CORRELATION COEFFICIENT

WHAT IS A CORRELATION COEFFICIENT?

The correlation coefficient measures how strong the relationship is between two funds (i.e., comparing Fund A to Fund B) based on the past performance of those funds.

The correlation coefficient's values always range between +1.00 and -1.00 and can be used to identify non-correlated funds, which is important in developing a diversified portfolio. Correlation analysis between the funds is important in the construction process of a balanced portfolio.

IF THE VALUE IS CLOSEST TO	TYPE OF CORRELATION	BREAKDOWN
+1.00	Perfect positive correlation	The fund returns move in the same direction 100% of the time. Fund A and fund B generate the same return.
+0.70	Strong correlation	The funds are very strongly correlated. Returns follow closely in tandem.
+0.50	Moderate correlation	Above +0.50 typically signals strong to moderate correlation. Returns will follow closely to somewhat closely.
+0.30	weak correlation	Returns will slightly follow
0.00	No correlation	There is no relationship between the funds. Equally likely to move together or in opposite directions.
-0.30	Weak negative correlation	Returns move in opposite directions.
-0.50	Moderate negative correlation	Generally, below -0.50 signals strong negative correlation. Returns move somewhat in opposite directions.
-0.70	Strong negative correlation	Returns move very strongly in opposite directions.
-1.00	Perfect negative correlation	The funds move in opposite directions 100% of the time. Fund A and fund B will generate exact opposite returns. Rare occurance.

