

THREE YEAR CORRELATIONS MATRIX THRU' 12/31/2011 OF MONTHLY RETURNS OF TIAA-CREF VARIABLE ANNUITIES, MUTUAL FUNDS & CORRESPONDING BENCHMARKS

Introduction

The attached correlation matrix was developed to provide an effective tool to compare TIAA-CREF Accounts and TIAA-CREF Mutual Funds with one another. The matrix can allow individuals to analyze TIAA-CREF variable annuity accounts and mutual funds, and it can assist in the process of creating portfolios and determining efficient asset allocations.

What is correlation?

The adage “don’t put all your eggs in one basket” refers to the concept of diversification. In a financial environment, investing in asset classes that behave similarly is like putting all your eggs in the same basket.

In finance, one indicator of the relationship between different asset classes is correlation. Correlation is a statistical measure that indicates how closely together the returns of two assets classes move over time. An asset class is considered a good portfolio diversifier if its correlation to other asset classes in a portfolio is low or negative. Correlations range from -1.00 to +1.00. A correlation of +1.00 indicates that the assets’ returns move together in unison (e.g., when Asset A increases by 10%, Asset B increases by 10% as well). Conversely, a correlation of -1.00 indicates that the assets move in opposite directions (e.g., when Asset A increases by 10%, Asset B decreases by 10%). Zero correlation means the two securities move randomly with respect to each other; and the movement of Asset A cannot be used to predict the movement of Asset B.

Correlations are used in portfolio management to reduce the potential risk of a portfolio while increasing its expected return potential. To illustrate, the CREF Equity Index Account has a fairly high degree of correlation with the TIAA-CREF S&P 500 Mutual Fund at 0.9980. Accordingly, use of the CREF Equity Index and the TIAA-CREF S&P 500 Mutual Fund in the same investor portfolio would not provide additional diversification benefits to reduce overall portfolio volatility. Alternatively, if the investor utilized the CREF Inflation-Linked Bond Account and the CREF Equity Index Account, the Accounts are negatively correlated and would provide the investor with more diversification in their portfolio than would be the case with the CREF Equity Index and TIAA-CREF S&P 500 Mutual Fund combination.

As always, an investor should always consider the investment objectives, risks, charges and expenses of individual funds carefully before investing.

The Correlation Matrix Report includes correlations between various different TIAA-CREF products and multiple benchmarks. The idea behind a correlation matrix is not necessarily only to show correlation between our products and benchmark indices in similar strategies, but also to demonstrate the correlations of our products and benchmark indices with products and benchmark indices in unrelated asset classes. Over long periods correlation matrices can serve as useful tools in demonstrating the benefits of portfolio diversification; and aiding investors with their portfolio asset allocation decision.

C41844 (0088)



FINANCIAL SERVICES
FOR THE GREATER GOOD®

THREE YEAR CORRELATIONS MATRIX THRU 12/31/2011
OF MONTHLY RETURNS OF TIAA-CREF VARIABLE ANNUITIES,
MUTUAL FUNDS & CORRESPONDING BENCHMARKS

