Triange Tria		2015 YTD Performance Summary																							
As of 6/30/15 Ticker Turner Subject Sub	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
Stable Value Coaranteed & Money Market TAK Stable Value "************************************	TIAA-CREF		Manager	AUM	Gross	Net	Net	Rev	Recent Re	turns			Annualiz	ed Total F	Returns as	s of 6/30/1	5		Since	Incep.	Sharpe Ra	tio	Std. Devia	ition	Tracking Error
Stable Value	As of 6/30/15	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1 Month	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	3 Year	%-ile	3 Year	%-ile	3 Year
THAN Stable Value**** Current crediting rate = 1.80 U. V. V. V. V. V. V. V.	Stable Value/Guaranteed & Money Market																								
Manage Market Manage Market Manage M	Stable Value/Guaranteed																								
Vanguard Prime Money Market Inv VMMXX	TIAA Stable Value**** Curre	ent crediting ra	ate = 1.80						0.15	0.94	1.90		1.84						1.88	03/31/12					
Current 7-day Yield: 0.02 City 3-Man(h) Treasury Bill FIXED NCOME FIX	Money Market																				0				
File	Vanguard Prime Money Market Inv	VMMXX	12.00	134,844.52	0.16	0.16		0.00	-	0.01	0.01		0.02		0.03		1.51		5.31	06/04/75	(3.24)		0.01		0.01
First DINCOME	Current 7-day Yield: 0.02																								
Vanguard Total Bond Market Index Adi	Citi 3-Month Treasury Bill								-	0.01	0.02		0.05		0.06		1.34								
Vanguard Total Bond Market Index Adi VBTLX VBTX VBTX VBTX VBTX VBTX VBTX VBTX VBX VB	FIXED INCOME																								
Barclays U.S. Aggregate Float Adjusted Index Intermediate Ferm Bond Median Intermediate Ferm Bond Median Intermediate Ferm Bond Median Intermediate Ferm Bond Median Intermediate Ferm Bond Number of Funds I	Intermediate-Term Bond																								
Intermediate-Term Bond Median Intermediate-Term Bond Median Intermediate-Term Bond Mumber of Funds Intermediate-Term Bond Number of Funds Intermediate-Term Bond Num	Vanguard Total Bond Market Index Adı	VBTLX	2.42	144,211.79	0.07	0.07	1	0.00	(1.00)	(0.17)	1.73	22	1.70	71	3.24	70	4.40	46	4.48	11/12/01	0.56	71	3.03	49	0.24
Intermediate-Term Bond Number of Funds National Number of Funds Nation	Barclays U.S. Aggregate Float Adjusted Index								(1.11)	(0.13)	1.78		1.82		3.38						0.60		2.98		
Find	Intermediate-Term Bond Median				0.89	0.79			(1.13)	(0.03)	1.21		2.24		3.75		4.36				0.73		3.05		0.86
PIMCO Real Return Insti PRRIX 7.58 13,045.38 0.47 0.45 17 0.00 (1.02) (0.15) (3.05) 68 (0.91) 29 3.25 3 4.40 4 6.38 01/29/97 (0.13) 18 6.02 97 Barclays US Treasury US TIPS TR USD (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) (0.97) 0.34 (1.73) 0.97 Inflation-Protected Bond Median (0.97) 0.98 (2.57) 0	Intermediate-Term Bond Number of Funds						260					1,087		1,040		971		861				1,040		1,040	
Barclays US Treasury US TIPS TR USD Inflation-Protected Bond Median Inflation-Protected Bond Number of Funds Equity Large Cap Blend Vinix 14.58 195,289.45 0.04 0.04 1 0.00 (1.94) 1.23 7.41 24 17.28 37 17.31 20 7.89 9.59 1.91 9.55 25 1.91 8.55 1.91 8.55																									
Inflation-Protected Bond Median Inflation-Protected Bond Median Inflation-Protected Bond Median Inflation-Protected Bond Number of Funds Equity Large Cap Blend Vanguard Institutional Index I S&P 500 TR USD United Bond Median Inflation-Protected Bond Number of Funds Inflation-	PIMCO Real Return InstI	PRRIX	7.58	13,045.38	0.47	0.45	17	0.00	(1.02)	(0.15)	(3.05)	68	(0.91)	29	3.25	3	4.40	4	6.38	01/29/97	(0.13)	18	6.02	97	1.15