Assumption Life

6305-00A-APR20

CORRELATION COEFFICIENTS FOR ASSUMPTION LIFE FUNDS

	American Disciplined Equity® Fund	American Value Fund	Assumption Balanced Growth Portfolio	Assumption Balanced Portfolio	Assumption Conservative Portfolio	Assumption Growth Portfolio	Assumption/Louisbourg Balanced Fund	Assumption/Louisbourg Can. Small Cap. Equity Fund	Assumption/Louisbourg Canadian Dividend Fund	Assumption/Louisbourg Fixed Income Fund	Assumption/Louisbourg Momentum Fund	Assumption/Louisbourg Money Market Fund	Assumption/Louisbourg U.S. Equity Fund	Cambridge Canadian Asset Allocation Fund	Cambridge Canadian Dividend Fund	Canadian Asset Allocation Fund	Canadian Bond Fund	Canadian Opportunity Fund	European Fund	Far East Fund	FID Emerging Markets Fund	Fixed Income Core Plus Fund	International Growth Fund	Monthly Income Fund	NorthStar® Balanced Fund	NorthStar® Fund	Preferred Share Fund	Signature Corporate Bond Fund	Signature Global Dividend Fund	Signature Global Resource Corporate Class Fund	Signature High Income Fund	True North Fund	SmartSeries 2020 Fund	SmartSeries 2025 Fund	SmartSeries 2030 Fund	SmartSeries 2035 Fund	SmartSeries 2040 Fund	SmartSeries 2045 Fund	SmartSeries 2050 Fund	SmartSeries 2055 Fund	SmartSeries Income Fund
American Disciplined Equity® Fund	1.00																																								
American Value Fund	0.97	1.00																																							
Assumption Balanced Growth Portfolio	0.80	0.79	1.00																																						
Assumption Balanced Portfolio	0.81	0.79	0.99	1.00																																					
Assumption Conservative Portfolio	0.76	0.74	0.88	0.94	1.00																																				
Assumption Growth Portfolio	0.77	0.77	1.00	0.97	0.85	1.00																																			
Assumption/Louisbourg Balanced Fund	0.72	0.71	0.97	0.95	0.82	0.97	1.00																																		
Assumption/Louisbourg Can. Small Cap. Equity Fund	0.14	0.14	0.58	0.51	0.36	0.60	0.64	1.00																																	
Assumption/Louisbourg Canadian Dividend Fund	0.43	0.46	0.80	0.73	0.59	0.82	0.86	0.75	1.00																																
Assumption/Louisbourg Fixed Income Fund	0.31	0.26	0.34	0.46	0.63	0.28	0.26	-0.12	-0.04	1.00																															
Assumption/Louisbourg Momentum Fund	0.21	0.18	0.52	0.49	0.34	0.56	0.52	0.42	0.37	0.21	1.00																														
Assumption/Louisbourg Money Market Fund	0.07	0.06	0.05	0.06	0.02	0.05	0.06	-0.08	0.04	0.11	0.01	1.00																													
Assumption/Louisbourg U.S. Equity Fund	0.87	0.87	0.83	0.81	0.69	0.82	0.84	0.30	0.61	0.15	0.31	0.10	1.00																												
Cambridge Canadian Asset Allocation Fund	0.83	0.81	0.88	0.88	0.81	0.87	0.86	0.40	0.67	0.36	0.38	0.06	0.83	1.00																											
Cambridge Canadian Dividend Fund	0.73	0.68	0.87	0.84	0.77	0.88	0.85	0.59	0.90	-0.01	0.48	0.06	0.76	0.90	1.00																										
Canadian Asset Allocation Fund	0.68	0.68	0.93	0.92	0.83	0.92	0.90	0.51	0.76	0.46	0.50	0.12	0.71	0.87	0.82	1.00																									
Canadian Bond Fund	0.28	0.24	0.29	0.42	0.58	0.23	0.21	-0.16	-0.08	0.99	0.19	0.13	0.12	0.33	-0.04	0.44	1.00																								
Canadian Opportunity Fund	0.34	0.33	0.67	0.62	0.48	0.68	0.72	0.65	0.71	0.14	0.42	0.14	0.47	0.60	0.86	0.72	0.11	1.00																							
European Fund	0.78	0.73	0.66	0.69	0.70	0.63	0.59	0.10	0.34	0.30	0.01	-0.01	0.63	0.65	0.68	0.56	0.28	0.21	1.00																						
Far East Fund	0.62	0.61	0.67	0.72	0.72	0.64	0.60	0.23	0.37	0.46	0.12	-0.03	0.53	0.53	0.42	0.61	0.43	0.22	0.67	1.00																					
FID Emerging Markets Fund	0.66	0.63	0.75	0.75	0.71	0.74	0.73	0.54	0.66	0.16	0.29	0.01	0.64	0.57	0.52	0.61	0.11	0.46	0.73	0.92	1.00																				
Fixed Income Core Plus Fund	0.28	0.26	0.34	0.41	0.52	0.30	0.36	0.12	0.24	0.94	0.30	0.17	0.20	0.41	0.14	0.55	0.93	0.35	0.05	0.33	0.25	1.00																			