	TIAA Retirement Annuity Account		CREF Global Equities Account		CREF Growth Account	CREF Equity Index Account	CREF Social Choice Account	CREF Bond Market Account	CREF Inflation Linked Bond Account		CREF Money Market Account	TIAA Real Estate Account
	1	-0.3371	-0.3327	-0.3338	-0.3575	-0.3232	0.1285	0.1992	0.2948	-0.3343		
CREF Stock Account	-0.3371	1	0.9947	0.9784	0.9917	0.9907	0.0992	0.1305	-0.0168	-0.1501		
CREF Global Equities Account	-0.3327	0.9947	1	0.9622	0.9751	0.9845	0.1286	0.1420	-0.0510	-0.1508		
CREF Growth Account	-0.3338	0.9784	0.9622	1	0.9827	0.9645	0.0194	0.1302	0.0674	-0.1644		
CREF Equity Index Account	-0.3575	0.9917	0.9751	0.9827	1	0.9877	0.0812	0.1206	0.0113	-0.1377		
CREF Social Choice Account	-0.3232	0.9907	0.9845	0.9645	0.9877	1	0.1967	0.1911	-0.0015	-0.1716		
CREF Bond Market Account	0.1285	0.0992	0.1286	0.0194	0.0812	0.1967	1	0.6033	-0.0276	-0.0656		
CREF Inflation Linked Bond Account	0.1992	0.1305	0.1420	0.1302	0.1206	0.1911	0.6033	1	0.0284	-0.0788		
CREF Money Market Account	0.2948	-0.0168	-0.0510	0.0674	0.0113	-0.0015	-0.0276	0.0284	1	-0.3241		
TIAA Real Estate Account	-0.3343	-0.1501	-0.1508	-0.1644	-0.1377	-0.1716	-0.0656	-0.0788	-0.3241	1		
CREF Composite Index	-0.3417	0.9988	0.9928	0.9758	0.9924	0.9912	0.1083	0.1301	-0.0091	-0.1461		
MSCI World Index	-0.3512	0.9921	0.9965	0.9574	0.9753	0.9839	0.1357	0.1360	-0.0434	-0.1406		
Russell 3000Growth / R1000G Index Blended	-0.3211	0.9765	0.9583	0.9889	0.9833	0.9625	0.0730	0.1238	0.0538	-0.1869		
Russell 3000 Index	-0.3575	0.9917	0.9751	0.9827	1.0000	0.9877	0.0812	0.1203	0.0115	-0.1375		
CREF Social Choice Composite Index	-0.3385	0.9932	0.9838	0.9655	0.9899	0.9970	0.1926	0.1786	-0.0155	-0.1432		
SSB/Barclays Capital TIPS Blended Index	0.2346	0.0999	0.1124	0.0967	0.0879	0.1624	0.5708	0.9873	0.0412	-0.1676		
IMoneyNet All Taxable Average	0.4349	-0.1313	-0.1148	-0.0708	-0.1767	-0.1740	-0.1907	-0.0503	0.5206	-0.5818		
Barclays Capital Aggregate Bond Index	0.1760	-0.0225	0.0067	-0.1052	-0.0334	0.0834	0.9773	0.5949	-0.0618	-0.0263		
Growth & Income Fund	-0.3562	0.9877	0.9735	0.9869	0.9927	0.9774	0.0533	0.1237	0.0069	-0.1352		
International Equity Fund	-0.3430	0.9438	0.9582	0.8992	0.9088	0.9305	0.1505	0.1266	-0.0783	-0.0911		
International Equity Index Fund	-0.3412	0.9629	0.9833	0.9087	0.9277	0.9551	0.1741	0.1527	-0.0924	-0.1306		
Large-Cap Growth Fund / IMGE	-0.3219	0.9639	0.9456	0.9949	0.9711	0.9492	-0.0046	0.1347	0.0905	-0.1600		
Large Cap Growth Index Fund	-0.3395	0.9819	0.9671	0.9989	0.9858	0.9703	0.0344	0.1287	0.0617	-0.1638		
Large Cap Value Fund	-0.3201	0.9818	0.9679	0.9497	0.9843	0.9789	0.1028	0.0827	0.0322	-0.1843		
Large Cap Value Index Fund	-0.3645	0.9791	0.9650	0.9452	0.9884	0.9831	0.1414	0.1321	-0.0430	-0.1150		
Mid Cap Growth Fund	-0.2947	0.9513	0.9277	0.9664	0.9537	0.9282	-0.0658	0.0237	0.1056	-0.1731		
Mid Cap Value Fund	-0.3157	0.9820	0.9633	0.9698	0.9869	0.9735	0.0505	0.0417	0.0687	-0.1752		
Real Estate Securities Fund	-0.2352	0.8469	0.8292	0.8019	0.8628	0.8657	0.1987	0.0187	0.0243	-0.0945		
S&P 500 Index Fund	-0.3622	0.9911	0.9777	0.9787	0.9980	0.9896	0.1081	0.1484	-0.0071	-0.1323		
Small Cap Blend Index Fund	-0.3396	0.9475	0.9156	0.9468	0.9658	0.9377	-0.0216	0.0051	0.0598	-0.1161		
Small Cap Equity Fund	-0.3461	0.9503	0.9198	0.9494	0.9661	0.9389	-0.0161	0.0100	0.0456	-0.1086		
Social Choice Equity Fund	-0.3363	0.9875	0.9690	0.9820	0.9969	0.9883	0.0784	0.1259	0.0388	-0.1690		
Equity Index Fund / IMEQ-A	-0.3563	0.9918	0.9751	0.9826	1.0000	0.9876	0.0820	0.1218	0.0115	-0.1383		
Bond Plus Fund / MFBP	0.0243	0.3673	0.3936	0.2896	0.3369	0.4369	0.8912	0.4912	-0.0804	-0.1234		
High Yield Fund / MFHY	-0.0007	0.7026	0.7124	0.6868	0.6625	0.6788	0.1278	0.0676	0.0995	-0.3589		
Inflation-Link Bond Fund / IILB-A	0.2024	0.1300	0.1414	0.1293	0.1202	0.1906	0.6010	0.9997	0.0217	-0.0783		
Bond Fund / IMBD-A	0.0722	0.1085	0.1344	0.0260	0.0916	0.2000	0.9854	0.5566	-0.0510	-0.0204		
Money Market Fund / IMMM-A	0.4782	-0.2255	-0.2157	-0.1499	-0.2615	-0.2728	-0.2491	-0.0533	0.5337	-0.4773		
Short-Term Bond Fund / MFSB	0.0993	0.2374	0.2716	0.1560	0.2011	0.3086	0.8655	0.4392	-0.0589	-0.1406		
Tax-Exempt Fund / MFTE	0.3280	-0.1092	-0.0878	-0.1372	-0.1284	-0.0748	0.4149	0.1780	0.0253	-0.1922		
MSCI EAFE Index	-0.3356	0.9552	0.9747	0.9005	0.9201	0.9446	0.1684	0.1275	-0.0725	-0.1363		
S&P 500 Index	-0.3629	0.9911	0.9778	0.9787	0.9980	0.9898	0.1096	0.1482	-0.0061	-0.1310		
Russell 1000 Value Index	-0.3652	0.9792	0.9650	0.9455	0.9886	0.9830	0.1403	0.1329	-0.0447	-0.1144		
Russell 2000 Growth Index	-0.2566	0.8142	0.7901	0.8203	0.8359	0.8143	-0.0680	-0.0432	0.0817	-0.1617		
Russell 2000 Index	-0.3390	0.9479	0.9162	0.9468	0.9660	0.9380	-0.0222	0.0046	0.0591	-0.1172		
Russell 2000 Value Index	-0.2699	0.8233	0.8003	0.8016	0.8515	0.8415	0.0557	-0.0121	0.0441	-0.1474		
Russell MidCap Growth Index	-0.2948	0.9624	0.9391	0.9744	0.9679	0.9442	-0.0429	0.0206	0.1131	-0.1844		
Russell MidCap Index	-0.2335	0.8599	0.8452	0.8462	0.8763	0.8715	0.0571	0.0077	0.0973	-0.2214		
Russell MidCap Value Index	-0.3083	0.9645	0.9410	0.9442	0.9786	0.9683	0.0862	0.0378	0.0693	-0.1637		
FTSE NAREIT/DJ Wilshire RESI Index Blended	-0.2316	0.8371	0.8219	0.7869	0.8516	0.8573	0.2176	0.0165	0.0242	-0.0933		
Merrill Lynch BB-B CPI	0.0844	0.6265	0.6376	0.6144	0.5836	0.5993	0.1072	0.0620	0.1099	-0.4282		
Barclays Capital Short (1-5 YR) GOVCREDIT Index	0.2554	0.1657	0.1994	0.1005	0.1330	0.2421	0.8859	0.5993	-0.0350	-0.1386		
Barclays Capital 10 Year Mun BI	0.3060	-0.1379	-0.1218	-0.1576	-0.1498	-0.1068	0.3701	0.1222	0.0378	-0.1266		

With the exception of the Tax-Exempt Fund where the Institutional Share Class is used, the above represents correlations of the Retirement Share Class of the TIAA-CREF Mutual Funds.

* CREF Stock Composite Weightings are: 70.00% Russell 3000® Index, 30.00% MSCI ACWI ex US Investible Market Index.

** CREF Social Choice Account Weightings are: 47% Equity, 40% Fixed Income, 13% Foreign Developed Markets.

Figures represented are correlations based on the rate of return for the three-year period ended 12/31/2011.

Disclosure

Correlation shows the degree to which two assets move together.

A value of 1 indicates perfect correlation, a value of 0 indicates no correlation, and a value of -1 indicates the assets move in opposite directions.

Correlations are based on the past; future correlations may be different, particularly in times of extreme negative performance.

All TIAA-CREF funds/accounts are subject to general market risk. Please see the prospectus for details concerning individual risk factors.

Please note that each fund/account has only one benchmark, which can be found in the prospectus.

TIAA-CREF Individual & Institutional Services, LLC and Teachers Personal Investors Services, Inc., members FINRA, distribute securities products. Annuity products issued by TIAA (Teachers Insurance and Annuity Association), New York, NY and TIAA-CREF Life Insurance Co., New York, NY.

©2011 Teachers Insurance and Annuity Association—College Retirement Equities Fund (TIAA-CREF), New York, NY 10017

THREE YEAR CORRELATIONS MATRIX THRU 12/31/2011
OF MONTHLY RETURNS OF TIAA-CREF VARIABLE ANNUITIES,
MUTUAL FUNDS & CORRESPONDING BENCHMARKS

