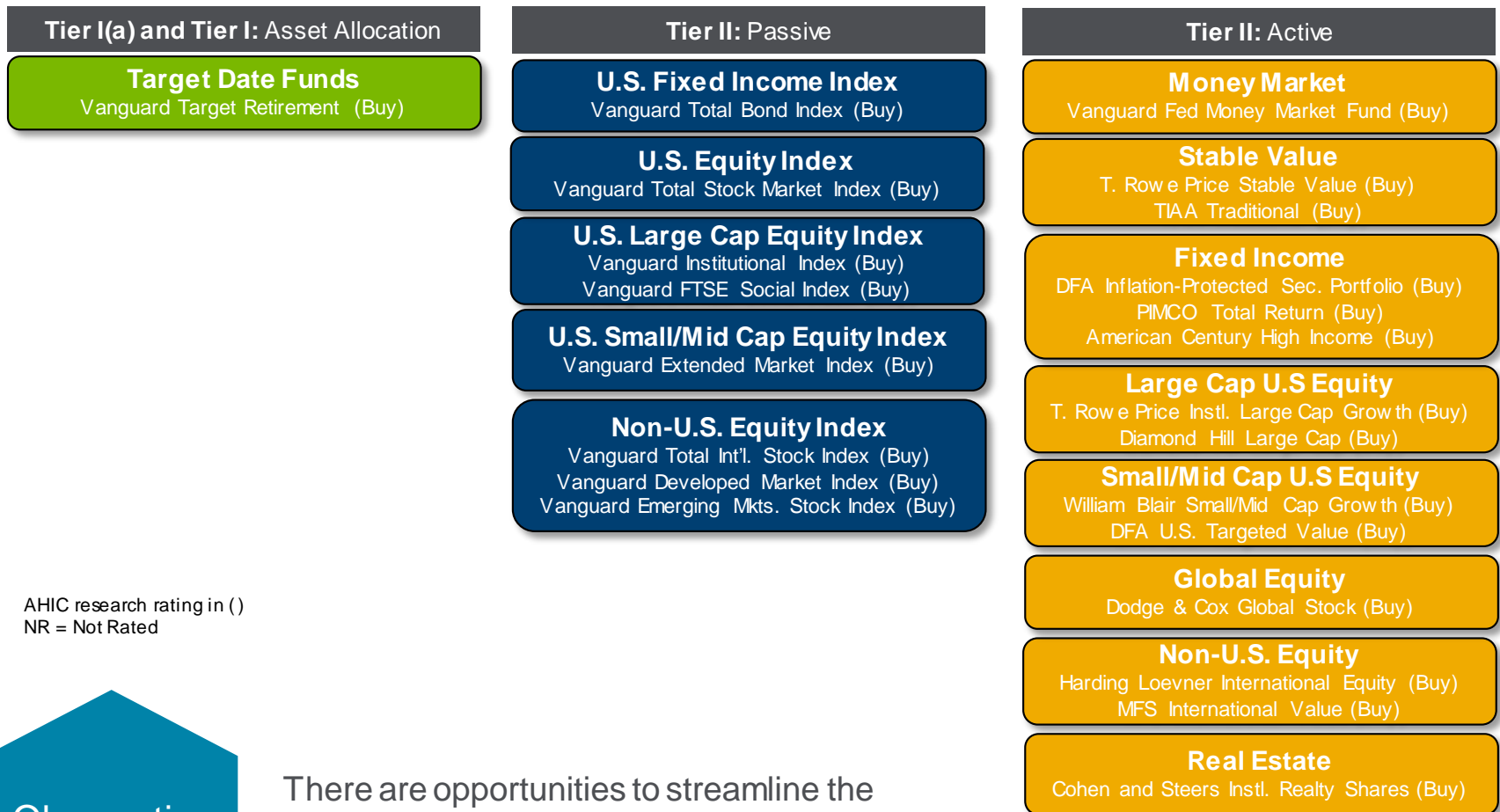
Section 1	Capital Markets Review
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The Building Blocks of a Successful Investment Structure



- Define and categorize plan objectives
 - Maintain long-term focus
-
- Number of options offered
 - Education on option implementation
 - Off-the-Shelf vs. Custom
 - Active vs. Passive
 - Style, Asset Class, or Objective-Based
 - Single or Multi-Manager
-
- Finalize investment options within structure
 - Investment Manager Selection
 - Vehicle Type
 - Fees
-
- Ongoing monitoring and maintenance for better participant outcomes

Tiered Investment Structure – Current



AHIC research rating in ()
NR = Not Rated



There are opportunities to streamline the investment lineup while still maintaining a well diversified set of options for participants

Investment Structure – Why Does it Matter?

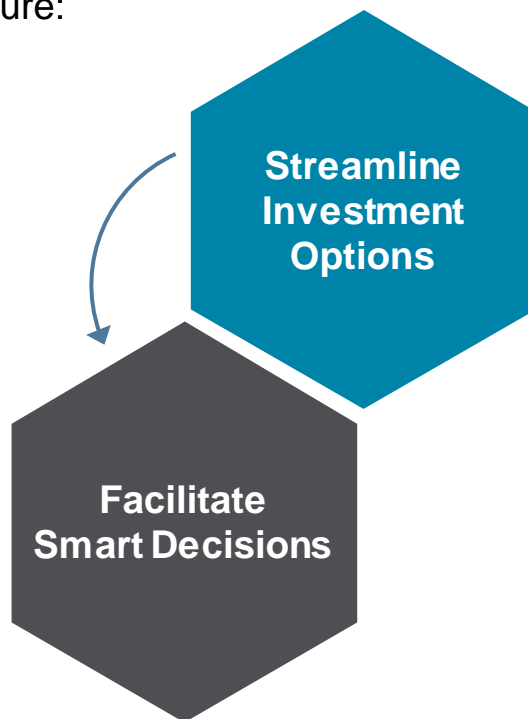
Defined contribution participants are responsible for key actions that influence their own outcomes



The structure of a defined contribution investment menu can have a significant **impact** on the choices people make, and ultimately their **success**. For these reasons, Aon believes in two key principles relating to investment menu structure:

Facilitate smart decisions

- Good governance leads to a strong investment menu
- Structure can nudge participants to act in their best long-term interest
- Design can help participants move into distribution stage



Streamline investment options *as much as possible*

- Target date funds as default where participants can choose one fund and “forget it”
- A limited number of passive and/or active strategies for participants that want to build customized investment portfolios

What is the Right Number of Funds to Offer?

Less Choice

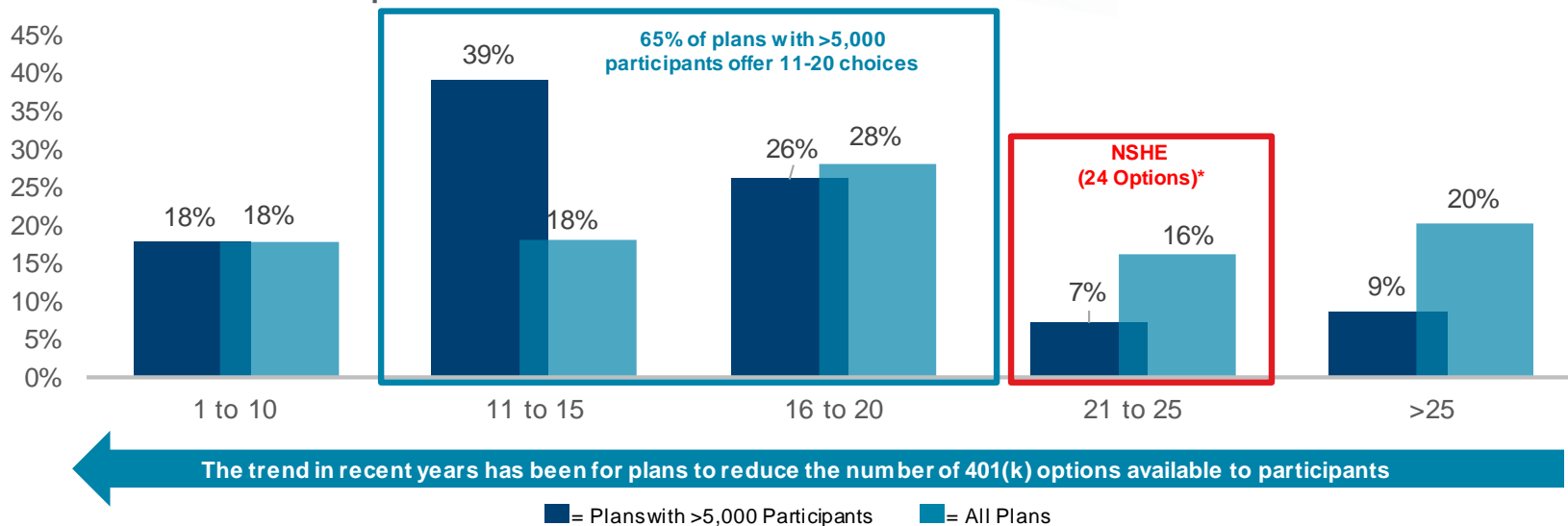
- Menu Consolidation
- Fewer Fund Options
- Broader Mandates



More Choice

- Large Menu
- More Fund Options
- Specialized Mandates

Number of Investment Options: Distribution of Results¹



¹Source: Plan Sponsor Council of America "61st Annual Survey – PSCA's Annual Survey of Profit Sharing and 401(k) Plans." 2018

*Counts the target-date suite, TIAA Traditional, and self-directed window as a single option

Are Different Styles and Capitalizations Offered?

	Value	Core	Growth
Large Cap	Diamond Hill Large Cap Fund Dodge & Cox Global Stock Fund MFS International Value Fund	Vanguard Total Stock Market Index Fund Vanguard Institutional Index Fund Vanguard FTSE Social Index Fund Vanguard Total International Stock Index Fund Vanguard Developed Market Index Fund Vanguard Emerging Markets Stock Index Fund Cohen & Steers Realty Shares	T. Rowe Price Instl. Large Cap Growth Fund Harding Loevner International Equity Fund
Mid Cap		Vanguard Extended Market Index Fund	William Blair Small/Mid Cap Growth Fund
Small Cap	DFA U.S. Targeted Value Fund		

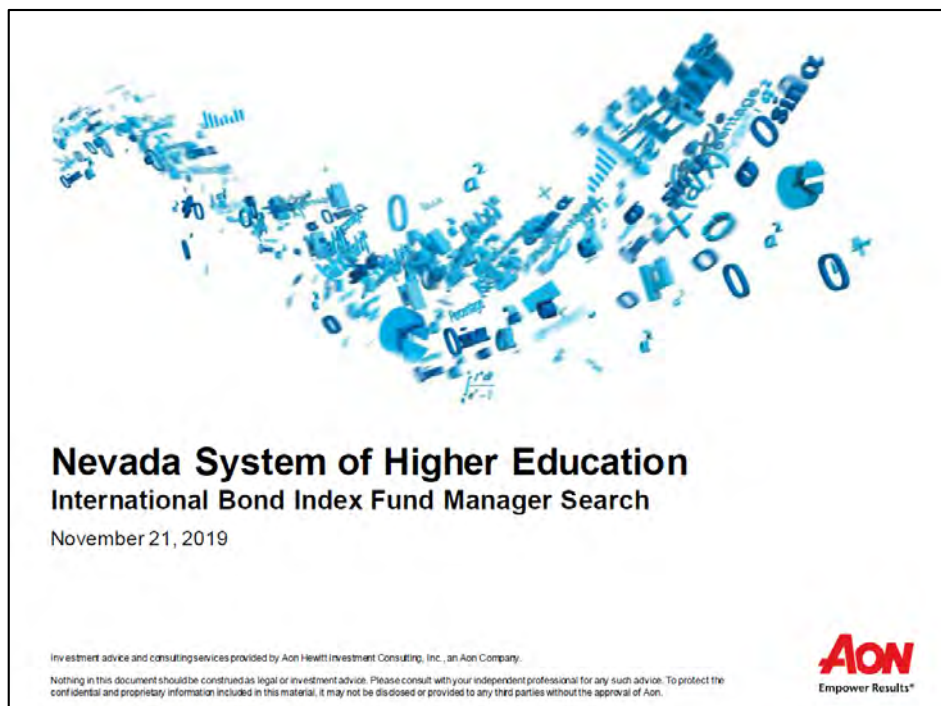
- An effective and efficient way for participants to reduce loss, and thereby increase return, is to diversify their investment portfolios
- As illustrated above, participants are offered a broad selection of U.S. equity funds across investment styles (growth and value) and the market capitalization spectrum (large and small)
 - The Plans index fund offerings are predominately large cap options