Inflation-Protected Bond Number of Funds Equity Large Cap Blend Vinix 14.58 195,289.45 0.04 0.04 1 0.00 (1.93) 1.22 7.41 24 17.28 37 17.31 20 7.90 25 9.60 07/31/90 1.91 19 8.55 25 S&P 500 TR USD	Barclays US Treasury US TIPS TR USD								(0.97)	0.34					3.29		4.13				(0.13)		5.23		
Equity Large Cap Blend Vanguard Institutional Index I VINIX 14.58 195,289.45 0.04 0.04 1 0.00 (1.93) 1.22 7.41 24 17.28 37 17.31 20 7.90 25 9.60 07/31/90 1.91 19 8.55 25 8.8P 500 TR USD					0.87	0.75			(0.96)	0.18	(2.57)		(1.20)		2.47		3.43				(0.23)		5.06		0.52
Large Cap Blend Vanguard Institutional Index I VINIX 14.58 195,289.45 0.04 0.04 1 0.00 (1.93) 1.22 7.41 24 17.28 37 17.31 20 7.90 25 9.60 07/31/90 1.91 19 8.55 25 S&P 500 TR USD 1.93 1.94 1.23 7.42 17.31 17.34 7.89 9.59 1.91 8.55 8.55							260					256		218		202		140				219		219	
Vanguard Institutional Index I VINIX 14.58 195,289.45 0.04 0.04 1 0.00 (1.93) 1.22 7.41 24 17.28 37 17.31 20 7.90 25 9.60 07/31/90 1.91 19 8.55 25 S&P 500 TR USD (1.94) 1.23 7.42 17.31 17.34 7.89 9.59 1.91 8.55																									
S&P 500 TR USD (1.94) 1.23 7.42 17.31 17.34 7.89 9.59 1.91 8.55		VINIX	14 58	195 289 45	0.04	0.04	1	0.00	(1 93)	1 22	7 Δ1	24	17 28	37	17 31	20	7 90	25	9.60	07/31/90	1 91	19	8 55	25	0.01
	•	******	11.00	170,207.10	0.01	0.01		0.00					-	0,		20		20		07/01/70				20	0.01
HAA-CREE Social Choice Ed Inst	TIAA-CREF Social Choice Eq Instl	TISCX	9.58	2,727.07	0.18	0.18	4	0.00	(2.11)	(0.42)	3.37	77	16.86	48	15.86	55	7.85	26	4.83	07/01/99	1.78	54	9.02	61	1.35
Russell 3000 TR USD (1.67) 1.94 7.29 17.73 17.54 8.15 5.14 1.92 8.71	•			_,,_,,						` '															
Large Blend Median 1.16 1.06 (1.92) 1.13 6.23 16.78 16.14 7.35 1.81 8.86					1.16	1.06																			2.27
Large Blend Number of Funds 1,505 1,410 1,181 1,515 1,515	y .						1,708		, ,			1,659		1,505		1,410		1,181				1,515		1,515	
Mid Cap Blend	Mid Cap Blend																								
Vanguard Mid Cap Index Adm VIMAX 17.17 65,730.24 0.09 0.09 3 0.00 (1.81) 3.05 8.63 9 19.68 17 18.24 15 9.37 19 10.30 11/12/01 1.98 4 9.34 17	Vanguard Mid Cap Index Adm	VIMAX	17.17	65,730.24	0.09	0.09	3	0.00	(1.81)	3.05	8.63	9	19.68	17	18.24	15	9.37	19	10.30	11/12/01	1.98	4	9.34	17	0.17
Spliced Mid Cap Index * (1.81) 3.09 8.68 19.74 18.31 9.41	Spliced Mid Cap Index *								(1.81)	3.09	8.68		19.74		18.31		9.41								
CRSP US Mid Cap TR USD (1.81) 3.09 8.68 19.66 18.51 9.41 10.46 1.97 9.36	CRSP US Mid Cap TR USD								(1.81)	3.09	8.68		19.66		18.51		9.41		10.46		1.97		9.36		
Mid-Cap Blend Median 1.22 1.17 (1.43) 2.71 5.37 18.03 16.59 8.39 1.67 10.24	Mid-Cap Blend Median				1.22	1.17			(1.43)	2.71	5.37		18.03		16.59		8.39				1.67		10.24		3.58
Mid-Cap Blend Number of Funds 411 408 378 337 249 380 380							411					408		378		337		249				380		380	
Small Cap Blend Vanquard Small Cap Index Adm VSMAX 23.58 56,426.73 0.09 0.09 1 0.00 (0.87) 4.21 5.24 48 18.73 25 18.15 19 9.49 12 9.30 11/13/00 1.62 8 11.01 14	·	VSMAV	72 50	56 126 72	0.00	0.00	1	0.00	(n g7)	∆ 21	5.24	40	19 72	25	18 15	10	0 40	12	0 30	11/12/00	1.62	Q	11 01	1/	0.40
Valiguard Small Cap Index Adm VSMAX 23.58 56,426.73 0.09 0.09 1 0.00 (0.87) 4.21 5.24 48 18.73 25 18.15 19 9.49 12 9.30 11/13/00 1.62 8 11.01 14 Spliced Small Cap Index **	· ·	VAIVIAX	23.38	JU,420./3	0.09	0.09		0.00	. ,			40		25		19		12	7.30	11/13/00	1.02	0	11.01	14	0.40
CRSP US Small Cap TR USD (0.87) 4.18 5.21 19.11 18.56 9.98 1.65 11.03	•																				1 65		11 03		
Small Blend Median 1.36 1.25 0.44 3.81 5.02 17.47 16.54 7.98 1.41 11.94	•				1.36	1.25																			3.31
Small Blend Number of Funds 836 811 723 678 543 728 728							836					811		723		678		543				728		728	