	CREF Composite Index		Russell 3000Growth / R1000G Index Blended		CREF Social Choice Composite Index		SSB/Barclays Capital TIPS Blended All Taxable Average		Barclays Capital Aggregate Bond Index
TIAA Retirement Annuity Account	-0.3417	-0.3512	-0.3211	-0.3575	-0.3385	0.2346	0.4349	0.1760	
CREF Stock Account	0.9988	0.9921	0.9765	0.9917	0.9932	0.0999	-0.1313	-0.0225	
CREF Global Equities Account	0.9928	0.9965	0.9583	0.9751	0.9878	0.1124	-0.1148	0.0067	
CREF Growth Account	0.9758	0.9574	0.9989	0.9827	0.9655	0.0967	-0.0708	-0.1052	
CREF Equity Index Account	0.9924	0.9753	0.9833	1.0000	0.9899	0.0879	-0.1767	-0.0334	
CREF Social Choice Account	0.9912	0.9839	0.9625	0.9877	0.9970	0.1624	-0.1740	0.0834	
CREF Bond Market Account	0.1083	0.1357	0.0730	0.0812	0.1926	0.5708	-0.1907	0.9773	
CREF Inflation Linked Bond Account	0.1301	0.1360	0.1238	0.1203	0.1786	0.9873	-0.0503	0.5949	
CREF Money Market Account	-0.0091	-0.0434	0.0538	0.0115	-0.0155	0.0412	0.5206	-0.0618	
TIAA Real Estate Account	-0.1461	-0.1406	-0.1869	-0.1375	-0.1432	-0.1676	-0.5818	-0.0263	
CREF Composite Index	1	0.9940	0.9746	0.9924	0.9952	0.0964	-0.1432	-0.0134	
MSCI World Index	0.9940	1	0.9540	0.9753	0.9899	0.1053	-0.1331	0.0128	
Russell 3000Growth / R1000G Index Blended	0.9746	0.9540	1	0.9833	0.9652	0.0961	-0.1449	0.0193	
Russell 3000 Index	0.9824	0.9753	0.9833	1	0.9899	0.0876	-0.1766	-0.0335	
CREF Social Choice Composite Index	0.9952	0.9899	0.9652	0.9899	1	0.1459	-0.1800	0.0760	
SSB/Barclays Capital TIPS Blended Index	0.0964	0.1053	0.0961	0.0876	0.1459	1	0.0805	0.5731	
iMoneyNet All Taxable Average	-0.1432	-0.1331	-0.1449	-0.1766	-0.1800	0.0805	1	-0.2434	
Barclays Capital Aggregate Bond Index	-0.0134	0.0128	0.0193	-0.0335	0.0760	0.5731	-0.2434	1	
Growth & Income Fund	0.9853	0.9702	0.9868	0.9928	0.9804	0.1042	-0.1338	-0.0627	
International Equity Fund	0.9432	0.9563	0.8903	0.9088	0.9346	0.0926	-0.1176	0.0227	
International Equity Index Fund	0.9625	0.9846	0.8984	0.9276	0.9594	0.1253	-0.1190	0.0552	
Large-Cap Growth Fund / IMGE	0.9610	0.9404	0.9889	0.9710	0.9495	0.1057	-0.0655	-0.1276	
Large Cap Growth Index Fund	0.9797	0.9626	1.0000	0.9858	0.9710	0.0951	-0.0790	-0.0878	
Large Cap Value Fund	0.9829	0.9704	0.9469	0.9844	0.9813	0.0582	-0.1443	-0.0105	
Large Cap Value Index Fund	0.9823	0.9696	0.9442	0.9885	0.9870	0.1059	-0.2537	0.0366	
Mid Cap Growth Fund	0.9483	0.9214	0.9677	0.9537	0.9270	-0.0004	-0.0266	-0.1964	
Mid Cap Value Fund	0.9816	0.9622	0.9670	0.9869	0.9743	0.0123	-0.1068	-0.0706	
Real Estate Securities Fund	0.8576	0.8435	0.7776	0.8626	0.8696	-0.0682	-0.3135	0.1118	
S&P 500 Index Fund	0.9921	0.9789	0.9810	0.9980	0.9925	0.1216	-0.1873	-0.0039	
Small Cap Blend Index Fund	0.9486	0.9148	0.9303	0.9657	0.9372	-0.0614	-0.1882	-0.1338	
Small Cap Equity Fund	0.9507	0.9184	0.9333	0.9661	0.9389	-0.0593	-0.1862	-0.1332	
Social Choice Equity Fund	0.9877	0.9684	0.9821	0.9969	0.9852	0.0962	-0.1640	-0.0348	
Equity Index Fund / IMEQ-A	0.9924	0.9752	0.9831	1.0000	0.9898	0.0886	-0.1762	-0.0327	
Bond Plus Fund / MFBP	0.3778	0.4056	0.2145	0.3369	0.4393	0.4524	-0.1645	0.7916	
High Yield Fund / MFHY	0.7091	0.7264	0.5990	0.6624	0.6907	0.0794	0.3071	-0.0253	
Inflation-Link Bond Fund / IILB-A	0.1293	0.1350	0.1238	0.1199	0.1778	0.9869	-0.0554	0.5939	
Bond Fund / IMBD-A	0.1187	0.1439	0.0153	0.0916	0.2002	0.5089	-0.2200	0.9515	
Money Market Fund / IMMM-A	-0.2369	-0.2323	-0.2185	-0.2614	-0.2753	0.0711	0.9798	-0.2865	
Short-Term Bond Fund / MFSB	0.2407	0.2737	0.0890	0.2010	0.3055	0.4075	-0.0999	0.8042	
Tax-Exempt Fund / MFTE	-0.1150	-0.0991	-0.0528	-0.1286	-0.0771	0.2779	0.2487	0.4224	
MSCI EAFE Index	0.9591	0.9830	0.8897	0.9201	0.9533	0.0951	-0.1016	0.0415	
S&P 500 Index	0.9920	0.9789	0.9809	0.9980	0.9926	0.1201	-0.1891	-0.0025	
Russell 1000 Value Index	0.9823	0.9695	0.9447	0.9886	0.9869	0.1070	-0.2543	0.0355	
Russell 2000 Growth Index	0.8182	0.7908	0.9287	0.8358	0.8107	-0.0672	-0.1615	-0.1161	
Russell 2000 Index	0.9491	0.9155	0.9304	0.9659	0.9375	-0.0615	-0.1872	-0.1345	
Russell 2000 Value Index	0.8302	0.8058	0.9140	0.8515	0.8374	-0.0562	-0.2948	0.0122	
Russell MidCap Growth Index	0.9599	0.9331	0.9718	0.9679	0.9428	-0.0175	-0.0393	-0.1657	
Russell MidCap Index	0.8651	0.8487	0.9615	0.8763	0.8687	-0.0113	-0.1593	0.0020	
Russell MidCap Value Index	0.9681	0.9448	0.9346	0.9786	0.9666	-0.0078	-0.1895	-0.0254	
FTSE NAREIT/DJ Wilshire RESI Index Blended	0.8492	0.8385	0.7668	0.8515	0.8627	-0.0705	-0.3164	0.1315	
Merrill Lynch BB-B CPI	0.6308	0.6475	0.5039	0.5834	0.6103	0.0984	0.4074	-0.0414	
Barclays Capital Short (1-5 YR) GOV/CREDIT Index	0.1665	0.1966	0.0782	0.1329	0.2371	0.5951	-0.0272	0.8565	
Barclays Capital 10 Year Mun BI	-0.1439	-0.1321	-0.0720	-0.1499	-0.1072	0.2220	0.2370	0.3812	

With the Exception of the Tax-Exempt Fund where the Institutional Share Class is used, the above represents correlations of the Retirement Share Class of the TIAA-CREF Mutual Funds.