Background

- During the May 23, 2019 Retirement Plan Advisory Committee (RPAC) meeting, representatives from Aon Hewitt Investment Consulting, Inc. (“AHIC”) presented their findings and recommendation following a review of the retirement plans’ investment structure
- Below is a recap of the investment structure considerations that were presented to the RPAC during the meeting:
 1. Consider consolidating assets and ongoing deferrals from the Vanguard Institutional Index Fund and the Vanguard Extended Market Index Fund into the Vanguard Total Stock Market Index Fund (VSM PX)
 2. Consider consolidating assets and ongoing deferrals from the Vanguard Developed Market Index Fund and the Vanguard Emerging Markets Index Fund into the Vanguard Total International Stock Market Index Fund (VTSNX)
 3. Consider adding an international bond index fund to allow participants to broaden their investment diversification
 - Similar to the diversification benefit expected from international equities, international bonds can help mitigate volatility in a diversified portfolio
 4. Consider adding a multi-asset inflation hedging option
 - Consolidate assets and ongoing deferrals from the existing TIPS and REIT fund options into this single fund option

International Bond Index Fund Investment Manager Search

- The Retirement Plan Advisory Committee (Committee) asked Aon Hewitt Investment Consulting (AHIC) to identify passive international fixed income investment manager candidates using a best-in-class, open architecture investment philosophy
- We identified two passive international fixed income investment manager candidate from our approved list of managers that we believe are appropriate for the Committee's consideration:
 - BlackRock
 - Vanguard
- We recommend the Committee utilize the Vanguard Total International Bond Index Fund (VTABX) as the Plans' passive international fixed income option
- An investment manager search report detailed information on the factors that we believe will have a bearing on each manager's suitability for this potential assignment has been included with this presentation



Index Fund Structure and Manager Recommendations – Summary

Current Structure & Fund Options	Recommended Structure	Recommended Fund Options	Comments
Fixed Income Index Vanguard Total Bond Market Index (0.04% Expense)	Fixed Income Index (broad U.S. bond market)	Vanguard Total Bond Market Index (0.04% Expense)	<ul style="list-style-type: none"> No change to U.S. bond index fund (Vanguard product is “Buy” rated)
	International Fixed Income Index (broad non-U.S. bond market)	Vanguard Total International Bond Index (0.11% Expense)	<ul style="list-style-type: none"> A single index fund provider (Vanguard) may help participants quickly identify the Plans’ passive investment offerings
Large Cap Index Vanguard Instl. Index (0.02% Expense)	Total U.S. Equity Market (large, mid, and small cap)	Vanguard Total Stock Market Index (0.02% Expense)	<ul style="list-style-type: none"> Consolidate large cap and extended market into one fund Overall fees lower (vs. a blend of the large cap and SMID cap funds)
Extended Market Index Vanguard Extended Market Index (0.06% Expense)			
Developed Index Vanguard Developed Mkt. Index (0.05% Expense)	Total International Equity Market (developed and emerging)	Vanguard Total International Stock Index (0.08% Expense) ¹	<ul style="list-style-type: none"> Replace developed and emerging markets only funds with broader option Small expense increase due to emerging markets exposure; but higher expected return and greater diversification
Emerging Market Index Vanguard Extended Market Index (0.10% Expense)			

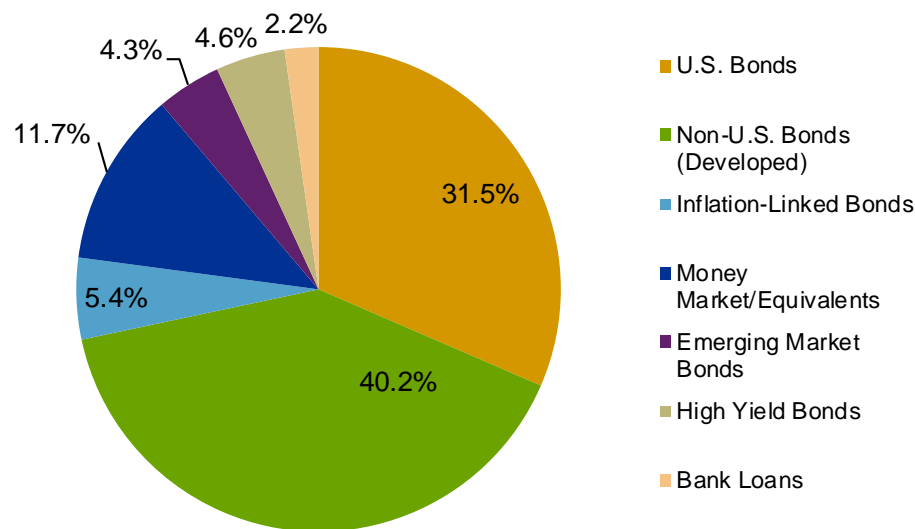
¹ An “Institutional Plus” share class option with a fee of 0.07% is available at \$100 million in assets.



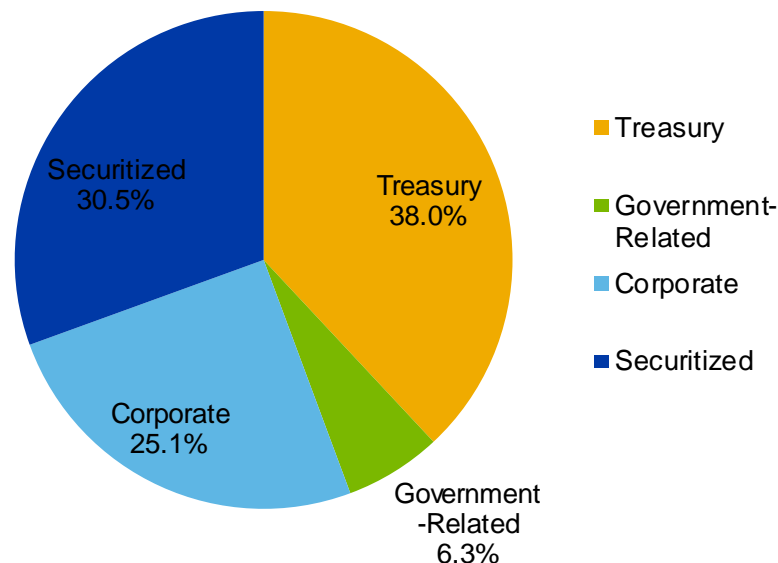
International Bond Index Fund

Add an International Bond Index Fund

- Financial theory suggests that holding a portfolio in market proportions is optimal
- As shown below, non-dollar bonds and emerging market debt comprise almost half of the global fixed income opportunity set



Total Global Fixed Income Opportunity Set
\$52.2 Trillion

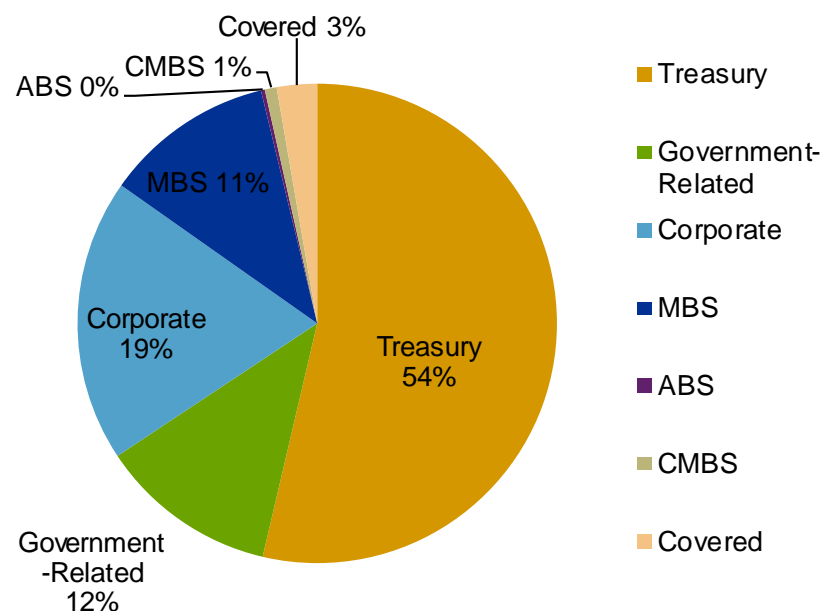


Barclays Capital U.S. Aggregate Index
41% of global opportunity set, \$20.3 Trillion

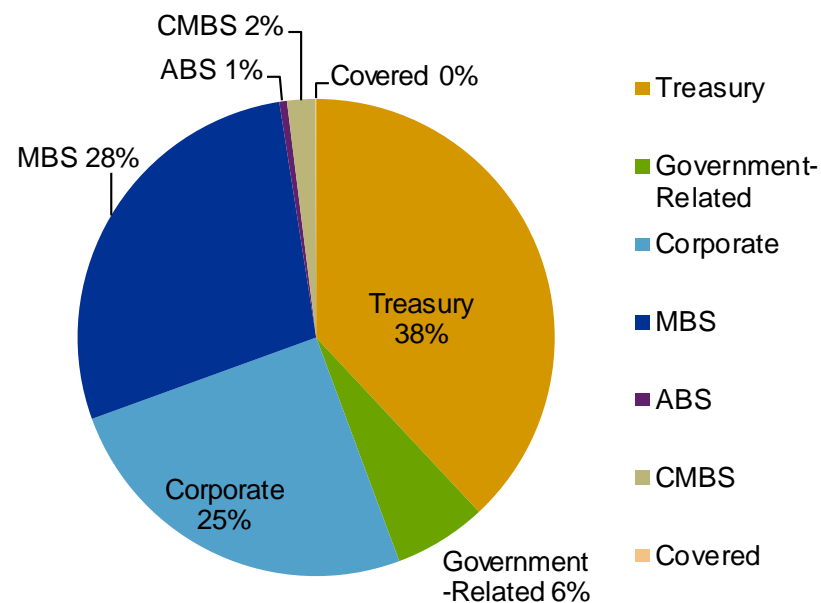
Source: Aon Hewitt Investment Consulting, Barclays
Data as of December 31, 2018

Add an International Bond Index Fund (cont'd)

- The international bond market has a larger allocation to government debt than the U.S. fixed income market, largely at the expense of securitized products
- Allocations to sovereign debt and Mortgage Backed Securities (MBS) should be viewed as similar to one another, without a need to match the market's exposure to each



Barclays Capital Global Aggregate Index
Sector Exposure (%) as of 12/31/2018
\$49.7 trillion on MV



Barclays Capital U.S. Aggregate Index
Sector Exposure (%) as of 12/31/2018
\$20.3 trillion on MV

Source: Aon Hewitt Investment Consulting, Barclays
Data as of December 31, 2018

Morningstar Model Portfolios

- Add the Vanguard Total International Bond Index Fund (VTABX)