					20	10_					an	ce S	Jui _	*****	ai y									
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
TAA-CREF		Manager	AUM		Net	Net	Rev F	Recent Ret				Annualize		Returns as	of 6/30/1	5		Since	Incep. S	Sharpe Ra	tio	Std. Devia		Fracking Error
As of 6/30/15	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1 Month	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	3 Year	%-ile	3 Year	%-ile	3 Year
Foreign Large Blend																						_		
TIAA-CREF International Eq Idx InstI	TCIEX	9.92	6,426.99	0.06	0.06	1	0.00	(2.82)	6.54	(3.98)	58	12.03	27	9.94	25	5.28	43	8.70	10/01/02	1.11	38	10.75	80	1.69
MSCI EAFE NR USD								(2.83)	5.52	(4.22)		11.97		9.54		5.12		8.67		1.13		10.52		
Foreign Large Blend Median				1.33	1.18			(2.78)	6.03	(3.47)		10.84		9.19		5.05				1.06		10.34		2.97
Foreign Large Blend Number of Funds						865					804		742		676		503				745		745	
Diversified Emerging Markets																								
Vanguard Emerging Mkts Stock Idx Ad	VEMAX	6.92	65,437.60	0.15	0.15	1	0.00	(2.39)	3.84	(2.43)	17	4.14	40	4.14	39			6.18	06/23/06	0.37	42	13.13	77	2.27
Spliced Emerging Markets Index ***								(2.29)	3.80	(2.15)		4.59		4.21										
FTSE Emerging NR USD								(2.29)	3.79	(2.18)		4.75		4.00						0.42		12.89		
MSCI EM NR USD								(2.60)	2.95	(5.12)		3.71		3.68				6.20		0.35		12.46		
Diversified Emerging Mkts Median				1.82	1.52			(2.40)	1.44	(6.83)		3.18		3.60						0.32		12.28		4.33
Diversified Emerging Mkts Number of Fund	ŝ					924					827		614		435						624		624	
Miscellaneous Sector																								
TIAA Real Estate Account	ariable Annuity	10.58	21,090.46	0.71	0.71		0.24	0.23	4.35	10.75		10.11		12.05		4.61		6.48	10/02/95	6.98		1.38		
Lifecycle																								
Vanguard Target Retirment Income Trus	II			0.11	0.11		0.00	(1.22)	0.81	2.01		5.42		6.80				5.12	02/29/08					
Vanguard Target Retirement Income Comp	os. Lx							(1.23)	0.92	2.13		5.57		6.91										
Retirement Income Median				1.14	0.88			(1.33)	0.65	0.68		4.84		5.86										
Retirement Income Number of Funds																								
Vanguard Target Retirment 2010 Trust II				0.11	0.11		0.00	(1.28)	1.02	2.17		6.99		8.40				5.35	02/29/08					
Vanguard Target Retirement 2010 Compos	Lx							(1.30)	1.09	2.33		7.14		8.47										
Target Date 2000-2010 Median				1.11	0.85			(1.33)	1.27	0.85		6.96		7.81										
Target Date 2000-2010 Number of Funds																								
Vanguard Target Retirment 2015 Trust II				0.11	0.11		0.00	(1.48)	1.38	2.69		8.88		9.73				5.83	02/29/08					
Vanguard Target Retirement 2015 Compos	Lx							(1.48)	1.46	2.82		9.02		9.80										
Target Date 2011-2015 Median				1.15	0.88			(1.45)	1.22	1.14		7.73		8.46										
Target Date 2011-2015 Number of Funds																								
Vanguard Target Retirment 2020 Trust II				0.11	0.11		0.00	(1.68)	1.62	3.07		10.25		10.75				6.07	02/29/08					
Vanguard Target Retirement 2020 Compos	Lx							(1.65)	1.67	3.23		10.46		10.94										
Target Date 2016-2020 Median				1.17	0.91			(1.58)	1.30	1.42		8.38		9.15										
Target Date 2016-2020 Number of Funds																								
Vanguard Target Retirment 2025 Trust II				0.11	0.11		0.00	(1.71)	1.88	3.20		11.27		11.57				6.20	02/29/08					
Vanguard Target Retirement 2025 Compos	ite Lx							(1.71)	1.90	3.32		11.48		11.77										
Target Date 2021-2025 Median				1.16	0.91			(1.63)	1.74	1.89		10.02		10.43										



