Exhibit 3.10 Correlations among Global Capital Market Asset Monthly Returns: 1980–2010

	Wilshire 5000 Equal Weighted	Wilshire 5000 S&P Cap Weighted	IFC Emerging Markets	MSCI EAFE	M-S World	Brinson GSMI	Inflation
S&P 500	0.763	1.000	0.543	0.645	0.873	0.926	–0.046
Ibbotson Small Cap Index	0.935	0.759	0.533	0.544	0.695	0.771	–0.032
Wilshire 5000 Equal Weighted	1.000	0.763	0.561	0.546	0.702	0.770	–0.014
Wilshire 5000 S&P Cap Weighted	0.763	1.000	0.542	0.645	0.873	0.926	–0.046
Russell 1000	0.786	0.997	0.550	0.645	0.871	0.931	–0.049
Russell 1000 Growth	0.768	0.961	0.526	0.609	0.835	0.898	–0.049
Russell 2000	0.905	0.828	0.540	0.582	0.750	0.829	–0.059
Russell 2000 Value	0.860	0.806	0.511	0.568	0.728	0.801	–0.067
Russell 2000 Growth	0.891	0.807	0.535	0.562	0.731	0.810	–0.049
Russell 3000	0.809	0.993	0.556	0.647	0.871	0.934	–0.051
Russell 3000 Value	0.755	0.949	0.532	0.629	0.836	0.888	–0.047
Russell 3000 Growth	0.791	0.958	0.533	0.613	0.835	0.901	–0.049
IFC Emerging Market	0.561	0.542	1.000	0.569	0.608	0.594	0.004
FTSE All World	0.755	0.943	0.826	0.958	0.998	0.977	0.030
FTSE All World Developed	0.751	0.950	0.801	0.955	0.999	0.976	0.028
FTSE All World Emerging	0.714	0.722	0.985	0.796	0.801	0.804	0.042
MSCI EAFE	0.548	0.645	0.569	1.000	0.929	0.819	–0.072
MSCI Europe	0.595	0.726	0.574	0.884	0.888	0.851	–0.082
MSCI Pacific Basin	0.409	0.462	0.466	0.894	0.780	0.645	–0.020
MSCI Japan	0.329	0.377	0.368	0.835	0.702	0.558	–0.020
Tokyo Stock Exchange Index	0.376	0.399	0.411	0.685	0.622	0.492	0.017
M–S World Index	0.702	0.873	0.608	0.929	1.000	0.945	–0.059
Brinson GSMI	0.770	0.926	0.594	0.819	0.945	1.000	–0.078
LB Government Bond	–0.031	0.112	–0.148	0.072	0.088	0.223	–0.139
LB Corporate Bond	0.209	0.297	0.058	0.242	0.285	0.421	–0.140
LB Aggregate Bond	0.081	0.209	–0.054	0.158	0.189	0.327	–0.123
High Yield Corporate Bond	0.640	0.552	0.404	0.472	0.554	0.633	–0.012
ML World Government Bond[1]	–0.049	0.064	–0.034	0.364	0.255	0.278	–0.107
ML World Government Bond ex U.S.[1]	–0.043	0.041	–0.011	0.431	0.296	0.268	–0.074
FTSE North American Equity REIT	0.598	0.553	0.379	0.461	0.545	0.588	–0.003
GS Commodities Index[2]	0.155	0.145	0.206	0.228	0.212	0.196	0.200
Treasury Bill–30 Day	–0.041	0.027	–0.080	–0.036	–0.014	–0.006	0.411
Treasury Bill–6 Month[3]	–0.022	0.043	–0.078	–0.007	0.013	0.030	0.371
Treasury Note–2 Year[3]	–0.058	0.047	–0.152	0.035	0.037	0.151	–0.021
Inflation	–0.014	–0.046	0.004	–0.072	–0.059	–0.078	1.000

[1]ML World Government Bond Index based on 1986–2010 only.
[2]GS Commodity Index based on 1983–2010 only.
[3]Treasury Bill–6 month and Treasury Note–2 year based on 1981–2010 only.
Source: Updated and modified, Frank K. Reilly and David J. Wright, "An Analysis of Risk Adjusted Performance for Global Market Assets," *Journal of Portfolio Management*, 30, no.3 (Spring 2004): 63–77.

Wilshire 5000 Index) have a reasonably high correlation with most developed countries but low correlation with emerging market stocks and Pacific Basin stocks. Also, U.S. equities show almost zero correlation with world government bonds, and with the commodities index. Recall from our earlier discussion that you can use this information to build a diversified portfolio by combining those assets with low positive or negative correlations.