RC

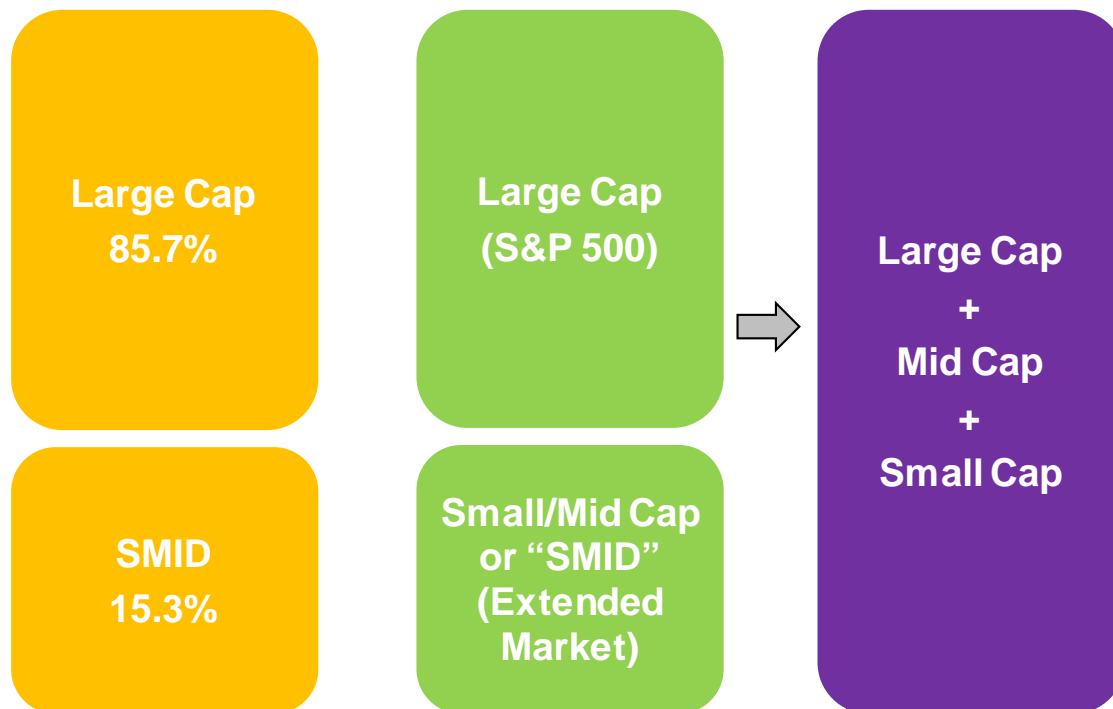
Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	7%	7%	5%	5%	5%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	3%	3%	4%
DFA Inflation-Protected Securities I	9%	8%	6%	4%	3%	-	-
DFA US Targeted Value I	-	3%	-	3%	4%	3%	3%
Diamond Hill Large Cap Y	-	-	-	-	4%	-	-
Dodge & Cox Global Stock	-	-	-	-	-	-	3%
MFS International Value R6	3%	3%	3%	3%	3%	3%	4%
T. Rowe Price Stable Value Fund	8%	6%	3%	-	-	-	-
TIAA Traditional	40%	34%	30%	22%	15%	7%	-
Vanguard Developed Markets Idx Instl	-	4%	8%	12%	16%	18%	20%
Vanguard Emerging Mkts Stock Idx I	-	3%	4%	6%	8%	11%	13%
Vanguard Extended Market Idx I	-	4%	12%	11%	12%	18%	19%
Vanguard Institutional Index Instl PI	4%	13%	16%	22%	24%	31%	31%
Vanguard Total Bond Market Index I	19%	10%	5%	6%	-	-	-
Vanguard Total Intl Bd Idx Admiral	7%	5%	5%	3%	3%	6%	-
William Blair Small-Mid Cap Gr I	3%	-	-	-	-	-	3%

RCP

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	6%	6%	6%	5%	4%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	4%	4%	4%
DFA Inflation-Protected Securities I	8%	8%	6%	4%	3%	-	-
DFA US Targeted Value I	-	4%	-	3%	3%	-	3%
Diamond Hill Large Cap Y	3%	9%	-	-	3%	-	-
Dodge & Cox Global Stock	-	-	-	-	-	-	3%
MFS International Value R6	-	3%	3%	3%	-	5%	4%
PIMCO Total Return Instl	27%	15%	4%	-	-	-	-
TIAA Traditional	40%	32%	25%	16%	10%	5%	-
Vanguard Developed Markets Index Instl	4%	3%	8%	12%	19%	18%	20%
Vanguard Emerging Mkts Stock Idx Instl	-	3%	4%	6%	8%	11%	13%
Vanguard Extended Market Index Instl	-	3%	12%	11%	13%	20%	19%
Vanguard Federal Money Market Investor	5%	-	-	-	-	-	-
Vanguard Institutional Index Instl PI	-	5%	16%	22%	24%	30%	31%
Vanguard Total Bond Market Index I	-	5%	10%	12%	6%	7%	-
Vanguard Total Intl Bd Idx Admiral™	4%	4%	3%	3%	3%	-	-
William Blair Small-Mid Cap Gr I	3%	-	-	-	-	-	3%

Consideration #1: Total U.S. Stock Market Index Fund

Market Weights¹ Current Structure Proposed Structure

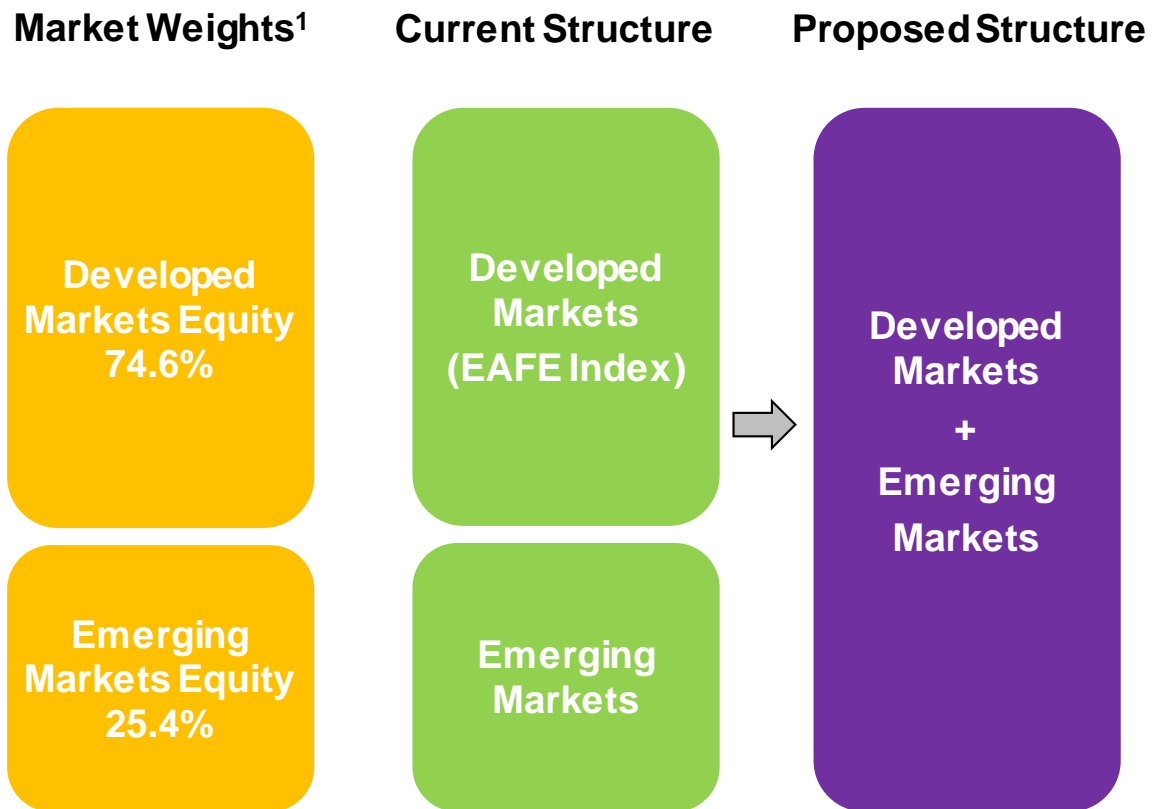


AHIC Recommendation:

- Consolidate the large cap and SMID cap index funds into a single, total U.S. stock market index fund
- AHIC's preferred approach is one fund with total U.S. equity market coverage
 - Maintains simplicity (consolidates two funds to one)
 - Potentially easier for participant decision-making (do not need to decide how to allocate between large and SMID cap equities)

¹ Dow Jones U.S. Total StockMarket as of March 31, 2019.

Consideration #2: Total International Stock Market Index Fund



AHIC Recommendation:

- Consolidate the developed and emerging market index funds into a single, total international stock market index fund
- AHIC's preferred approach is one fund with total international equity market coverage
 - Maintains simplicity (consolidates two funds to one)
 - Potentially easier for participant decision-making (do not need to decide how to allocate between developed and emerging market equities)

¹ Dow Jones U.S. Total StockMarket as of March 31, 2019.

Correlation Table – Tier II Investment Options

- The five-year correlation among NSHE's investment options is shown below
- Correlations above **0.7** are shown in red, between **0.3 and 0.7** in yellow, and below **0.3** in green

Five-Years Ending 3/31/2019

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Vanguard Total Bond Market Index Fund	1.00																						
2 Vanguard Total Stock Market Index Fund	-0.06	1.00																					
3 Vanguard Institutional Index Fund	-0.06	0.99	1.00																				
4 Vanguard FTSE Social Index Fund	-0.09	0.99	0.99	1.00																			
5 Vanguard Extended Market Index Fund	-0.08	0.93	0.89	0.91	1.00																		
6 Vanguard Total International Stock Index Fund	0.10	0.80	0.80	0.78	0.70	1.00																	
7 Vanguard Developed Market Index Fund	0.06	0.81	0.82	0.80	0.72	0.99	1.00																
8 Vanguard Emerging Markets Stock Index Fund	0.24	0.63	0.64	0.61	0.54	0.88	0.80	1.00															
9 Vanguard Federal Money Market Fund	0.07	0.01	0.00	0.01	0.01	0.01	0.00	0.03	1.00														
10 T. Rowe Price Stable Value Common Trust Fund A	0.27	0.00	-0.01	0.01	0.00	-0.10	-0.10	-0.08	0.50	1.00													
11 TIAA Traditional - RC	0.20	-0.01	-0.02	-0.01	0.01	-0.04	-0.05	0.02	-0.50	0.01	1.00												
12 TIAA Traditional - RCP	0.21	0.01	0.01	0.01	0.04	0.02	0.01	0.06	-0.51	-0.04	0.97	1.00											
13 PIMCO Total Return Fund	0.90	0.11	0.12	0.10	0.07	0.30	0.28	0.36	0.06	0.24	0.24	0.24	1.00										
14 DFA Inflation-Protected Securities Portfolio	0.83	0.08	0.08	0.02	0.07	0.29	0.25	0.43	0.06	0.17	0.18	0.21	0.81	1.00									
15 American Century High Income	0.10	0.72	0.71	0.69	0.70	0.80	0.79	0.70	0.06	-0.15	0.11	0.16	0.28	0.30	1.00								
16 T. Rowe Price Instl. Large Cap Growth Fund	-0.09	0.89	0.89	0.92	0.82	0.79	0.81	0.61	0.05	0.02	-0.06	-0.05	0.13	0.06	0.64	1.00							
17 Diamond Hill Large Cap	-0.16	0.97	0.97	0.96	0.89	0.77	0.78	0.60	-0.02	-0.06	-0.02	0.01	0.01	-0.03	0.70	0.84	1.00						
18 William Blair Small/Mid Cap Growth Fund	-0.10	0.91	0.87	0.90	0.95	0.66	0.69	0.49	0.03	0.04	-0.09	-0.07	0.06	0.03	0.61	0.84	0.84	1.00					
19 DFA U.S. Targeted Value	-0.23	0.86	0.81	0.82	0.95	0.61	0.62	0.44	-0.05	-0.10	0.02	0.05	-0.11	-0.05	0.65	0.68	0.86	0.85	1.00				
20 Dodge & Cox Global Stock Fund	-0.15	0.88	0.89	0.88	0.80	0.90	0.89	0.76	-0.03	-0.13	0.05	0.09	0.09	0.06	0.81	0.82	0.91	0.73	0.76	1.00			
21 Harding Loevner International Equity Instl.	0.20	0.80	0.81	0.78	0.71	0.96	0.96	0.84	-0.02	-0.08	-0.02	0.03	0.38	0.37	0.77	0.79	0.75	0.68	0.59	0.84	1.00		
22 MFS International Value Fund	0.30	0.78	0.79	0.77	0.67	0.88	0.90	0.70	0.00	0.02	-0.06	0.01	0.46	0.41	0.66	0.78	0.70	0.70	0.51	0.73	0.92	1.00	
23 Cohen and Steers Instl. Realty Shares	0.52	0.58	0.56	0.55	0.56	0.43	0.44	0.40	0.04	0.32	0.25	0.26	0.59	0.51	0.40	0.47	0.48	0.54	0.44	0.38	0.51	0.58	1.00