	2015 YTD Performance Summary																							
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
TIAA-CREF	Manager AUM Gross		Gross	Net	Net	Rev Recent Returns		urns			Annualized Total Returns as			s of 6/30/15		Since		Incep. Sharpe Ratio		itio	o Std. Deviation		Tracking Error	
As of 6/30/15	Ticker	r Tenure	\$ Millions	ER	ER	%-ile	Share	1 Month	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	3 Year	%-ile	3 Year	%-ile	3 Year
Vanguard Target Retirment 2030 Trust II				0.11	0.11		0.00	(1.81)	2.12	3.27		12.27		12.40				6.29	02/29/08					
Vanguard Target Retirement 2030 Composite Lx								(1.78)	2.12	3.41		12.49		12.58										
Target Date 2026-2030 Median				1.24	0.98			(1.74)	2.09	2.07		11.02		10.91										
Target Date 2026-2030 Number of Funds																								
Vanguard Target Retirment 2035 Trust II				0.11	0.11		0.00	(1.88)	2.35	3.30		13.26		13.21				6.53	02/29/08					
Vanguard Target Retirement 2035 Composite Lx								(1.84)	2.34	3.50		13.50		13.39										
Target Date 2031-2035 Median				1.20	0.95			(1.77)	2.35	2.37		12.11		11.93										
Target Date 2031-2035 Number of Funds																								
Vanguard Target Retirment 2040 Trust II				0.11	0.11		0.00	(1.95)	2.53	3.35		13.89		13.56				6.79	02/29/08					
Vanguard Target Retirement 2040 Composite Lx								(1.90)	2.55	3.59		14.14		13.76										
Target Date 2036-2040 Median				1.30	1.00			(1.81)	2.52	2.40		12.41		12.04										
Target Date 2036-2040 Number of Funds																								
Vanguard Target Retirment 2045 Trust II				0.11	0.11		0.00	(1.95)	2.53	3.36		13.88		13.58				6.76	02/29/08					
Vanguard Target Retirement 2045 Composite Lx								(1.90)	2.55	3.59		14.14		13.76										
Target Date 2041-2045 Median				1.25	0.96			(1.83)	2.63	2.47		13.00		12.61										
Target Date 2041-2045 Number of Funds																								
Vanguard Target Retirment 2050 Trust II				0.11	0.11		0.00	(1.94)	2.56	3.38		13.87		13.55				6.79	02/29/08					
Vanguard Target Retirement 2050 Composite Lx								(1.90)	2.55	3.59		14.14		13.76										
Target Date 2046-2050 Median				1.42	1.01			(1.81)	2.69	2.56		13.09		12.57										
Target Date 2046-2050 Number of Funds																								
Vanguard Target Retirment 2055 Trust II				0.11	0.11		0.00	(1.99)	2.47	3.25		13.85						13.43	08/31/10					
Vanguard Target Retirement 2055 Composite Lx								(1.90)	2.55	3.59		14.14												
Vanguard Target Retirment 2060 Trust II				0.11	0.11		0.00	(1.98)	2.53	3.30		13.82						11.54	03/01/12					
Vanguard Target Retirement 2060 Composite Lx								(1.90)	2.55	3.59		14.14												
Target Date 2051+ Median				1.35	0.96			(1.83)	2.73	2.64		13.36												
Target Date 2051+ Number of Funds																								