*** In instances where the Retirement Share Class began operations less than three years ago, we have linked the results from the then existing Institutional Share Class or Retail Mutual Fund in the respective strategy. Note that in those cases the results have not been adjusted to reflect the higher expenses of the Retirement Share Class.

Figures represented are correlations based on the rate of return for the three-year period ended 12/31/2011.

Disclosure

Correlation shows the degree to which two assets move together.

A value of 1 indicates perfect correlation, a value of 0 indicates no correlation, and a value of -1 indicates the assets move in opposite directions.

Correlations are based on the past; future correlations may be different, particularly in times of extreme negative performance.

All TIAA-CREF funds/accounts are subject to general market risk. Please see the prospectus for details concerning individual risk factors.

Please note that each fund/account has only one benchmark, which can be found in the prospectus.

TIAA-CREF Individual & Institutional Services, LLC and Teachers Personal Investors Services, Inc., members FINRA, distribute securities products. Annuity products issued by TIAA (Teachers Insurance and Annuity Association), New York, NY and TIAA-CREF Life Insurance Co., New York, NY.

©2011 Teachers Insurance and Annuity Association—College Retirement Equities Fund (TIAA-CREF), New York, NY 10017

THREE YEAR CORRELATIONS MATRIX THRU 12/31/2011
OF MONTHLY RETURNS OF TIAA-CREF VARIABLE ANNUITIES,
MUTUAL FUNDS & CORRESPONDING BENCHMARKS

	Growth & Income Fund	International Equity Fund	International Equity Index Fund	Large-Cap Growth Fund / IMGE	Large Cap Growth Index Fund	Large Cap Value Fund	Large Cap Value Index Fund	Mid Cap Growth Fund	Mid Cap Value Fund	Real Estate Securities Fund
TIAA Retirement Annuity Account	-0.3562	-0.3430	-0.3412	-0.3219	-0.3395	-0.3201	-0.3645	-0.2947	-0.3157	-0.2352
CREF Stock Account	0.9877	0.9438	0.9629	0.9639	0.9819	0.9818	0.9791	0.9513	0.9820	0.8469
CREF Global Equities Account	0.9735	0.9582	0.9833	0.9456	0.9671	0.9679	0.9650	0.9277	0.9633	0.8292
CREF Growth Account	0.9869	0.8992	0.9087	0.9949	0.9989	0.9497	0.9452	0.9664	0.9698	0.8019
CREF Equity Index Account	0.9927	0.9088	0.9277	0.9711	0.9858	0.9843	0.9884	0.9537	0.9869	0.8628
CREF Social Choice Account	0.9774	0.9305	0.9551	0.9492	0.9703	0.9789	0.9831	0.9282	0.9735	0.8657
CREF Bond Market Account	0.0533	0.1505	0.1741	-0.0046	0.0344	0.1028	0.1414	-0.0658	0.0505	0.1987
CREF Inflation Linked Bond Account	0.1237	0.1266	0.1527	0.1347	0.1287	0.0827	0.1321	0.0237	0.0417	0.0187
CREF Money Market Account	0.0069	-0.0783	-0.0924	0.0905	0.0617	0.0322	-0.0430	0.1056	0.0687	0.0243
TIAA Real Estate Account	-0.1352	-0.0911	-0.1306	-0.1600	-0.1638	-0.1843	-0.1150	-0.1731	-0.1752	-0.0945
CREF Composite Index	0.9853	0.9432	0.9625	0.9610	0.9797	0.9829	0.9823	0.9483	0.9816	0.8576
MSCI World Index	0.9702	0.9563	0.9846	0.9404	0.9626	0.9704	0.9696	0.9214	0.9622	0.8435
Russell 3000Growth / R1000G Index Blended	0.9868	0.8903	0.8984	0.9889	1.0000	0.9469	0.9442	0.9677	0.9670	0.7776
Russell 3000 Index	0.9928	0.9088	0.9276	0.9710	0.9858	0.9844	0.9885	0.9537	0.9869	0.8626
CREF Social Choice Composite Index	0.9804	0.9346	0.9594	0.9495	0.9710	0.9813	0.9870	0.9270	0.9743	0.8696
SSB/Barclays Capital TIPS Blended Index	0.1042	0.0926	0.1253	0.1057	0.0951	0.0582	0.1059	-0.0004	0.0123	-0.0682
iMoneyNet All Taxable Average	-0.1338	-0.1176	-0.1190	-0.0655	-0.0790	-0.1443	-0.2537	-0.0266	-0.1068	-0.3135
Barclays Capital Aggregate Bond Index	-0.0627	0.0227	0.0552	-0.1276	-0.0878	-0.0105	0.0366	-0.1964	-0.0706	0.1118
Growth & Income Fund	1	0.9027	0.9256	0.9793	0.9880	0.9743	0.9748	0.9525	0.9809	0.8259
International Equity Fund	0.9027	1	0.9611	0.8738	0.9074	0.9043	0.8944	0.8923	0.9041	0.7926
International Equity Index Fund	0.9256	0.9611	1	0.8893	0.9160	0.9313	0.9266	0.8673	0.9150	0.7994
Large-Cap Growth Fund / IMGE	0.9793	0.8738	0.8893	1	0.9901	0.9342	0.9301	0.9609	0.9590	0.7938
Large Cap Growth Index Fund	0.9880	0.9074	0.9160	0.9901	1	0.9545	0.9507	0.9635	0.9719	0.8058
Large Cap Value Fund	0.9743	0.9043	0.9313	0.9342	0.9545	1	0.9866	0.9325	0.9875	0.8773
Large Cap Value Index Fund	0.9748	0.8944	0.9266	0.9301	0.9507	0.9866	1	0.9139	0.9724	0.8882
Mid Cap Growth Fund	0.9525	0.8923	0.8673	0.9609	0.9635	1	0.9139	1	0.9687	0.8142
Mid Cap Value Fund	0.9809	0.9041	0.9150	0.9590	0.9719	0.9875	0.9724	0.9687	1	0.8767
Real Estate Securities Fund	0.8259	0.7926	0.7994	0.7938	0.8058	0.8773	0.8882	0.8142	0.8767	1
S&P 500 Index Fund	0.9919	0.9081	0.9354	0.9662	0.9827	0.9814	0.9905	0.9375	0.9783	0.8544
Small Cap Blend Index Fund	0.9491	0.8566	0.8496	0.9389	0.9467	0.9541	0.9454	0.9622	0.9738	0.8633
Small Cap Equity Fund	0.9509	0.8639	0.8558	0.9408	0.9488	0.9538	0.9447	0.9674	0.9755	0.8636
Social Choice Equity Fund	0.9875	0.9025	0.9202	0.9709	0.9850	0.9814	0.9827	0.9562	0.9861	0.8607
Equity Index Fund / IMEQ-A	0.9926	0.9080	0.9275	0.9707	0.9858	0.9846	0.9885	0.9531	0.9867	0.8616
Bond Plus Fund / MFBP	0.3091	0.4333	0.4317	0.2645	0.2972	0.3592	0.3784	0.2368	0.3279	0.4386
High Yield Fund / MFHY	0.6597	0.7058	0.7161	0.6713	0.6821	0.6846	0.6321	0.7022	0.7046	0.6218
Inflation-Link Bond Fund / IILB-A	0.1238	0.1255	0.1519	0.1334	0.1280	0.0820	0.1321	0.0225	0.0403	0.0167
Bond Fund / IMBD-A	0.0586	0.1687	0.1759	-0.0023	0.0396	0.1166	0.1533	-0.0425	0.0655	0.2286
Money Market Fund / IMMM-A	-0.2152	-0.2167	-0.2263	-0.1382	-0.1606	-0.2374	-0.3413	-0.1007	-0.1939	-0.3841
Short-Term Bond Fund / MFSB	0.1769	0.3356	0.3209	0.1194	0.1690	0.2375	0.2450	0.1066	0.1987	0.3237
Tax-Exempt Fund / MFTE	-0.1048	-0.1175	-0.0697	-0.1253	-0.1378	-0.1059	-0.1090	-0.1150	-0.0765	0.0572
MSCI EAFE Index	0.9145	0.9609	0.9933	0.8801	0.9070	0.9271	0.9194	0.8654	0.9110	0.8069
S&P 500 Index	0.9917	0.9085	0.9355	0.9662	0.9828	0.9812	0.9905	0.9372	0.9781	0.8554
Russell 1000 Value Index	0.9751	0.8939	0.9264	0.9304	0.9509	0.9863	1.0000	0.9139	0.9723	0.8866
Russell 2000 Growth Index	0.8261	0.7273	0.7385	0.8230	0.8268	0.8200	0.8110	0.8075	0.8390	0.7441
Russell 2000 Index	0.9493	0.8575	0.8505	0.9389	0.9467	0.9547	0.9458	0.9624	0.9741	0.8637
Russell 2000 Value Index	0.8307	0.7194	0.7539	0.8024	0.8101	0.8528	0.8585	0.7712	0.8499	0.8257
Russell MidCap Growth Index	0.9638	0.8913	0.8783	0.9656	0.9741	0.9506	0.9314	0.9940	0.9813	0.8306
Russell MidCap Index	0.8664	0.7751	0.8069	0.8451	0.8553	0.8762	0.8709	0.8158	0.8809	0.8273
Russell MidCap Value Index	0.9604	0.8779	0.8900	0.9335	0.9470	0.9822	0.9771	0.9468	0.9884	0.9241
FTSE NAREIT/DJ Wilshire RESI Index Blended	0.8134	0.7857	0.7975	0.7768	0.7917	0.8695	0.8809	0.7955	0.8650	0.9981
Merrill Lynch BB-B CPI	0.5868	0.6364	0.6376	0.5986	0.6093	0.6101	0.5502	0.6439	0.6357	0.5536
Barclays Capital Short (1-5 YR) GOV/CREDIT Index	0.1148	0.2357	0.2436	0.0664	0.1151	0.1545	0.1720	0.0328	0.1143	0.2223
Barclays Capital 10 Year Mun BI	-0.1210	-0.1551	-0.1120	-0.1409	-0.1605	-0.1254	-0.1309	-0.1320	-0.0921	0.0414