Lower Cost Vanguard Share Class Options

As of September 30, 2019

Fund	Assets	Share Class	Fee (\$)	Estimated Annual Savings
Vanguard Institutional Index Fund - Instl. Plus	\$144,642,248	VIIIX @ 0.02%	\$28,928	--
Vanguard Extended Market Index Fund - Inst.	\$44,309,940	VIEIX @ 0.06%	\$26,586	--
Vanguard Total Stock Market Index Fund - Inst.	\$52,091,054	VITSX @ 0.03%	\$15,627	--
Vanguard Total Stock Market Index Fund - Instl. Plus	\$241,043,242	VSMPX @ 0.02%	\$48,209	\$22,933
Vanguard Developed Market Index Fund - Inst.	\$49,770,224	VTMNX @ 0.05%	\$24,885	--
Vanguard Emerging Markets Stock Index Fund - Inst.	\$32,930,232	VEMIX @ 0.10%	\$32,930	--
Vanguard Total International Stock Index Fund - Inst.	\$10,062,410	VTSNX @ 0.08%	\$8,050	--
Vanguard Total International Stock Index Fund - Inst.	\$92,762,866	VTSNX @ 0.08%	\$74,210	(\$8,345)
Vanguard Total International Stock Index Fund - Instl. Plus	\$100,000,000	VTPSX @ 0.07%	\$70,000	\$4,135

- The “Institutional Plus” share class option of the Vanguard Total International Stock Index Fund with a fee of 0.07% is available at \$100 million in assets

Morningstar Model Portfolios

- Merge the Vanguard Institutional Index Fund (VIIIX) and the Vanguard Extended Market Index Fund (VIEIX) into the Vanguard Total Stock Market Index Fund (VIT SX)
- Merge the Vanguard Developed Market Index Fund (VTMNX) and the Vanguard Emerging Market Index (VEMIX) Fund into the Total International Stock Market Index Fund (VTSNX)

RC

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	8%	9%	6%	4%	5%	-	-
Cohen & Steers Instl Realty Shares	-	-	4%	4%	4%	5%	4%
DFA Inflation-Protected Securities I	12%	7%	7%	5%	3%	4%	-
DFA US Targeted Value I	-	4%	3%	4%	6%	9%	11%
Diamond Hill Large Cap Y	-	-	-	-	3%	-	-
Dodge & Cox Global Stock	-	3%	-	3%	4%	5%	5%
Harding International Eq Inst	-	-	-	4%	6%	8%	9%
MFS International Value R6	3%	3%	5%	5%	4%	6%	6%
PIMCO Total Return Instl	-	-	-	-	-	-	-
T. Rowe Price Stable Value Fund	10%	7%	5%	4%	-	-	-
TIAA Traditional	40%	34%	30%	22%	15%	7%	-
Vanguard Federal Money Market Investor	-	-	-	-	-	-	-
Vanguard Total Bond Market Index I	18%	13%	6%	4%	3%	-	-
Vanguard Total Stock Market Idx I	-	5%	10%	11%	14%	16%	20%
Vanguard Total International Stock Index I	6%	15%	19%	27%	30%	37%	39%
William Blair Small-Mid Cap Gr I	3%	-	5%	3%	3%	3%	6%

RCP

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	7%	7%	6%	4%	5%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	4%	4%	5%	4%
DFA Inflation-Protected Securities I	10%	7%	7%	5%	3%	-	-
DFA US Targeted Value I	-	6%	5%	4%	6%	7%	11%
Diamond Hill Large Cap Y	3%	12%	-	-	3%	-	-
Dodge & Cox Global Stock	3%	-	-	4%	4%	4%	5%
Harding Loevner International Eq Instl	-	-	-	3%	6%	6%	9%
MFS International Value R6	-	3%	7%	5%	4%	7%	6%
PIMCO Total Return Instl	29%	21%	12%	-	-	-	-
TIAA Traditional	40%	32%	25%	16%	10%	5%	-
Vanguard Federal Money Market Investor	5%	3%	-	-	-	-	-
Vanguard Total Bond Market Index I	-	-	5%	14%	8%	7%	-
Vanguard Total Intl Stock Index I	-	6%	8%	11%	14%	17%	20%
Vanguard Total Stock Market Idx I	-	3%	18%	27%	30%	37%	39%
William Blair Small-Mid Cap Gr I	3%	-	4%	3%	3%	5%	6%

Morningstar Model Portfolios (cont'd)

- Merge the Vanguard Institutional Index Fund (VIIIX) and the Vanguard Extended Market Index Fund (VIEIX) into the Vanguard Total Stock Market Index Fund (VIT SX)
- Merge the Vanguard Developed Market Index Fund (VTMNX) and the Vanguard Emerging Market Index (VEMIX) Fund into the Total International Stock Market Index Fund (VTSNX)
- Add the Vanguard Total International Bond Index Fund (VTABX)

RC

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	8%	8%	6%	5%	5%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	4%	4%	5%
DFA Inflation-Protected Securities I	9%	8%	6%	4%	3%	-	-
DFA US Targeted Value I	-	4%	4%	7%	6%	8%	8%
Diamond Hill Large Cap Y	4%	-	-	-	3%	-	-
Dodge & Cox Global Stock	3%	3%	-	3%	4%	-	5%
Harding International Eq Inst	-	-	3%	5%	6%	-	6%
MFS International Value R6	-	3%	3%	3%	4%	12%	7%
PIMCO Total Return Instl	-	-	-	3%	-	-	-
T. Rowe Price Stable Value Fund	8%	6%	3%	-	-	-	-
TIAA Traditional	40%	34%	30%	22%	15%	7%	-
Vanguard Total Bond Market Index I	17%	11%	4%	3%	-	-	-
Vanguard Total International Stock Index I	-	14%	19%	27%	30%	37%	39%
Vanguard Total Intl Bd Idx Admiral	8%	3%	6%	3%	3%	7%	-
Vanguard Total Stock Market Idx I	-	6%	9%	12%	14%	19%	22%
William Blair Small-Mid Cap Gr I	3%	-	4%	-	3%	6%	8%

RCP

Fund Name	Very Conservative	Conservative	Moderately Conservative	Moderate	Moderately Aggressive	Aggressive	Very Aggressive
American Century High Income Y	6%	6%	6%	5%	5%	-	-
Cohen & Steers Instl Realty Shares	-	-	3%	3%	4%	5%	5%
DFA Inflation-Protected Securities I	8%	8%	6%	4%	3%	-	-
DFA US Targeted Value I	-	5%	5%	7%	6%	7%	8%
Diamond Hill Large Cap Y	4%	6%	-	3%	3%	-	-
Dodge & Cox Global Stock	-	3%	3%	4%	4%	4%	5%
Harding Loevner International Eq Instl	-	-	3%	-	6%	5%	6%
MFS International Value R6	-	3%	3%	5%	4%	7%	7%
PIMCO Total Return Instl	27%	15%	5%	-	-	-	-
TIAA Traditional	40%	32%	25%	16%	10%	5%	-
Vanguard Federal Money Market Investor	5%	-	-	-	-	-	-
Vanguard Total Bond Market Index I	-	5%	9%	11%	5%	7%	-
Vanguard Total Intl Bd Idx Admiral™	4%	4%	3%	3%	3%	-	-
Vanguard Total Intl Stock Index I	3%	5%	8%	15%	14%	18%	22%
Vanguard Total Stock Market Idx I	-	8%	18%	24%	30%	37%	39%
William Blair Small-Mid Cap Gr I	3%	-	3%	-	3%	5%	8%



Appendix

AHIC Manager Research Ratings

As of 9/30/2019

Fund	AHIC Ratings
Vanguard Target Retirement Funds/Trusts	Buy
Vanguard Total Bond Market Index Fund	Buy
Vanguard Total Stock Market Index Fund	Buy
Vanguard Institutional Index Fund	Buy
Vanguard FTSE Social Index Fund	Buy
Vanguard Extended Market Index Fund	Buy
Vanguard Total International Stock Index	Buy
Vanguard Developed Market Index Fund	Buy
Vanguard Emerging Markets Stock Index Fund	Buy
Vanguard Federal Money Market Fund	Buy
T. Rowe Price Stable Value Common Trust Fund A	Buy
TIAA Traditional RC/RCP	Above Average
PIMCO Total Return Fund	Buy
DFA Inflation-Protected Securities	Buy
American Century High Income	Buy
T. Rowe Price Instl. Large Cap Growth Fund	Buy
Diamond Hill Large Cap	Buy
William Blair Small/Mid Cap Growth Fund	Buy
DFA U.S. Targeted Value	Buy
Dodge & Cox Global Stock Fund	Buy
Harding Loevner International Equity Instl.	Buy
MFS International Value Fund	Buy
Cohen & Steers Instl Realty Shares	Buy

Observations:

- The Plans' investment lineups offer several high quality investment managers
 - Buy: 100%
 - Qualified: 0%
 - Sell: 0%
 - Not Rated: 0%
 - In Review: 0%

The overall ratings score can be interpreted as follows:

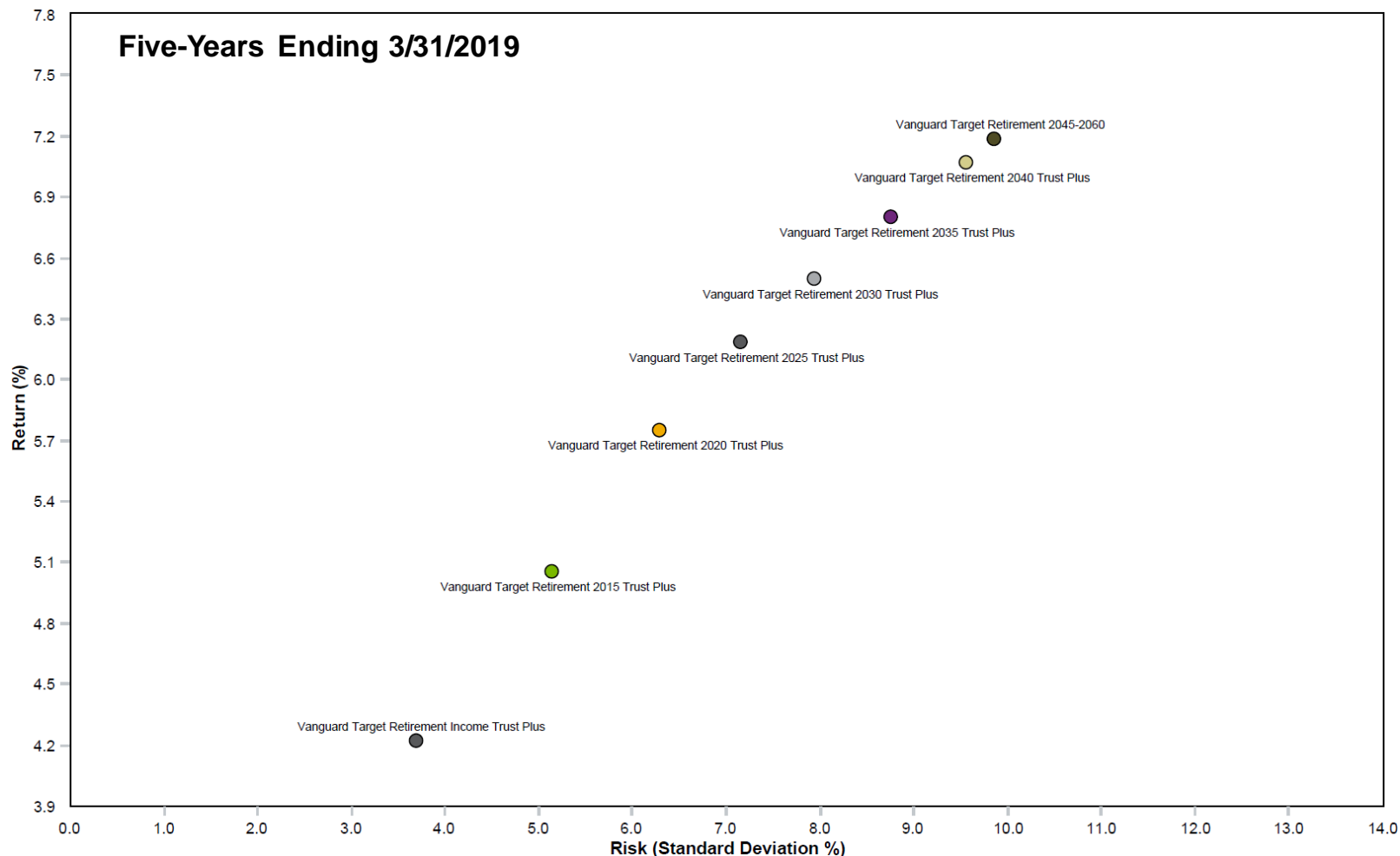
Buy – we recommend purchase of this investment product