International Growth Fund	0.87	0.83	0.74	0.79	0.81	0.70	0.64	0.06	0.30	0.53	0.14	0.04	0.69	0.71	0.60	0.66	0.51	0.26	0.90	0.79	0.80	0.37	1.00																		
Monthly Income Fund	0.69	0.69	0.84	0.88	0.87	0.81	0.78	0.32	0.59	0.66	0.37	0.12	0.65	0.83	0.77	0.91	0.64	0.56	0.59	0.61	0.54	0.64	0.72	1.00																	
NorthStar® Balanced Fund	0.51	0.49	0.43	0.45	0.56	0.40	0.40	0.05	0.32	0.45	0.06	-0.00	0.34	0.42	0.25	0.46	0.44	0.37	0.33	0.46	0.40	0.54	0.55	0.45	1.00																
NorthStar® Fund	0.74	0.70	0.52	0.58	0.67	0.48	0.38	-0.14	0.05	0.48	0.05	-0.07	0.55	0.53	0.60	0.42	0.47	0.03	0.71	0.59	0.65	0.25	0.79	0.55	0.78	1.00															
Preferred Share Fund	0.47	0.49	0.42	0.44	0.52	0.44	0.41	0.42	0.47	-0.50	0.12	-0.23	0.45	0.30	0.34	0.13	-0.54	0.12	0.50	0.29	0.33	-0.22	0.39	-0.02	0.08	0.39	1.00														
Signature Corporate Bond Fund	0.68	0.64	0.71	0.75	0.82	0.68	0.74	0.38	0.66	0.52	0.49	0.22	0.62	0.78	0.55	0.76	0.49	0.63	0.50	0.48	0.49	0.73	0.66	0.79	0.46	0.46	0.24	1.00													
Signature Global Dividend Fund	0.92	0.90	0.90	0.89	0.85	0.91	0.90	0.48	0.84	-0.02	0.41	-0.08	0.91	0.85	0.81	0.76	-0.08	0.70	0.86	0.71	0.78	0.16	0.87	0.68	0.39	0.76	0.51	0.62	1.00												
Signature Global Resource Corporate Class Fund	0.58	0.54	0.76	0.74	0.69	0.78	0.77	0.77	0.79	-0.20	0.51	-0.14	0.61	0.64	0.68	0.62	-0.21	0.57	0.80	0.63	0.62	0.02	0.60	0.45	0.11	0.51	0.58	0.47	0.71	1.00											
Signature High Income Fund	0.75	0.74	0.83	0.84	0.80	0.81	0.79	0.37	0.60	0.44	0.29	0.16	0.72	0.82	0.79	0.85	0.42	0.63	0.62	0.56	0.49	0.48	0.71	0.85	0.36	0.50	0.16	0.79	0.78	0.51	1.00										
True North Fund	0.72	0.72	0.89	0.86	0.74	0.89	0.86	0.46	0.78	0.29	0.42	0.12	0.73	0.85	0.84	0.92	0.27	0.73	0.56	0.46	0.50	0.38	0.62	0.84	0.39	0.40	0.16	0.63	0.73	0.55	0.84	1.00									
SmartSeries 2020 Fund	0.94	0.93	0.98	0.98	0.97	0.98	0.98	0.67	0.93	-0.22	0.50	-0.01	0.95	0.93	0.92	0.85	-0.27	0.81	0.83	0.70	0.77	0.07	0.84	0.76	0.31	0.73	0.57	0.75	0.96	0.84	0.87	0.81	1.00								
SmartSeries 2025 Fund	0.95	0.93	0.98	0.98	0.97	0.98	0.98	0.67	0.93	-0.23	0.51	-0.03	0.95	0.94	0.92	0.84	-0.28	0.82	0.84	0.69	0.76	0.07	0.85	0.76	0.32	0.74	0.57	0.75	0.96	0.84	0.87	0.81	1.00	1.00							
SmartSeries 2030 Fund	0.95	0.93	0.99	0.98	0.97	0.98	0.98	0.66	0.93	-0.22	0.52	-0.02	0.95	0.94	0.93	0.85	-0.27	0.82	0.82	0.68	0.75	0.07	0.84	0.77	0.30	0.73	0.55	0.75	0.96	0.83	0.88	0.82	1.00	1.00	1.00						
SmartSeries 2035 Fund	0.95	0.93	0.98	0.98	0.97	0.98	0.98	0.66	0.93	-0.23	0.52	-0.02	0.95	0.94	0.92	0.85	-0.28	0.82	0.83	0.69	0.75	0.06	0.85	0.76	0.30	0.73	0.56	0.74	0.96	0.84	0.87	0.81	1.00	1.00	1.00	1.00					
SmartSeries 2040 Fund	0.94	0.93	0.98	0.98	0.97	0.98	0.98	0.67	0.93	-0.23	0.51	-0.03	0.94	0.94	0.93	0.85	-0.28	0.82	0.84	0.68	0.75	0.06	0.85	0.76	0.31	0.74	0.57	0.74	0.96	0.83	0.87	0.82	1.00	1.00	1.00	1.00	1.00				
SmartSeries 2045 Fund	0.95	0.93	0.98	0.98	0.97	0.98	0.98	0.65	0.93	-0.22	0.52	-0.04	0.96	0.94	0.92	0.85	-0.27	0.82	0.83	0.69	0.75	0.07	0.85	0.76	0.31	0.73	0.55	0.75	0.96	0.84	0.88	0.81	1.00	1.00	1.00	1.00	1.00	1.00			
SmartSeries 2050 Fund	0.95	0.93	0.98	0.98	0.96	0.98	0.98	0.66	0.93	-0.23	0.52	-0.03	0.95	0.94	0.93	0.85	-0.28	0.82	0.83	0.68	0.75	0.05	0.85	0.76	0.31	0.74	0.56	0.74	0.96	0.84	0.87	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
SmartSeries 2055 Fund	0.95	0.94	0.98	0.98	0.97	0.98	0.98	0.66	0.93	-0.24	0.50	-0.04	0.95	0.94	0.92	0.84	-0.29	0.81	0.84	0.69	0.75	0.05	0.85	0.75	0.31	0.74	0.57	0.74	0.97	0.84	0.87	0.81	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
SmartSeries Income Fund	0.94	0.93	0.98	0.98	0.98	0.98	0.97	0.68	0.92	-0.22	0.50	-0.02	0.95	0.93	0.93	0.83	-0.28	0.80	0.83	0.70	0.78	0.08	0.85	0.75	0.32	0.74	0.60	0.75	0.96	0.84	0.86	0.80	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	1.00

For the period between January 2015 to December 2019 using monthly returns for fund series B - no load.