With the exception of the Tax-Exempt Fund where the Institutional Share Class is used, the above represents correlations of the Retirement Share Class of the TIAA-CREF Mutual Funds.

***In instances where the Retirement Share Class began operations less than three years ago, we have linked the results from the then existing Institutional Share Class or Retail Mutual Fund in the respective strategy. Note that in those cases the results have not been adjusted to reflect the higher expenses of the Retirement Share Class.

Figures represented are correlations based on the rate of return for the three-year period ended 12/31/2011.

Disclosure

Correlation shows the degree to which two assets move together.

A value of 1 indicates perfect correlation, a value of 0 indicates no correlation, and a value of -1 indicates the assets move in opposite directions.

Correlations are based on the past; future correlations may be different, particularly in times of extreme negative performance.

All TIAA-CREF funds/accounts are subject to general market risk. Please see the prospectus for details concerning individual risk factors.

Please note that each fund/account has only one benchmark, which can be found in the prospectus.

TIAA-CREF Individual & Institutional Services, LLC and Teachers Personal Investors Services, Inc., members FINRA, distribute securities products. Annuity products issued by TIAA (Teachers Insurance and Annuity Association), New York, NY and TIAA-CREF Life Insurance Co., New York, NY.

©2011 Teachers Insurance and Annuity Association—College Retirement Equities Fund (TIAA-CREF), New York, NY 10017

THREE YEAR CORRELATIONS MATRIX THRU 12/31/2011
OF MONTHLY RETURNS OF TIAA-CREF VARIABLE ANNUITIES,
MUTUAL FUNDS & CORRESPONDING BENCHMARKS