Qualified – we recommend client investments in this product be maintained

Sell – we recommend termination of client investments in this product

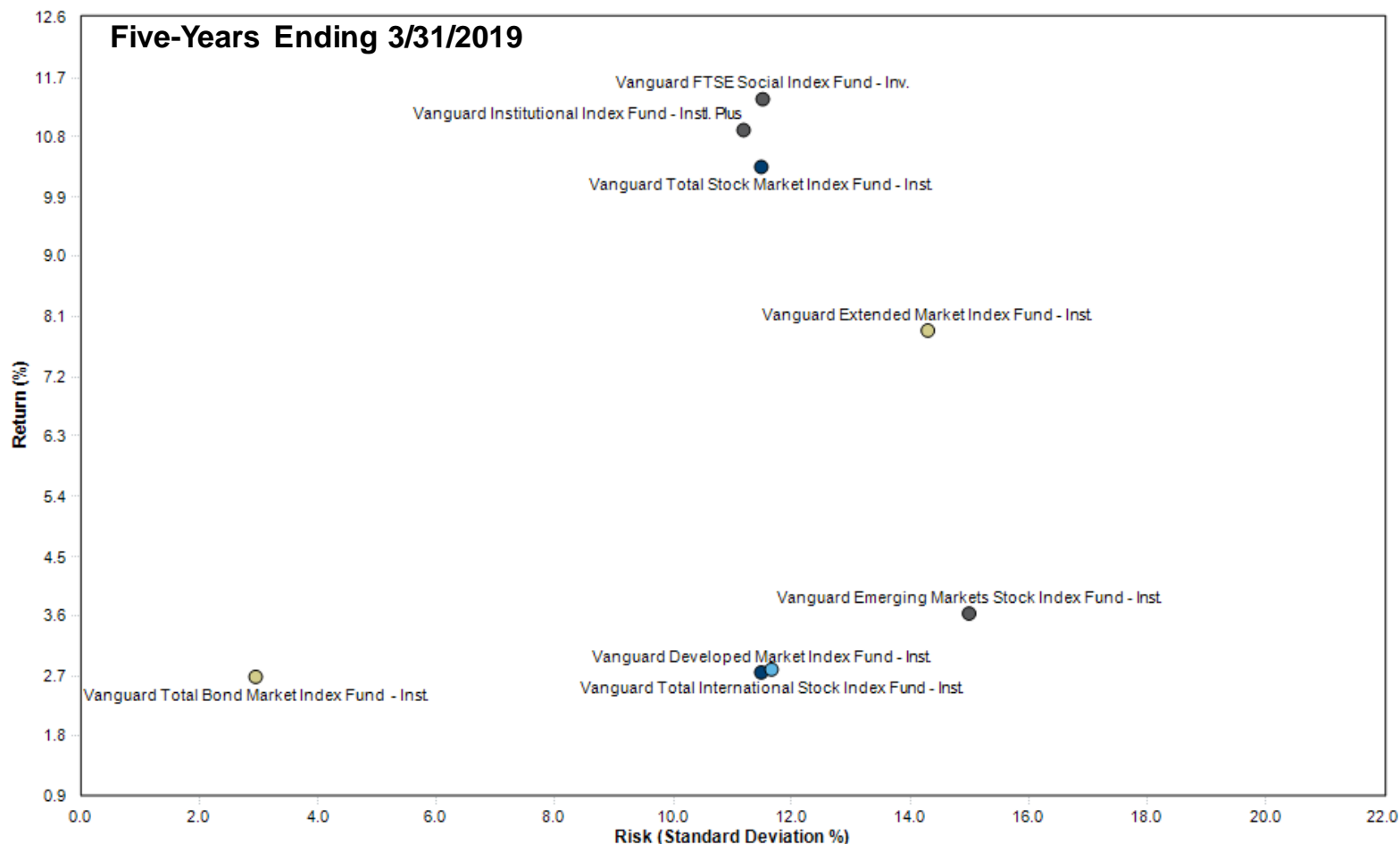
In Review – the rating is under review as we evaluate factors that may cause us to change the current rating

Do Offerings Span the Risk Spectrum? – Target Date Retirement Funds



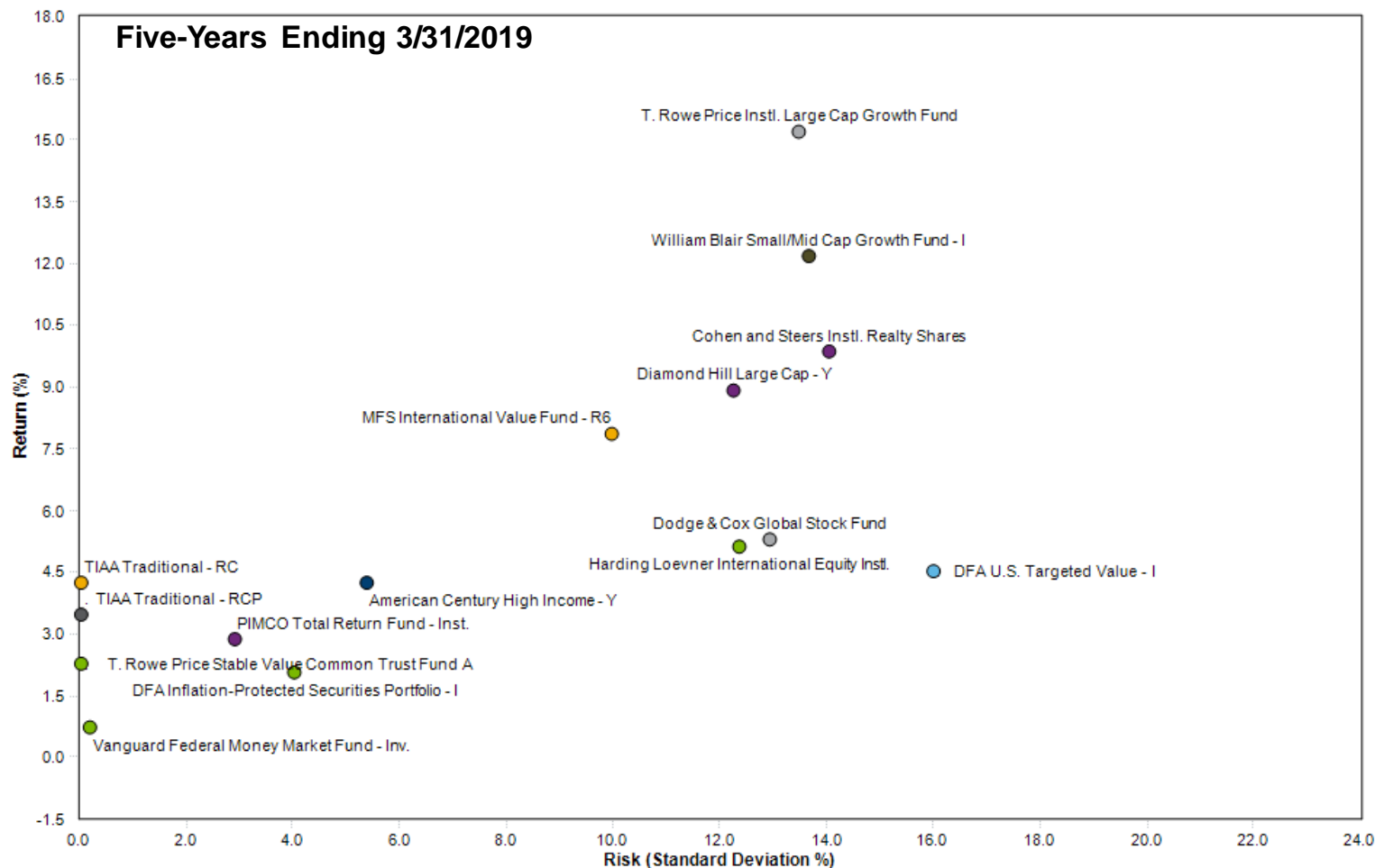
- As highlighted above, the Plans' Target Date Retirement Funds have markedly different risk-return characteristics based upon their respective target date

Do Offerings Span the Risk Spectrum? – Index Funds



- As highlighted above, the Plans' index fund options provide participants with ample opportunity to form well-diversified portfolios, given a reasonable range of risk and return circumstance

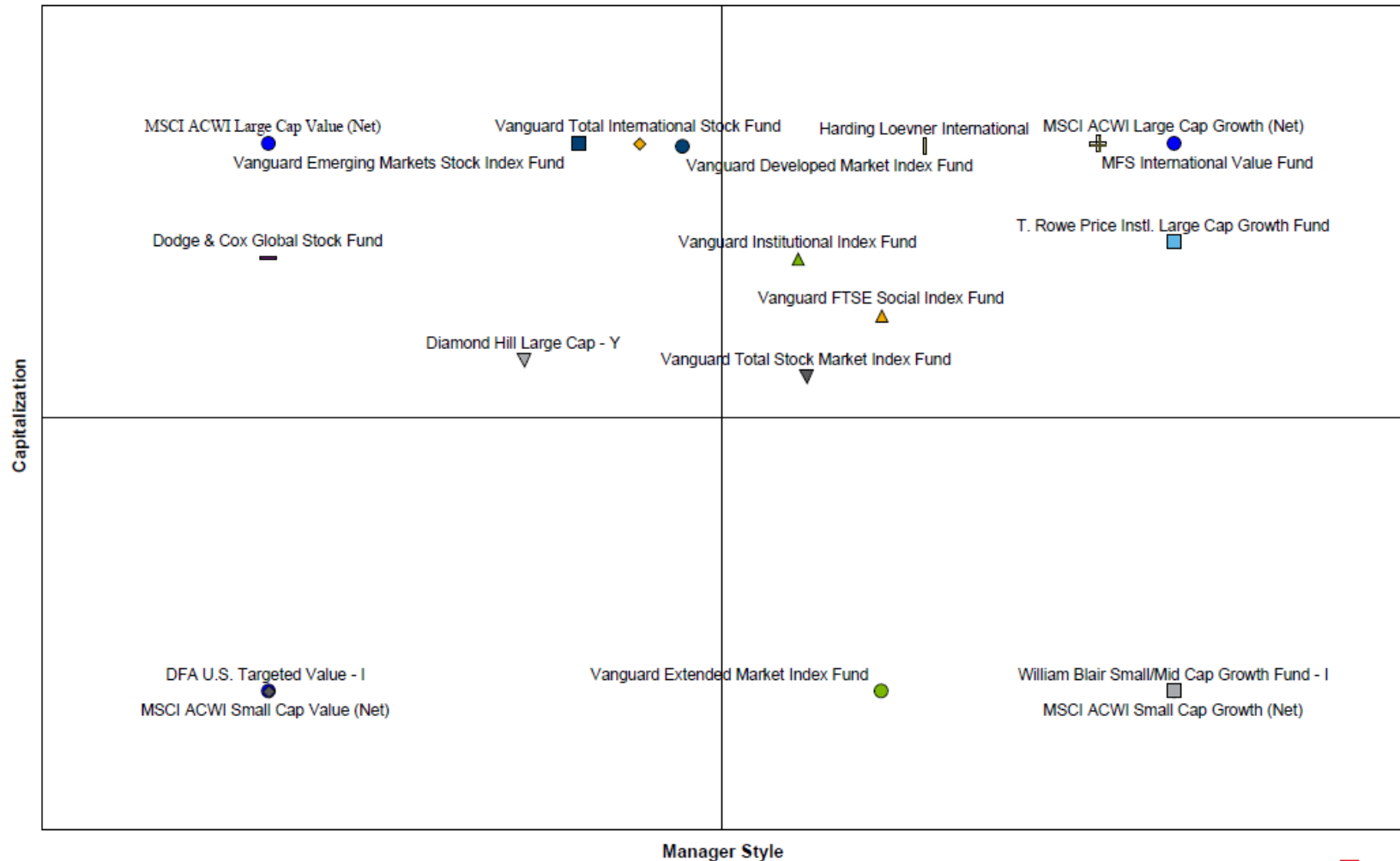
Do Offerings Span the Risk Spectrum? – Active Funds



- The Plans' actively managed investment options also provide participants with ample opportunity to form well-diversified portfolios, given a reasonable range of risk and return circumstance

Are Different Styles and Capitalizations Offered?