Source: Morningstar & TIAA-CREF

-Tracking error calculated using "Primary Prospectus Benchmark"

All data as of 6/30/15

Since Incep. = Since Inception Date Incep. Date = Inception Date

Vanguard Index Information from available at http://www.vanguard.com

- * = S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter
- ** = Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter

^{***** =} For definitions please visit www.tiaa-cref.org/public/assetmanagement



Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio, Sharpe ratio and standard deviation are calculated by TIAA-CREF and may differ based on calculation methods

Fee Disclosures: 1 The net expense ratio reflects total annual fund operating expenses excluding interest expense. Ifinterest expense was included, returns would have been lower.

2 Accumulations in mutual funds not managed by TIAA-CREF may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.

^{*** =} Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; and FTSE Emerging Index thereafter.

^{**** =} The TIAA Stable Value Inception Date represents the date that the plan's TIAA Stable Value record was initiated on TIAA-CREF's recordkeeping system which may be earlier than the date of first deposit to the contract.

[&]quot;Since Inception" performance is calculated from this date.



%-ile --> Percentile Ranking in Morningstar Category.

The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAA-CREF Website at www.tiaa-cref.org, or call 877 518-9161.

Annuity account options are available through annuity contracts issued by TIAA or CREF. These contracts are designed for retirement or other long-term goals, and offer a variety of income options, including lifetime income. Payments from the variable annuity accounts are not guaranteed and will rise or fall based on investment performance.

For the variable annuity accounts, we estimate expenses for the plan year based on projected expense and asset levels. Differences between estimated and actual expenses are adjusted quarterly and reflected in current investment results. Historically, the adjusting payments have resulted in both upward and downward adjustments.

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

The risks associated with foreign investments are often magnified in emerging markets where there is greater potential for political, currency, and economic volatility.

Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.



Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.

Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Stable Value is guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

TIAA-CREF Individual & Institutional Services, LLC, Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC, Members FINRA and SIPC, distribute securities products. Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association of America (TIAA) and College Retirement Equities Fund (CREF), New York, NY. Each is solely responsible for its own financial condition and contractual obligations.

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161 or log on to tiaacref.org for product and fund prospectuses that contains this and other information. Please read the prospectuses carefully before investing.



Morningstar is an independent service that rates mutual funds and variable annuities, based on risk-adjusted returns. Although Morningstar data is gathered from reliable sources, neither Morningstar nor TIAA-CREF can guarantee its completeness and accuracy. Morningstar does not rate money market accounts, and the other TIAA-CREF mutual fund accounts are too new to be rated. Past performance does not guarantee future results. Accumulation net asset values and returns will vary.

For each fund/account with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's/account's monthly performance (including the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Where applicable, Morningstar's performance rankings are based on linked performance that considers the differences in expense ratios, while actual performance data shown does not reflect such differences. The top 10 percent of funds/accounts in a category receive five stars, the next 22.5 percent receive four stars, and the next 35 percent receive three stars, the next 22.5 percent receive two stars and the bottom 10 percent receive one star. (Each share class is counted as a fraction of one fund/account within this scale and rated separately, which may cause slight variations in the distribution percentages.) Morningstar proprietary ratings on U.S.-domiciled funds/accounts reflect historical risk-adjusted performance, are subject to change every month. They are derived from a weighted average of the performance figures associated with its three-, five- and ten-year (if applicable) Morningstar Rating metrics. Please note, Morningstar now rates group variable annuities within the open-end mutual fund universe.



Prospectus Gross Expense Ratio

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

Prospectus Net Expense Ratio

The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.
- --TIAA-CREF, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees.
- -- Prospectus Net Expense Ratio % ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

Sharpe Ratio (Source: Morningstar Direct)

A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. The Sharpe Ratio can be used to compare two portfolios directly with regard to how much excess return each portfolio achieved for a certain level of risk. Morningstar first calculates a monthly Sharpe Ratio and then annualizes it to put the number in a more useful one-year context.



Standard Deviation (Source: Morningstar Direct) The statistical measurement of dispersion about an average, which depicts how widely a stock or portfolio's returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that is most likely for a given investment. When a stock or portfolio has a high standard deviation, the predicted range of performance is wide, implying greater volatility.

Information Ratio (Source: Morningstar Direct) Benchmark Specific

Information ratio is a risk-adjusted performance measure. The information ratio is a special version of the Sharpe Ratio in that the benchmark doesn't have to be the risk-free rate.

Beta (Source: Morningstar Direct) Benchmark Specific

Beta is a measure of a portfolio's sensitivity to market movements. The beta of the market is 1.00 by definition.

Alpha (Source: Morningstar Direct) Benchmark Specific

A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive Alpha figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative Alpha indicates the portfolio has underperformed, given the expectations established by beta.

Tracking Error (Source: Morningstar Direct) Benchmark Specific

Tracking error is a measure of the volatility of excess returns relative to a benchmark.

Upside (Source: Morningstar Direct) **Benchmark Specific**

Upside Capture Ratio measures a manager's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the security's upside capture return and dividing it by the benchmark's upside capture return.

Downside (Source: Morningstar Direct) Benchmark Specific

Downside Capture Ratio measures a manager's performance in down markets relative to the market (benchmark) itself. It is calculated by taking the security's downside capture return and dividing it by the benchmark's downside capture return.

R-Square (Source: Morningstar Direct) Benchmark Specific

Reflects the percentage of a portfolio's movements that can be explained by movements in its benchmark.

You cannot invest directly in index.

TIAA-CREF reported performance may differ from Morningstar source returns for the

same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by a hypothetical investor over the requested time period. So the return for one year is calculated using the same formula as one month. TIAA-CREF calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns include dividends and capital gains.

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