	S&P 500 Index Fund	Small Cap Blend Index Fund	Small Cap Equity Fund	Social Choice Equity Fund	Equity Index Fund / IMEQ	Bond Plus Fund / MFBP	High Yield Fund / MFHY	Inflation-Link Bond Fund / IILB-A	Bond Fund / IMBD-A	Money Market Fund / IMMM-A	Short-Term Bond Fund / MFSB	Tax-Exempt Fund / MFTE
TIAA Retirement Annuity Account	-0.3622	-0.3396	-0.3461	-0.3363	-0.3563	0.0243	-0.0007	0.2024	0.0722	0.4782	0.0993	0.3280
CREF Stock Account	0.9911	0.9475	0.9503	0.9875	0.9918	0.3673	0.7026	0.1300	0.1085	-0.2255	0.2374	-0.1092
CREF Global Equities Account	0.9777	0.9156	0.9198	0.9690	0.9751	0.3936	0.7124	0.1414	0.1344	-0.2157	0.2716	-0.0878
CREF Growth Account	0.9787	0.9468	0.9494	0.9820	0.9826	0.2896	0.6868	0.1293	0.0260	-0.1499	0.1560	-0.1372
CREF Equity Index Account	0.9980	0.9658	0.9661	0.9969	1.0000	0.3369	0.6625	0.1202	0.0916	-0.2615	0.2011	-0.1284
CREF Social Choice Account	0.9896	0.9377	0.9389	0.9883	0.9876	0.4369	0.6788	0.1906	0.2000	-0.2728	0.3086	-0.0748
CREF Bond Market Account	0.1081	-0.0216	-0.0161	0.0784	0.0820	0.8912	0.1278	0.6010	0.9854	-0.2491	0.8655	0.4149
CREF Inflation Linked Bond Account	0.1484	0.0051	0.0100	0.1259	0.1218	0.4912	0.0676	0.9997	0.5566	-0.0533	0.4392	0.1780
CREF Money Market Account	-0.0071	0.0598	0.0456	0.0388	0.0115	-0.0804	0.0995	0.0217	-0.0510	0.5337	-0.0589	0.0253
TIAA Real Estate Account	-0.1323	-0.1161	-0.1086	-0.1690	-0.1383	-0.1234	-0.3589	-0.0783	-0.0204	-0.4773	-0.1406	-0.1922
CREF Composite Index	0.9921	0.9486	0.9507	0.9877	0.9924	0.3778	0.7091	0.1293	0.1187	-0.2369	0.2407	-0.1150
MSCI World Index	0.9789	0.9148	0.9184	0.9684	0.9752	0.4056	0.7264	0.1350	0.1439	-0.2323	0.2737	-0.0991
Russell 3000Growth / R1000G Index Blended	0.9810	0.9303	0.9333	0.9821	0.9831	0.2145	0.5990	0.1238	0.0153	-0.2185	0.0890	-0.0528
Russell 3000 Index	0.9980	0.9657	0.9661	0.9969	1.0000	0.3369	0.6624	0.1199	0.0916	-0.2614	0.2010	-0.1286
CREF Social Choice Composite Index	0.9925	0.9372	0.9389	0.9852	0.9898	0.4393	0.6907	0.1778	0.2002	-0.2753	0.3055	-0.0771
SSB/Barclays Capital TIPS Blended Index	0.1216	-0.0614	-0.0593	0.0962	0.0886	0.4524	0.0794	0.9869	0.5089	0.0711	0.4075	0.2779
IMoneyNet All Taxable Average	-0.1873	-0.1852	-0.1862	-0.1640	-0.1762	-0.1645	0.3071	-0.0554	-0.2200	0.9798	-0.0999	0.2487
Barclays Capital Aggregate Bond Index	-0.0039	-0.1338	-0.1332	-0.0348	-0.0327	0.7916	-0.0253	0.5939	0.9515	-0.2865	0.8042	0.4224
Growth & Income Fund	0.9919	0.9491	0.9509	0.9875	0.9926	0.3091	0.6597	0.1238	0.0586	-0.2152	0.1769	-0.1048
International Equity Fund	0.9081	0.8566	0.8639	0.9025	0.9080	0.4333	0.7058	0.1255	0.1687	-0.2167	0.3356	-0.1175
International Equity Index Fund	0.9354	0.8496	0.8558	0.9202	0.9275	0.4317	0.7161	0.1519	0.1759	-0.2263	0.3209	-0.0697
Large-Cap Growth Fund / IMGE	0.9662	0.9389	0.9408	0.9709	0.9707	0.2645	0.6713	0.1334	-0.0023	-0.1382	0.1194	-0.1253
Large Cap Growth Index Fund	0.9827	0.9467	0.9488	0.9850	0.9858	0.2972	0.6821	0.1280	0.0396	-0.1606	0.1990	-0.1378
Large Cap Value Fund	0.9814	0.9541	0.9538	0.9814	0.9846	0.3592	0.6846	0.0820	0.1166	-0.2374	0.2375	-0.1059
Large Cap Value Index Fund	0.9905	0.9454	0.9447	0.9827	0.9885	0.3784	0.6321	0.1321	0.1533	-0.3413	0.2450	-0.1090
Mid Cap Growth Fund	0.9375	0.9622	0.9674	0.9562	0.9531	0.2368	0.7022	0.0225	-0.0425	-0.1007	0.1066	-0.1150
Mid Cap Value Fund	0.9783	0.9738	0.9755	0.9861	0.9867	0.3279	0.7046	0.0403	0.0655	-0.1939	0.1987	-0.0765
Real Estate Securities Fund	0.8544	0.8633	0.8636	0.8607	0.8616	0.4386	0.6218	0.0167	0.2286	-0.3841	0.3237	0.0572
S&P 500 Index Fund	1	0.9492	0.9494	0.9939	0.9981	0.3527	0.6550	0.1483	0.1144	-0.2737	0.2188	-0.1252
Small Cap Blend Index Fund	0.9492	1	0.9983	0.9670	0.9654	0.2591	0.6399	0.0039	0.0032	-0.2613	0.1037	-0.1544
Small Cap Equity Fund	0.9494	0.9983	1	0.9669	0.9657	0.2737	0.6512	0.0088	0.0130	-0.2593	0.1229	-0.1412
Social Choice Equity Fund	0.9939	0.9670	0.9669	1	0.9969	0.3343	0.6629	0.1257	0.0867	-0.2517	0.2002	-0.1369
Equity Index Fund / IMEQ-A	0.9981	0.9654	0.9657	0.9969	1	0.3375	0.6628	0.1214	0.0925	-0.2612	0.2015	-0.1307
Bond Plus Fund / MFBP	0.3527	0.2591	0.2737	0.3343	0.3375	1	0.4802	0.4877	0.9073	-0.2510	0.8673	0.3406
High Yield Fund / MFHY	0.6550	0.6399	0.6512	0.6629	0.6628	0.4802	1	0.0633	0.1450	0.2238	0.2934	0.1702
Inflation-Link Bond Fund / IILB-A	0.1483	0.0039	0.0088	0.1257	0.1214	0.4877	0.0633	1	0.5535	-0.0585	0.4363	0.1724
Bond Fund / IMBD-A	0.1144	0.0032	0.0130	0.0867	0.0925	0.9073	0.1450	0.5535	1	-0.2753	0.8887	0.3835
Money Market Fund / IMMM-A	-0.2737	-0.2613	-0.2593	-0.2517	-0.2612	-0.2510	0.2238	-0.0585	-0.2753	1	-0.1795	0.2628
Short-Term Bond Fund / MFSB	0.2188	0.1037	0.1229	0.2002	0.2015	0.8673	0.2934	0.4363	0.8887	-0.1795	1	0.3402
Tax-Exempt Fund / MFTE	-0.1252	-0.1544	-0.1412	-0.1369	-0.1307	0.3406	0.1702	0.1724	0.3835	0.2628	0.3402	1
MSCI EAFE Index	0.9265	0.8485	0.8547	0.9116	0.9198	0.4486	0.7560	0.1260	0.1772	-0.2094	0.3247	-0.0871
S&P 500 Index	1.0000	0.9490	0.9492	0.9939	0.9980	0.3539	0.6541	0.1480	0.1160	-0.2755	0.2205	-0.1273
Russell 1000 Value Index	0.9907	0.9455	0.9447	0.9827	0.9886	0.3773	0.6314	0.1329	0.1519	-0.2420	0.2428	-0.1105
Russell 2000 Growth Index	0.8240	0.8674	0.8496	0.8349	0.8343	0.0969	0.4824	-0.0443	-0.1058	-0.2313	-0.0301	-0.0887
Russell 2000 Index	0.9494	1.0000	0.9983	0.9671	0.9656	0.2590	0.6407	0.0034	0.0026	-0.2605	0.1032	-0.1544
Russell 2000 Value Index	0.8453	0.8667	0.8478	0.8503	0.8505	0.2016	0.4389	-0.0126	0.0243	-0.3736	0.0902	-0.0877
Russell MidCap Growth Index	0.9530	0.9742	0.9772	0.9703	0.9675	0.2420	0.6951	0.0195	-0.0235	-0.1152	0.1203	-0.1104
Russell MidCap Index	0.8727	0.8620	0.8469	0.8743	0.8751	0.2126	0.5261	0.0068	0.0171	-0.2443	0.1230	-0.0216
Russell MidCap Value Index	0.9693	0.9765	0.9759	0.9787	0.9782	0.3508	0.6708	0.0365	0.1043	-0.2751	0.2246	-0.0804
FTSE NAREIT/DJ Wilshire RESI Index Blended	0.8445	0.8489	0.8492	0.8486	0.8504	0.4560	0.6289	0.0143	0.2474	-0.3896	0.3427	0.0634
Merrill Lynch BB-B CPI	0.5745	0.5617	0.5751	0.5841	0.5835	0.4455	0.9836	0.0574	0.1206	0.3289	0.2947	0.2598
Barclays Capital Short (1-5 YR) GOVCREDIT Index	0.1579	0.0085	0.0262	0.1329	0.1338	0.8059	0.2531	0.5980	0.8812	-0.0767	0.9356	0.4425
Barclays Capital 10 Year Mun BI	-0.1486	-0.1644	-0.1519	-0.1600	-0.1523	0.2927	0.1305	0.1160	0.3445	0.2636	0.3036	0.9870

With the exception of the Tax-Exempt Fund where the Institutional Share Class is used, the above represents correlations of the Retirement Share Class of the TIAA-CREF Mutual Funds.