Five-Years Ending 9/30/2019



Diversification Relative to Peers

As of 3/31/2019

Investment Option Type:	NSHE*	Plans with 5,000+ Participants	All Plans
U.S. Stock (Active)	6.7%	20.4%	20.9%
U.S. Stock (Indexed)	12.1	15.8	15.4
Non-U.S. Stock (Active)	3.8	3.3	3.6
Non-U.S. Stock (Indexed)	4.5	2.2	2.1
Company Stock	0.0	15.3	14.0
Total Stock	27.2	57.0	56.0
U.S. Bonds (Active)	2.5	4.3	4.4
U.S. Bonds (Indexed)	2.0	5.9	5.5
Non-U.S. Bonds (Active)	0.0	0.3	0.3
TIPS	1.0	0.4	0.4
Stable Value	10.8	6.2	6.4
Cash Equivalents	1.4	3.5	3.4
Total Fixed Income	17.7	20.6	20.4
Balanced/Lifestyle	0.0	3.5	3.2
Target Retirement Date	52.8	16.6	17.8
Self-Directed	1.1	1.1	1.3
Real Estate	1.3	0.3	0.4
Sector Fund(s) Other than Real Estate	0.0	0.0	0.1
Other	0.0	0.7	0.7
Total	100.0%	100.0%	100.0%

Source: Plan Sponsor Council of America "61st Annual Survey – PSCA's Annual Survey of Profit Sharing and 401(k) Plans." 2018

*Excludes loans

Are Important Fund Types Missing?

As of 3/31/2019

Investment Option Type:	NSHE	All Plans*
<i>U.S. Stock (Active)</i>	Yes – 4	85.3%
<i>U.S. Stock (Indexed)</i>	Yes – 4	87.3
<i>International/Global Stock (Active)</i>	Yes – 3	83.7
<i>International/Global Stock (Indexed)</i>	Yes – 3	47.3
<i>U.S Bonds (Active)</i>	Yes – 2	78.8
<i>U.S. Bonds (Indexed)</i>	Yes – 1	46.1
<i>International/Global Bonds</i>	No	24.5
<i>Inflation-Protected Bond</i>	Yes – 1	31.0
<i>Stable Value</i>	Yes – 2	67.3
<i>Cash Equivalents</i>	Yes – 1	44.1
<i>Balanced Stock/Bond Fund</i>	No	45.3
<i>Target Retirement Date/Lifecycle Funds</i>	Yes – 1	73.1
<i>Target Risk/Lifestyle Funds</i>	No	9.0
<i>Real Estate Fund</i>	Yes – 1	37.1
<i>Sector Fund(s)</i>	No	15.9
<i>Self-Directed Brokerage Window</i>	Yes – 1	24.5

Source: Plan Sponsor Council of America "61st Annual Survey – PSCA's Annual Survey of Profit Sharing and 401(k) Plans." 2018

Note: The Vanguard Target Retirement Suite and TIAA Traditional are counted as one option each

Discussion Topics

Section 1	Capital Markets Review
Section 2	Performance Review
Section 3	Noteworthy Items
Section 4	Vanguard Flash Report
Section 5	Investment Structure Discussion
Section 6	Legal & Compliance Update



Aon Quarterly Update

Third Quarter 2019

Retirement Legal Consulting & Compliance

In this Issue

- 2 New SEC Guidance Regarding Investment Advice—Implications for Retirement Plans
- 3 Supreme Court Agrees to Hear IBM Stock Case
- 3 DOL Requires Electronic Filing of “Top Hat” Pension Plan Statements
- 4 IRS Expands Self-Correction Program for Retirement Plans
- 5 Determination Letter Program Reopened for Certain Individually Designed Plans
- 6 Should Your Retirement Plan Require Arbitration?
- 6 IRS to Issue Guidance on Student Loan Matching Provisions
- 7 Quarterly Roundup of Other New Developments
- 9 Recent Publications

Prior Issues

To access prior issues, [click here](#) and select “Newsletters”

Notes From Your Editors

Letting the days go by, another quarter has passed. As usual, the federal agencies that govern retirement benefits have given us some gifts. The biggest one from our point of view is the proposed rules issued by the Securities and Exchange Commission regarding the fiduciary duties of broker dealers and registered investment advisors. While primarily focused on retail investors (retirement plans in general are not retail investors), there are aspects of the proposed rules that will impact retirement plan sponsors.

We spend a lot of time thinking about the most prudent processes for monitoring employer stock investment options in defined contribution plans. Several years ago, the U.S. Supreme Court issued an opinion in *Dudenhoeffer* that established some threshold guidance about what plaintiffs must successfully allege to bring a “stock drop” case against a plan sponsor. Now we’re seeing a split in the federal appellate courts about how the *Dudenhoeffer* standard should be interpreted. Recently, the Supreme Court agreed to hear a “stock drop” case involving *IBM* that will hopefully resolve these issues once and for all.

The Internal Revenue Service (IRS) gave plan sponsors two major gifts during the last quarter. The first was expanding the list of plan failures that can be corrected under the self-correction program of the IRS’ Employee Plans Compliance Resolution System (EPCRS). This is a significant development as the self-correction program does not require IRS involvement and is faster, easier, and less costly than the IRS’ Voluntary Compliance Program. The second gift is the expansion of its determination letter program. The program expansion permits determination letter applications for individually designed hybrid plans during a one-year period beginning on September 1, and applications from individually designed merged plans (defined benefit or defined contribution) on an ongoing basis if certain timing requirements are satisfied.

A question that we’re frequently asked is whether a retirement plan should contain terms requiring that disputes be resolved through arbitration, rather than litigation, after the plan’s claims procedure is exhausted. We include an article considering the pros and cons associated with this approach.

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.

Jennifer Ross Berrian
Partner
Aon

Susan Motter
Associate Partner
Aon

New SEC Guidance Regarding Investment Advice—Implications for Retirement Plans

by Elizabeth Groenewegen



The Securities and Exchange Commission (SEC) recently finalized guidance regarding recommendations offered by securities broker-dealers (BDs) and advice offered by registered investment advisers (RIAs). The SEC has authority to regulate the professional conduct of BDs and RIAs under federal securities law, and the new guidance is intended to clarify the duty of care each respectively owes to its investor customers. Our focus is on the implications of this SEC guidance for tax-qualified retirement plans and their employer sponsors.

The guidance consists of two new rules and two interpretations regarding the Investment Advisers Act of 1940:

- **Regulation Best Interest (Regulation BI).** Regulation BI is a new rule that imposes a “best interest” standard of conduct on BDs when they make recommendations to retail clients about security transactions or investment strategies involving securities. The BD must not put its financial interests ahead of the interest of the retail customer. BDs must have policies and procedures reasonably designed to achieve compliance with Regulation BI in place by June 30, 2020.
- **Form CRS Relationship Summary and Form ADV Amendments (Form CRS Rule).** The Form CRS Rule is a new rule that requires BDs and RIAs to provide retail clients with client relationship summary (CRS) information that describes the nature of the relationship and the applicable standard of conduct. Effective June 30, 2020, the Form CRS must be provided at the beginning of each new relationship with a retail investor (and by July 30, 2020 for each existing relationship).
- **Standard of Conduct for Investment Advisers.** The standard of conduct is new interpretive guidance intended to clarify the fiduciary duties that RIAs owe to their clients, including the duties of care and loyalty. This guidance is effective now.
- **Broker-Dealer “Solely Incidental” Exclusion.** The solely incidental exclusion is also effective now. This new guidance explains how a broker-dealer providing investment advice that is “solely incidental” to its BD business (and for no special compensation) is not subject to the fiduciary standards of an investment adviser.

Regulation BI makes clear the SEC’s focus is on “retail” investors, which includes individuals with savings held under retirement plans and individual retirement accounts (IRAs). Other investment accounts for individuals, such as a health savings account (HSA) or an educational savings account, are also considered “retail” investors for this purpose. The SEC rules are not intended to break new ground regarding investors that are not retail investors. That is, current SEC standards remain in place for investment professionals’ relationships with “institutional” investors, which include retirement plan sponsors and their plan investment committees.

In 2016, the Department of Labor (DOL) finalized regulations that would have imposed fiduciary status and duties under the Employee Retirement Income Security Act of 1974 (ERISA) on anyone receiving compensation for offering investment recommendations and advice for ERISA plan accounts and IRAs. The 5th Circuit Court of Appeals vacated the DOL regulations in *Chamber of Commerce v. DOL*. In declining to appeal, the DOL effectively abandoned the regulations. Instead, the DOL has stated that new guidance will be issued under ERISA, which will be drafted to harmonize with the new SEC guidance.

While there is no definitive ERISA guidance yet, the SEC guidance clearly will have implications for retirement plan sponsors and their plan fiduciaries. We can anticipate seeing impacts in the following areas:

- **Investment Services Provided to Retirement Plans.** Regulation BI and its best interest standard of care applies to retail investors only. A retirement plan (other than an IRA) is not a retail investor and Regulation BI does not apply to investment advice given to a retirement plan that is not an IRA.
- **Investment Services Provided to Plan Participants.** Retirement plans frequently offer participants financial information and education, and at times, access to certain financial services. In addition, terminated vested participants frequently seek advice on whether to leave their benefits in the plan, take withdrawals, or make rollovers. Regulation BI applies to such service offerings. ERISA requires a plan fiduciary to prudently select and monitor the services made available to participants. The plan fiduciaries should understand the services the firm will provide or offer and, at a minimum, require the firm to confirm compliance with the appropriate standard of conduct for services directed to individual participants and beneficiaries.

Aon continues to monitor developments regarding investment advice standards and will alert the retirement community once the DOL issues its guidance under ERISA. Retirement plan sponsors should reach out to their Aon consultant with any questions regarding ERISA’s fiduciary obligations regarding plan investments.

Supreme Court Agrees to Hear IBM Stock Case

by Hitz Burton

On June 3, 2019, the U.S. Supreme Court agreed to review the 2nd Circuit Court of Appeals decision in *Jander v. Retirement Plans Committee of IBM*. The appellate court decision allowed participants to proceed with a proposed class action stock-drop lawsuit related to IBM's sale of a struggling business unit. The decision by the 2nd Circuit took many plan sponsors and fiduciaries by surprise, and it appears to be at odds with prior decisions by the 5th and 6th Circuits since the Supreme Court's 2014 decision in *Fifth Third Bancorp v. Dudenhoeffer* placed additional burdens on plaintiffs attempting to assert fiduciary breach claims.

The *Jander* plaintiffs allege that the fiduciaries for IBM's retirement plan breached their fiduciary duty of prudence under the Employee Retirement Income Security Act of 1974 when they failed to make certain disclosures and allowed participants to continue to make investments in an IBM stock fund even though the fiduciaries were aware (or should have been aware) that IBM's share price was artificially inflated. The IBM fiduciaries, the *Jander* plaintiffs maintain, had nonpublic information regarding steep losses at a business unit which, if known to the public equity markets, would have resulted in a significant decline in IBM's stock price.

