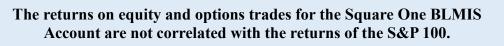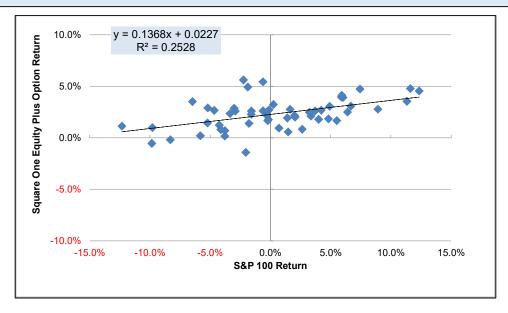Expert Report of Dr. Steve Pomerantz

Appendix IV: Alpha Analysis Schedules

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Schedule 4: Regression Analysis of Equity Trades Plus Option Trades Within Baskets

> **The returns on equity and options trades for the Square One BLMIS Account are not correlated with the returns of the S&P 100.**

$y = 0.1368x + 0.0227$
$R^2 = 0.2528$

BLMIS Equity and Option Return v. S&P 100 Equity and Option Return

- The chart shows a regression of the returns of the Square One BLMIS Account from equity and option trades, for the life of the Square One BLMIS Account, against the returns from the S&P 100 over the same time period.
- The data reflects basket trades between February 1999 and November 2008. The first basket was put on in March 1999. The last basket trade in November 2008 was excluded because there was no corresponding sale of the basket.
- The horizontal axis represents S&P 100 returns.
- The vertical axis represents the returns from the purported purchase and sale of equities and options in the Square One BLMIS Account.
- The R-Squared factor represents the degree of correlation between the returns of the S&P 100 and the returns from the Square One BLMIS Account. A lower R-Squared factor represents a weaker correlation, whereas a higher R-Squared represents a stronger correlation. This graph indicates a low R-Squared factor, meaning that the returns from equity are not highly correlated with the returns from the S&P 100.

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Schedule 5: Regression Diagnostics

> **The Square One BLMIS Account earned returns unaccounted for by index movements with implausible certainty.**

Regression Characteristics of the Basket Trades			
Parameter	**Equity Returns**	**Option Returns**	**Total Returns**
Slope	1.48	-0.92	0.14
t-slope	3.69	-23.63	4.27
Alpha	-0.66%	0.77%	2.27%
t-Alpha	-0.31	3.70	13.30
R-Squared	0.20	0.91	0.25

Regression Characteristics of Basket Trades

- The chart shows the results of a regression of the Square One BLMIS Account basket returns, from February 1999 to November 2008, against the S&P 100 returns.
- On average, purported trades earned 2.27% above what can be explained by S&P 100 movements.
- On average, Square One's purported basket trades from February 1999 to November 2008 earned 2.27% above what can be explained by S&P 100 movements.
- The slope represents the relationship between the returns from Square One's BLMIS Account basket trading (including both equities and options) and the returns from investing in the S&P 100. A slope of 1.0 indicates that the return of the Square One BLMIS Account moves in-step with the return from the S&P 100. A slope of 2.0 indicates that the Square One BLMIS Account returns twice as much as the return from the S&P 100. A slope of 0.1 indicates that the return from the Square One BLMIS Account is approximately 10% of the return from the S&P 100.
- The alpha in the chart represents the return to the Square One BLMIS Account which is greater than the return from the S&P 100. The alpha indicates that the Square One BLMIS Account returns 2.27% above any returns explained by the S&P 100.
- T-Alpha represents the t-statistic for the alpha of the regression. A high t-alpha statistic (13.30 in this case) indicates that the alpha of the regression is significant and statistically different from zero. In fact, the average return for basket trades is 2.27% with a t-stat of 13.30.

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- R-Squared represents the square of the degree of correlation between the returns of the Square One BLMIS Account and returns of the S&P 100 (i.e., the proportion of the returns for the Square One BLMIS Account which can be explained by returns from the S&P 100). A low R-Squared indicates that only a small portion of the returns for the Square One BLMIS Account can be explained by the returns of the S&P 100.