*** In instances where the Retirement Share Class began operations less than three years ago, we have linked the results from the then existing Institutional Share Class or Retail Mutual Fund in the respective strategy. Note that in those cases the results have not been adjusted to reflect the higher expenses of the Retirement Share Class.

Figures represented are correlations based on the rate of return for the three-year period ended 12/31/2011.

Disclosure

Correlation shows the degree to which two assets move together.

A value of 1 indicates perfect correlation, a value of 0 indicates no correlation, and a value of -1 indicates the assets move in opposite directions.

Correlations are based on the past; future correlations may be different, particularly in times of extreme negative performance.

All TIAA-CREF funds/accounts are subject to general market risk. Please see the prospectus for details concerning individual risk factors.

Please note that each fund/account has only one benchmark, which can be found in the prospectus.

TIAA-CREF Individual & Institutional Services, LLC and Teachers Personal Investors Services, Inc., members FINRA, distribute securities products. Annuity products issued by TIAA (Teachers Insurance and Annuity Association), New York, NY and TIAA-CREF Life Insurance Co., New York, NY.

©2011 Teachers Insurance and Annuity Association—College Retirement Equities Fund (TIAA-CREF), New York, NY 10017

THREE YEAR CORRELATIONS MATRIX THRU 12/31/2011
OF MONTHLY RETURNS OF TIAA-CREF VARIABLE ANNUITIES,
MUTUAL FUNDS & CORRESPONDING BENCHMARKS