Under the standard established in *Dudenhoeffer*, the *Jander* plaintiffs must plausibly describe (i) an alternative action that the IBM fiduciaries could have taken that did not violate federal securities or other applicable laws and (ii) that a prudent fiduciary could not have

thought that stopping plan investments in IBM stock or disclosing the financial losses incurred by the business unit would have done more harm than good.

The 2nd Circuit found that the specific facts at issue in *Jander* provided the IBM fiduciaries with ample opportunity to make sufficient disclosures through regular securities filings. Further, the court found that a prudent fiduciary could not have thought that earlier disclosure in a federal securities filing would do more harm than a later disclosure as "[a] reasonable business executive could plausibly foresee that the inevitable disclosure of longstanding corporate fraud would reflect badly on the company and undermine faith in its future pronouncements."

By agreeing to review the *Jander* decision, it is hoped that the Supreme Court will provide additional clarification regarding when and under what circumstances allegations of a fiduciary breach involving a plan's investment in employer stock will be permitted to proceed.

Sponsors of defined contribution plans will be watching this case quite closely as the Supreme Court proceeds to further clarify what plaintiffs may need to demonstrate to pursue plan fiduciaries over a plan's employer stock performance. Aon's Retirement Legal Consulting & Compliance consultants will be pleased to work with plan sponsors and their plan fiduciaries to evaluate possible employer stock exposure and to consider alternative risk mitigation strategies.

DOL Requires Electronic Filing of "Top Hat" Pension Plan Statements

by David Alpert

On June 17, 2019, the U.S. Department of Labor (DOL) finalized proposed regulations to revise the procedures for filing top hat pension plan statements. The final regulations require electronic submission of these statements through a website provided by the Employee Benefits Security Administration.

A "top hat" pension plan is an unfunded or employer paid insured pension plan maintained primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employees. A top hat pension plan is exempt from most of the reporting and disclosure rules of the Employee Retirement Income Security Act of 1974, provided that the plan administrator files a simple one-time statement with the DOL and provides plan documents to the DOL should the DOL request them.

Originally, top hat statements were required to be filed with the DOL by mail or personal delivery. Proposed regulations issued on September 30, 2014 permitted plan administrators, on a voluntary basis, to file the statement electronically. The final regulations now require electronic

filing of the statement effective August 16, 2019, and filings by mail or personal delivery will no longer be accepted. The rules regarding the content of the notice haven't changed, just the delivery requirement. A similar revised electronic filing rule also applies for welfare benefit plans that provide only apprenticeship or training benefits.

Top hat plan sponsors are encouraged to:

- Determine whether the required top hat statement has been timely filed with the DOL for each top hat plan;
- If no such statement was timely filed, determine the best way to correct the omission; and
- Ensure that any such statement filed on or after August 16, 2019 is done electronically.

Aon's Retirement Legal Consulting & Compliance consultants can assist plan sponsors in assessing filing requirements and correcting any filing failures.

IRS Expands Self-Correction Program for Retirement Plans

by Susan Motter



Effective April 19, 2019, the Internal Revenue Service (IRS) significantly expanded the types of retirement plan disqualification failures that may be corrected under the Self-Correction Program (SCP) of the IRS' Employee Plans Compliance Resolution System (EPCRS). Specifically, the IRS released Revenue Procedure 2019-19 (New EPCRS) that modifies and supersedes Revenue Procedure 2018-52. EPCRS provides a comprehensive system of correction programs, including SCP, the Voluntary Correction Program (VCP), and the Audit Closing Agreement Program (Audit CAP), for sponsors of retirement plans that have failed to satisfy certain qualification requirements of the Internal Revenue Code (Code).

Prior to the expansion, plan sponsors could use SCP to self-correct certain limited types of plan disqualification failures without the need for a VCP submission with the IRS. Using SCP is easier for plan sponsors than VCP as no application needs to be filed with the IRS, no user fee is required, and no approval from the IRS is necessary. Plan sponsors have long urged the IRS to provide additional relief through an expansion of the types of failures that can be corrected using SCP. New EPCRS now provides welcome relief to plan sponsors in the form of significant opportunities to self-correct certain plan document and loan failures.

Plan Document Failures. Prior to New EPCRS, if a plan sponsor failed to timely amend its retirement plan for legislative or regulatory changes, the plan sponsor would have been required to file a VCP submission with the IRS and pay a user fee. With the expansion of SCP, a plan sponsor is permitted to self-correct without IRS involvement by retroactively adopting the required amendment. Self-correction is only available if the plan has a favorable determination letter and the retroactive amendment is adopted by no later than the close of the

second plan year following the plan year in which the amendment should have been adopted.

Operational Failures Corrected by Plan Amendment. A plan sponsor has the fiduciary responsibility to follow its retirement plan document, the written terms of which contain technical and complex rules. It is therefore no surprise that mistakes do occur where plan operations are not consistent with the terms of the plan document. Prior to New EPCRS, a plan sponsor could not self-correct certain operational failures (such as processing a hardship distribution when the plan does not allow for hardship distributions) by a plan amendment to conform the terms of the plan with the plan's prior operations.

The SCP expansion permits a plan sponsor to self-correct by retroactive plan amendment if certain conditions are satisfied. The amendment must result in an increase of a benefit, right, or feature (BRF); the increased BRF must be available to all eligible employees; and the provision of the increased BRF must not violate any other qualification requirement of the Code. In addition, the general correction principles of EPCRS must be satisfied.

Plan Loan Failures. Self-correction of plan loan operational failures (e.g., failure to repay a plan loan according to plan terms; a "defaulted loan") continues to be available under New EPCRS. The significant difference under the SCP expansion is the ability to self-correct without having to report the failure as a taxable deemed distribution to the participant. Prior to New EPCRS, a plan sponsor was required to file a VCP submission, pay a user fee, and specifically request reporting relief from the IRS.

The SCP expansion permits a plan sponsor to self-correct a failure to obtain spousal consent for a plan loan (where the terms of the plan require spousal consent) by simply notifying the spouse and obtaining consent retroactively. In addition, the SCP expansion now allows a plan sponsor to self-correct a failure where a plan participant was able to obtain a number of plan loans that exceeded the number permitted by the plan's terms. In such a case, a plan sponsor can retroactively adopt a conforming amendment to the plan as long as the amendment otherwise satisfies the qualification requirements of the Code or the requirements applicable to the plan.

The SCP expansion provides plan sponsors an immediate opportunity to review their plans for documentary and operational compliance to take advantage of simpler correction procedures for common plan errors without IRS involvement. Aon's Retirement Legal Consulting & Compliance consultants can assist plan sponsors in reviewing their plans' compliance and how best to take advantage of this new guidance.

Determination Letter Program Reopened for Certain Individually Designed Plans

By Dan Schwallie



As reported previously, in 2016 the Internal Revenue Service (IRS) limited the ability of plan sponsors of individually designed plans to apply for determination letters as to the qualified status of the plans. The limited determination letter program only permitted applications to be made for initial qualification or upon plan termination. However, on May 1, 2019, the IRS issued Revenue Procedure 2019-20 (RP 2019-20), which expanded the determination letter program for individually designed qualified retirement plans on a limited basis to include individually designed statutory hybrid plans (e.g., cash balance and pension equity plans). The expanded program also includes merged plans that result from a recent corporate merger or acquisition. The determination letter program continues to be available without modification for initial qualification and qualification upon plan termination.

Expanded Determination Letter Opportunities for Hybrid Plans.

During the 12 month period beginning September 1, 2019, and ending August 31, 2020, sponsors of individually designed statutory hybrid plans may submit determination letter applications.

Expanded Determination Letter Opportunities for Merged Plans.

Beginning September 1, 2019, the IRS will accept determination letter applications on an ongoing basis for individually designed merged plans that are submitted within the period beginning on the effective date of the plan merger and ending on the last day of the first plan year that begins after the effective date of the plan merger. The effective date of the plan merger must have occurred no later than the last day of the first plan year beginning after the plan year that includes the effective date of the merger, acquisition, or business transaction. For example, a corporation with a calendar year 401(k) plan acquires a company in 2019 with a calendar year 401(k) plan. The merger of the two plans must be completed by December 31, 2020, and the determination application must be submitted by December 31, 2021.

Plan mergers that occurred after the 2016 restrictions limiting the determination letter program for individually designed plans to initial qualification and upon termination and that do not meet the timing requirements above will not be eligible for review under this expansion (e.g., a plan merger related to a pre-2017 merger or acquisition).

Remedial Amendment Period. Any remedial amendment period that is open as of the beginning of the applicable submission period described above is extended to the end of that submission period. Filing a determination letter application within the applicable submission period further extends the remedial amendment period for 91 days after the date a determination letter is issued. (An open remedial amendment period is the time during which an individually designed plan is permitted to be amended retroactively to comply with Internal Revenue Code qualification requirements.)

Monetary Sanctions for Plan Document Failures. Merged plans submitted for determination letters pursuant to RP 2019-20 will not be at risk for monetary sanctions with respect to plan provisions effectuating the plan merger. In addition, no monetary sanctions will be imposed on hybrid plans for any plan provision failure related to statutory requirements for hybrid plans. However, in some cases, a monetary sanction may be imposed for plan provision failures that are unrelated to statutory hybrid plan requirements or plan merger provisions.

Sponsors of hybrid plans should consider taking advantage of this limited one-year opportunity to obtain a determination letter as to the qualified status of their plan documents—including plan provisions unrelated to the hybrid plan rules. Sponsors of plans that merge due to an acquisition or corporate merger should also consider submitting a timely determination letter application. Aon's Retirement Legal Consulting & Compliance consultants can provide the necessary consulting and determination letter submission services in either situation.

Should Your Retirement Plan Require Arbitration?

by Hitz Burton



As the frequency and financial stakes of lawsuits filed under the Employee Retirement Income Security Act of 1974 (ERISA) increase, plan sponsors and fiduciaries have naturally looked for ways to control and mitigate their exposure to that litigation risk. One risk management technique that has gained some traction is to add mandatory arbitration provisions to retirement plans.

Lawsuits are problematic to plan sponsors and fiduciaries for a variety of reasons, including the time involved, the expense, and the substantial amount of documentation that may be required to be produced during discovery. Arbitration, by contrast, is typically quicker and less expensive with only limited opportunities for plaintiffs to pursue discovery. On the other hand, decisions in federal court ERISA litigation are typically made by a judge who is bound to a large degree by precedent. Therefore, decisions are arguably more predictable, and an adverse initial decision can typically be appealed. Arbitration decisions, meanwhile, are made by an individual arbitrator who is less constrained by prior decisions and typically includes very limited appeal rights, if any.

But are plan provisions designed to require participants to arbitrate claims a good idea? To address that question, one needs to understand (i) what types of claims participants typically raise in ERISA litigation; (ii) how that litigation in federal court compares to arbitration; and (iii) when plan provisions that purport to compel arbitration of claims are enforceable.

Participant claims are typically claims for benefits or allegations that a breach of fiduciary duty under ERISA has occurred. Claims for benefits due under the terms of a plan are usually specific to an individual

participant's facts and circumstances (a claim, for example, by a participant that his pay or service was not calculated in accordance with plan provisions). Fiduciary breach claims, on the other hand, are claims brought by a participant on behalf of the plan and typically involve a group of participants. Common fiduciary breach allegations include claims brought by participants who allege that the fees for an investment fund are too high or that performance for that fund trailed similar peer investment funds.

Plan terms may provide that individual participants can generally waive their rights under ERISA to litigate an individual claim for benefits. An agreement to arbitrate claims is, however, not likely enforceable where an individual plaintiff seeks to bring claims on behalf of a plan, often involving a class of similarly situated participants.

Plan sponsors considering adopting an amendment to add a mandatory arbitration provision should evaluate what types of possible claims they would want to remove from the federal courts and whether such removal is likely to lead to a more favorable outcome. For example, a 401(k) plan may already have a robust fiduciary process in place to evaluate the investment alternatives offered to participants. Since the Supreme Court's employer-favorable 2014 decision in *Dudenhoeffer*, a plan sponsor may determine that it may obtain a better outcome in federal court than in arbitration even considering the time and expense of litigation. On the other hand, if senior executives or plan fiduciaries are particularly concerned about the potential distractions involved with extensive discovery for individual benefit claims, adding a mandatory arbitration provision to a plan might make sense.

If you would like to discuss the feasibility of adding a mandatory arbitration provision to your retirement plan and its implications, Aon's Retirement Legal Consulting & Compliance consultants are available to help you consider that alternative and its impact going forward.

IRS to Issue Guidance on Student Loan Matching Provisions

by Dan Schwallie

During a May 2019 meeting of the Tax Section of the American Bar Association, an Internal Revenue Service (IRS) representative stated that the IRS is working on guidance to answer questions the agency has received following the release of Private Letter Ruling (PLR) 201833012 a year earlier. That PLR concluded there was no violation of the contingent benefit rule by a 401(k) plan that provided a nonelective employer contribution instead of a matching contribution to those employees who made payments on their student loans equal to a specified percentage of their compensation. The IRS indicated that

the guidance may be issued either in pieces or in comprehensive guidelines. It was also noted that the IRS will not consider further PLRs while the agency works on this guidance project.

We will continue to monitor developments in this area and will update you when new guidance is released. Please contact any of Aon's Retirement Legal Consulting & Compliance consultants if you have any questions.

Quarterly Roundup of Other New Developments

by Teresa Kruse, Jan Raines, and Bridget Steinhart

QDROs: When Participants Remarry

The anti-alienation rules of the Employee Retirement Income Security Act of 1974 (ERISA) and the Internal Revenue Code (Code) do not permit a retirement plan to transfer or assign a participant's benefit to another person. A limited exception is provided for the assignment of retirement benefits through a qualified domestic relations order (QDRO). QDRO processing can be messy, especially when a subsequent spouse is involved.

On April 16, 2019, the 5th Circuit Court of Appeals settled a QDRO timing dispute between an ex-wife and the widow of a 401(k) plan participant. The issue was whether a QDRO that was submitted to the retirement plan after the participant's death was enforceable. The 5th Circuit affirmed the lower court's conclusion that the ex-wife was entitled to the \$500,000 awarded under the parties' divorce settlement and memorialized in the QDRO. Under the facts of the case, the participant and his former spouse divorced in 2014, the participant remarried four months later, and the divorce settlement was finalized in May 2015, awarding the participant's ex-wife \$500,000 of the 401(k) account. The participant died in October 2015, right about the time the family law court entered a judgment of partition incorporating the terms of the settlement into the divorce decree.

In November 2016, the participant's subsequent spouse sued in federal court to claim the 401(k) funds as the surviving spouse. Since the QDRO was finalized by the state court in January 2017, the widow claimed that the QDRO was invalid because, among other things, it was finalized following the death of the participant. In ruling in favor of the ex-wife, the 5th Circuit noted that ERISA was modified to make "clear that a QDRO will not fail solely because of the time at which it [was] issued." *Miletello v. RMR Mech., Inc.*, No. 18-30942 (5th Cir. Apr. 16, 2019).

An unusual situation? Not according to Aon consultants who are familiar with domestic relations matters and can provide assistance with timely reviews and QDRO processing.

Don't Let Payroll Data Threaten Plan Qualification

Payroll operations continue to be a target of Internal Revenue Service (IRS) enforcement activities due to the role played by employee data in benefits administration. Consider the impact of incorrect employee census and payroll data in determining plan eligibility and benefit amounts, administering loans, and processing distributions. Correcting plan administration errors can be cumbersome and costly, considering hard-dollar costs, indirect costs, and potential sanctions. While such errors can be corrected through the IRS' correction programs under the Employee Plans Compliance Resolution System (EPCRS), part of this process—including negotiating any penalties—requires that sound internal controls exist by the time the IRS review is complete.

Sound internal controls require checks and balances for reviewing the correct treatment of plan administration. For example, this could include a process for determining how to address amendments to the plan, documenting the process, and testing how well it works.

Documentation might include the definition and purpose of specific data points, and the required processes and timing for information flow (such as hard deadlines by which the plan sponsor's field locations must submit new hire, leave of absence, and termination dates to the payroll team). This step not only supports staff training (and future reference) but can provide a meaningful framework for monitoring the effectiveness of the controls. Aon can provide assistance such as helping to develop and document internal control processes, identifying any deficiencies in controls, consulting on plan error resolution, handling associated government filings, and performing targeted operational reviews.

Thole vs. U.S. Bank Heads to the U.S. Supreme Court

The U.S. Supreme Court has agreed to hear the *Thole v. U.S. Bank* case this session. This case is interesting as the plaintiffs are attempting to hold the plan fiduciaries accountable for a fiduciary breach under circumstances where the plaintiffs have not sustained any financial harm. Although the plaintiffs alleged that the defendants' bad investment decisions constituted a fiduciary breach, the plan is currently overfunded, and no participants were adversely impacted by the losses incurred by the plan's trust.

In the past, some courts have required the plaintiffs to sustain an injury (e.g., loss of plan benefits) before permitting a lawsuit to proceed. The plaintiffs in this case claim that participants should have some recourse against plan fiduciaries who breach their ERISA responsibilities and that such conduct should be addressed in all cases—without regard to whether the plan or participants incurred a financial loss.

To the extent that the plaintiffs prevail in being able to assert a fiduciary breach claim in the absence of any financial loss, it would open the door to any number of fiduciary breach claims—particularly in the defined benefit plan space where plan fiduciaries in the past may have been insulated to the extent that the plan was adequately funded and/or benefits continued to be paid timely. In the event the Supreme Court concludes that a fiduciary breach claim may be alleged without a financial injury, such a result will likely subject the plan fiduciaries to increased scrutiny—notwithstanding that the participants are receiving the plan benefits to which they are entitled.

Much will obviously depend on which way the Supreme Court decides. The Department of Labor (DOL) has historically supported permitting ERISA claims for fiduciary breaches notwithstanding the participants not experiencing any financial loss. We will continue to monitor developments and will be glad to discuss further. *Thole v. U.S. Bank*, No. 17-1712, 2019 BL 240739 (U.S. June 28, 2019).

What's the Big Deal about Plan Data?

Plan data includes any personal information about participants that is passed to a retirement plan recordkeeper and used in the creation and servicing of plan accounts. Information can include names and addresses, email addresses, social security numbers, birth dates, account balances, salaries, beneficiary information, or any other

personal information. The data is typically shared through payroll and census files, or directly by the participant who might enter his or her information on a retirement plan account website.

Recently, Vanderbilt University settled a class action lawsuit brought by its 403(b) plan participants. The participants claimed that unreasonable fees were imposed on their investments, imprudent investments were offered, and plan assets weren't protected as service providers were permitted to use plan data to cross-sell investment products and services to plan participants. As part of the settlement, the agreement specified the University must require the recordkeeper to cease using plan data for cross-selling opportunities. To our knowledge this is the first time that a plan data restriction has been imposed in a publicly announced settlement. Therefore, it's important to understand this is a settlement and not a court ruling, so we don't know how a court would rule on this question.

Plan sponsors should review service contracts and talk to their service providers to determine how plan data is used and whether any service or contract changes are in order. Items to address may include what specific data is shared and with whom, for what purpose, and when data is shared with any third party. Assuming plan fiduciaries determine that the data's use and the associated services are appropriate, protocols should be documented to ensure secure transmission, use, and storage. *Cassell v. Vanderbilt Univ.*, No. 3:16-cv-02086 (M.D. Tenn. May 30, 2019).

Retirement Plan Autopilot—How Do You Know What Employees Want?

The Pension Protection Act of 2006 provided incentives for plan sponsors to automatically enroll employees in their defined contribution retirement plans. Fast forward 13 years, and about 60% of retirement plans include an automatic enrollment feature, many with a default savings rate of 3%. Aon's *The Real Deal: 2018 Retirement Income Adequacy Study* reveals the annual amount a typical employee needs to defer is 16% of pay starting at age 25 (that number includes employer contributions in addition to salary deferrals). However, the amount participants tend to save is closer to 4% – 7%. Adding an automatic enrollment feature can help employees save and including an automatic deferral escalation feature may help employees get closer to the 16% target savings rate.

But what do employees want? Younger employees may look to their employer to make savings and investment decisions for them. More seasoned employees may want to make their own decisions. The key is reviewing and understanding your plan demographics. Looking at the decisions your employees are making can provide an understanding of what they want. For example, if your plan data shows an average deferral rate of 6% when employees enroll themselves, this may be a good starting default rate for an automatic deferral in your plan. Aon's *The Real Deal* study shows that as a participant's pay and age increases, so does the participant's average savings rate; therefore, implementing an automatic deferral escalation program may be giving your employees what they want—a savings plan on autopilot.

Please contact your Aon consultant if you have questions about this information or need help reviewing your plan demographics, participant behaviors, automatic enrollment requirements, and retirement readiness.

Electronic Delivery—Will it Ever Become the Norm?

Plan sponsors struggle with the complexity, cost, and delivery of required participant fee disclosures and other notices (statements, safe harbor, automatic enrollment, etc.). DOL and IRS regulations and other guidance regarding the methods of delivery of required disclosures and notices are confusing and vary depending on the information being sent to employees, whether employees have access to electronic materials at work and use a computer for their day-to-day job functions or have given consent to receive information via electronic means.

Recently, eight defined contribution industry groups submitted a letter to the DOL requesting that it propose regulations that will permit employers and plan fiduciaries to make electronic delivery the default delivery method of required participant notices and disclosures. This letter follows the Executive Order signed by President Trump in August 2018, where he directed the DOL and the IRS to review and issue regulations (within a year) which would make required disclosures more “understandable and useful” and to also explore use of electronic disclosure. For plan sponsors with a large number of eligible employees, the cost of delivering paper statements, disclosures, and notices can be significant.

While we await proposed regulations from the DOL, plan sponsors may want to start addressing whether it makes sense to provide work email addresses (if available) to recordkeepers, and to consider if electronic delivery is appropriate for its workforce. We will continue to follow the progress of this topic and keep our clients updated as more information is available.

Auditor Selection—Why it Matters

The selection of an experienced and reliable independent auditor is a high priority for plan fiduciaries. In addition to the selection, it is also important to review and understand the results of the completed audit report. Generally, ERISA requires employee benefit plans with 100 or more participants to have an annual audit, the results of which are then filed with the plan's Form 5500. Due to the ERISA requirement that fiduciaries act prudently, the selection and monitoring of an employee benefit plan auditor is a fiduciary responsibility. Fiduciaries have an obligation to ensure that an auditor meets certain requirements and that the fees for the services provided are reasonable.

Following a study by the DOL a few years ago, the DOL found that audit firms performing less than 100 benefit plan audits each year had a higher deficiency rate than firms performing more than 100 audits each year. The DOL's Employee Benefits Security Administration has developed guidance to assist plan fiduciaries in selecting a qualified, independent auditing firm. The guidance focuses on why the choice of an auditor is important and includes what to look for in licensing requirements, independence, training, and experience. The different scopes of audit are reviewed, and the guide includes questions to ask about the auditor's work. *U.S. Dep't of Labor, Employee Benefits Security Administration, Assessing the Quality of Employee Benefit Plan Audits* (May 2015).

Audits are an important administrative function needed by many plans. Having the tools available to select a skilled and competent audit firm is vital. Your Aon consultant can provide you with more information regarding the selection of an independent audit firm and help you understand your fiduciary responsibilities.

Please see the applicable Disclosures and Disclaimers on page [10](#).

Recent Publications

Considerations Before Paying Expenses From the Plan

by Daniel Schwallie

Benefits Quarterly (Third Quarter 2019)

Plan assets are generally for the exclusive benefit of plan participants. Paying expenses from plan assets requires due consideration to avoid violating rules under ERISA and the Internal Revenue Code. This article highlights what to consider.

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



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