	MSCI EAFE Index	S&P 500 Index	Russell 1000 Value Index	Russell 2000 Growth Index	Russell 2000 Value Index	Russell 2000 Value Index	Russell MidCap Growth Index	Russell MidCap Value Index	Russell MidCap Value Index	FTSE NAREIT/DJ Wilshire RESI Blended	Merrill Lynch BB-B CPI	Barclays Capital Short (1-5 YR) T Index	Barclays Capital 10 Year Mun BI
TIAA Retirement Annuity Account	-0.3356	-0.3629	-0.3652	-0.2566	-0.3390	-0.2699	-0.2948	-0.2335	-0.3083	-0.2316	0.0844	0.2554	0.3060
CREF Stock Account	0.9552	0.9911	0.9792	0.8142	0.9479	0.8233	0.9624	0.8599	0.9645	0.8371	0.6265	0.1657	-0.1379
CREF Global Equities Account	0.9747	0.9778	0.9650	0.7901	0.9162	0.8003	0.9391	0.8452	0.9410	0.8219	0.6376	0.1994	-0.1218
CREF Growth Account	0.9005	0.9787	0.9455	0.8203	0.9468	0.8016	0.9744	0.8462	0.9442	0.7869	0.6144	0.1005	-0.1576
CREF Equity Index Account	0.9201	0.9980	0.9886	0.8359	0.9660	0.8515	0.9679	0.8763	0.9786	0.8516	0.5836	0.1330	-0.1498
CREF Social Choice Account	0.9446	0.9898	0.9830	0.8143	0.9390	0.8415	0.9442	0.8715	0.9663	0.8573	0.5993	0.2421	-0.1068
CREF Bond Market Account	0.1684	0.1096	0.1403	-0.0680	-0.0222	0.0557	-0.0429	0.0571	0.0862	0.2176	0.1072	0.8859	0.3701
CREF Inflation Linked Bond Account	0.1275	0.1482	0.1329	-0.0432	0.0046	-0.0121	0.0206	0.0077	0.0378	0.0165	0.0620	0.5993	0.1222
CREF Money Market Account	-0.0725	-0.0061	-0.0447	0.0817	0.0591	0.0441	0.1131	0.0973	0.0693	0.0242	0.1099	-0.0350	0.0378
TIAA Real Estate Account	-0.1363	-0.1310	-0.1144	-0.1617	-0.1172	-0.1474	-0.1844	-0.2214	-0.1637	-0.0933	-0.4282	-0.1386	-0.1266
CREF Composite Index	0.9591	0.9920	0.9823	0.8182	0.9491	0.8302	0.9599	0.8651	0.9681	0.8492	0.6308	0.1665	-0.1439
MSCI World Index	0.9830	0.9789	0.9695	0.7908	0.9155	0.8058	0.9331	0.8487	0.9448	0.8385	0.6475	0.1966	-0.1321
Russell 3000Growth / R1000G Index Blended	0.8897	0.9809	0.9447	0.9287	0.9304	0.9140	0.9718	0.9615	0.9346	0.7668	0.5039	0.0782	-0.0720
Russell 3000 Index	0.9201	0.9980	0.9886	0.8358	0.9659	0.8515	0.9679	0.8763	0.9786	0.8515	0.5834	0.1329	-0.1499
CREF Social Choice Composite Index	0.9533	0.9926	0.9869	0.8107	0.9375	0.8374	0.9428	0.8687	0.9666	0.8627	0.6103	0.2371	-0.1072
SSB/Barclays Capital TIPS Blended Index	0.0951	0.1201	0.1070	-0.0672	-0.0615	-0.0562	-0.0175	-0.0113	-0.0078	-0.0705	0.0984	0.5951	0.2220
IMoney/Net All Taxable Average	-0.1016	-0.1891	-0.2543	-0.1615	-0.1872	-0.2948	-0.0393	-0.1593	-0.1895	-0.3164	0.4074	-0.0272	0.2370
Barclays Capital Aggregate Bond Index	0.0415	-0.0025	0.0355	-0.1161	-0.1345	0.0122	-0.1657	0.0020	-0.0254	0.1315	-0.0414	0.8565	0.3812
Growth & Income Fund	0.9145	0.9917	0.9751	0.8261	0.9493	0.8307	0.9638	0.8664	0.9604	0.8134	0.5868	0.1148	-0.1210
International Equity Fund	0.9609	0.9085	0.8939	0.7273	0.8575	0.7194	0.8913	0.7751	0.8779	0.7857	0.6364	0.2357	-0.1551
International Equity Index Fund	0.9933	0.9355	0.9264	0.7385	0.8505	0.7539	0.8783	0.8069	0.8900	0.7975	0.6376	0.2436	-0.1120
Large-Cap Growth Fund / IMGE	0.8801	0.9662	0.9304	0.8230	0.9389	0.8024	0.9656	0.8451	0.9335	0.7768	0.5986	0.0664	-0.1409
Large Cap Growth Index Fund	0.9070	0.9828	0.9509	0.8268	0.9467	0.8101	0.9741	0.8553	0.9470	0.7917	0.6093	0.1151	-0.1605
Large Cap Value Fund	0.9271	0.9812	0.9863	0.8200	0.9547	0.8528	0.9506	0.8762	0.9822	0.8695	0.6101	0.1545	-0.1254
Large Cap Value Index Fund	0.9194	0.9905	1.0000	0.8110	0.9458	0.8585	0.9314	0.8709	0.9771	0.8809	0.5502	0.1720	-0.1309
Mid Cap Growth Fund	0.8654	0.9372	0.9139	0.8075	0.9624	0.7712	0.9940	0.8158	0.9468	0.7955	0.6439	0.0328	-0.1320
Mid Cap Value Fund	0.9110	0.9781	0.9723	0.8390	0.9741	0.8499	0.9813	0.8809	0.9884	0.8650	0.6357	0.1143	-0.0921
Real Estate Securities Fund	0.8069	0.8554	0.8866	0.7441	0.8637	0.8257	0.8306	0.8273	0.9241	0.9981	0.5536	0.2223	0.0414
S&P 500 Index Fund	0.9265	1.0000	0.9907	0.8240	0.9494	0.8453	0.9530	0.8727	0.9693	0.8445	0.5745	0.1579	-0.1486
Small Cap Blend Index Fund	0.8485	0.9490	0.9455	0.8674	1.0000	0.8667	0.9742	0.8620	0.9765	0.8489	0.5617	0.0085	-0.1644
Small Cap Equity Fund	0.8547	0.9492	0.9447	0.8496	0.9983	0.8478	0.9772	0.8468	0.9759	0.8492	0.5751	0.0262	-0.1519
Social Choice Equity Fund	0.9116	0.9939	0.9827	0.8349	0.9671	0.8503	0.9703	0.8743	0.9787	0.8486	0.5841	0.1329	-0.1600
Equity Index Fund / IMEQ-A	0.9198	0.9980	0.9886	0.8343	0.9656	0.8505	0.9675	0.8751	0.9782	0.8504	0.5835	0.1338	-0.1523
Bond Plus Fund / MFBP	0.4486	0.3539	0.3773	0.0969	0.2590	0.2016	0.2420	0.2126	0.3508	0.4560	0.4455	0.8059	0.2927
High Yield Fund / MFHY	0.7560	0.6541	0.6314	0.4824	0.6407	0.4389	0.6951	0.5261	0.6708	0.6289	0.9836	0.2531	0.1305
Inflation-Link Bond Fund / IILB-A	0.1260	0.1480	0.1329	-0.0443	0.0034	-0.0126	0.0195	0.0068	0.0365	0.0143	0.0574	0.5980	0.1160
Bond Fund / IMBD-A	0.1772	0.1160	0.1519	-0.1058	0.0026	0.0243	-0.0235	0.0171	0.1043	0.2474	0.1206	0.8812	0.3445
Money Market Fund / IMMM-A	-0.2094	-0.2755	-0.3420	-0.2313	-0.2605	-0.3736	-0.1152	-0.2443	-0.2751	-0.3896	0.3289	-0.0767	0.2636
Short-Term Bond Fund / MFSB	0.3247	0.2205	0.2428	-0.0301	0.1032	0.0902	0.1203	0.1230	0.2246	0.3427	0.2947	0.9356	0.3036
Tax-Exempt Fund / MFTE	-0.0871	-0.1273	-0.1105	-0.0887	-0.1544	-0.0877	-0.1104	-0.0216	-0.0804	0.0634	0.2598	0.4425	0.9870
MSCI EAFE Index	1	0.9265	0.9191	0.7311	0.8496	0.7455	0.8744	0.7982	0.8899	0.8079	0.6782	0.2318	-0.1271
S&P 500 Index	0.9265	1	0.9907	0.8232	0.9492	0.8451	0.9528	0.8723	0.9695	0.8456	0.5731	0.1590	-0.1508
Russell 1000 Value Index	0.9191	0.9907	1	0.8114	0.9459	0.8586	0.9314	0.8709	0.9766	0.8791	0.5493	0.1701	-0.1327
Russell 2000 Growth Index	0.7311	0.8232	0.8114	1	0.8679	0.9570	0.8350	0.9635	0.8454	0.7317	0.4193	-0.0793	-0.1012
Russell 2000 Index	0.8496	0.9492	0.9459	0.8679	1	0.8668	0.9744	0.8625	0.9767	0.8493	0.5627	0.0079	-0.1645
Russell 2000 Value Index	0.7455	0.8451	0.8586	0.9570	0.8668	1	0.8092	0.9760	0.8807	0.8179	0.3652	0.0115	-0.0911
Russell MidCap Growth Index	0.8744	0.9528	0.9314	0.8350	0.9744	0.8092	1	0.8487	0.9625	0.8138	0.6332	0.0501	-0.1274
Russell MidCap Index	0.7982	0.8723	0.8709	0.9635	0.8625	0.9760	0.8487	1	0.8936	0.8192	0.4665	0.0673	-0.0365
Russell MidCap Value Index	0.8899	0.9695	0.9766	0.8454	0.9767	0.8807	0.9625	0.8936	1	0.9151	0.5979	0.1291	-0.0951
FTSE NAREIT/DJ Wilshire RESI Index Blended	0.8079	0.8456	0.8791	0.7317	0.8493	0.8179	0.8138	0.8192	0.9151	1	0.5599	0.2384	0.0465
Merrill Lynch BB-B CPI	0.6782	0.5731	0.5493	0.4193	0.5627	0.3652	0.6332	0.4665	0.5979	0.5599	1	0.2685	0.2214
Barclays Capital Short (1-5 YR) GOV/CREDIT Index	0.2318	0.1590	0.1701	-0.0793	0.0079	0.0115	0.0501	0.0673	0.1291	0.2384	0.2685	1	0.3944
Barclays Capital 10 Year Mun BI	-0.1271	-0.1508	-0.1327	-0.1012	-0.1645	-0.0911	-0.1274	-0.0365	-0.0951	0.0465	0.2214	0.3944	1

With the exception of the Tax-Exempt Fund where the Institutional Share Class is used, the above represents correlations of the Retirement Share Class of the TIAA-CREF Mutual Funds.

***In instances where the Retirement Share Class began operations less than three years ago, we have linked the results from the then existing Institutional Share Class or Retail Mutual Fund in the respective strategy. Note that in those cases the results have not been adjusted to reflect the higher expenses of the Retirement Share Class.

Figures represented are correlations based on the rate of return for the three-year period ended 12/31/2011.

Disclosure

Correlation shows the degree to which two assets move together.

A value of 1 indicates perfect correlation, a value of 0 indicates no correlation, and a value of -1 indicates the assets move in opposite directions.

Correlations are based on the past; future correlations may be different, particularly in times of extreme negative performance.

All TIAA-CREF funds/accounts are subject to general market risk. Please see the prospectus for details concerning individual risk factors.

Please note that each fund/account has only one benchmark, which can be found in the prospectus.

TIAA-CREF Individual & Institutional Services, LLC and Teachers Personal Investors Services, Inc., members FINRA, distribute securities products. Annuity products issued by TIAA (Teachers Insurance and Annuity Association), New York, NY and TIAA-CREF Life Insurance Co., New York, NY.

©2011 Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA-CREF), New York, NY 10017