



Out-of-Sample Performance of the
Cash Flow Analytics Proprietary Model
2007 Calendar Year

Jonathan E. Clarke and Charles W. Mulford
College of Management
Georgia Institute of Technology
January 9th, 2008

This note reviews the performance of the Cash Flow Analytics proprietary model over the 2007 calendar year. The model was initially developed in 2006 and back tested using historical data from 1998 to 2005. Consequently, the results reported here represent an out-of-sample test of the predictive ability of the model. For a more detailed description of the development of the model and the initial backtesting of the model please see the white paper, which is available at www.cashflowanalytics.com.

Our model uses proprietary data from Cash Flow Analytics to create a score ranging from 0 to 7 for each stock in our database. The seven signals used in our model are designed to capture the five broad categories of financial performance and position: cash flow, profitability, operating efficiency, financial leverage, and valuation. Initial tests of the model conducted using historical data from 1998 to 2005, indicated that the model was most effective in selecting small market capitalization stocks (those with market caps below \$1.4 billion). For these small-cap stocks the high score firms outperformed the benchmark in 79.3% of the months examined and generated abnormal returns of up to 13.3% per year.

Out-of-sample tests conducted using data from 1/1/2007 until 12/31/2007 show that the model continues to generate excess returns. Table 1 presents average abnormal returns to the model, where the abnormal returns are calculated by subtracting the size-based benchmark returns from the actual returns. High score firms in the smallest size quintile generate an abnormal return of 4.4 basis points per day, while low score firms generate a negative abnormal return of approximately 2 basis points per day. Table 2 shows that compounded over one year this amounts to abnormal performance of approximately 11.14% for high score firms and -4.69% for low score firms.

The model also performs well for firms in the largest size quintile. High score firms in this quintile produce an average abnormal daily return of 4 basis points, while low score firms generate a daily abnormal return of approximately -5.7 basis points. Compounded over one year this amounts to abnormal performance of 10.07% and -12.79% for high and low score firms respectively. The intermediate quintiles produce abnormal returns ranging from 1.21% to 6.44% per annum for high score firms and -1.43% to -2.14% per annum for low score firms.

In sum, the Cash Flow Analytics proprietary model continued to produce strong abnormal returns in calendar year 2007 for small and large capitalization stocks. In addition, results were economically significant across every size quintile.

Table 1. Abnormal Daily Returns to High and Low Cash Flow Analytics™ Score Firms

<i>Portfolio</i>	<i>High Score Abnormal Returns</i>	<i>Low Score Abnormal Returns</i>	<i>High Score – Low Score Returns</i>
Quintile 1	0.044%***	-0.020%***	0.064%***
Quintile 2	0.026%	-0.009%	0.035%
Quintile 3	0.018%	-0.010%	0.028%
Quintile 4	0.005%	-0.006%	0.011%
Quintile 5	0.040%***	-0.057%***	0.097%***

This table reports the average daily return to high and low Cash Flow Analytics™ score firms. High score firms are those with model scores of 6 or 7. Low score firms are those with model scores of 0 or 1. The sample period spans the period from January 1st, 2007 to December 31st, 2007. Results are reported by market capitalization quintile. Abnormal returns are calculated with respect to an equally weighted portfolio of all stocks within the same quintile. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels respectively.

Table 2. Abnormal Daily Returns to High and Low Cash Flow Analytics™ Score Firms

<i>Portfolio</i>	<i>High Score Abnormal Returns</i>	<i>Low Score Abnormal Returns</i>	<i>High Score – Low Score Returns</i>
Quintile 1	11.14%***	-4.69%***	16.60%***
Quintile 2	6.44%	-2.14%	8.76%
Quintile 3	4.41%	-2.37%	6.95%
Quintile 4	1.21%	-1.43%	2.68%
Quintile 5	10.07%***	-12.79%***	26.20%***

This table reports annualized returns to high and low Cash Flow Analytics™ score firms. High score firms are those with model scores of 6 or 7. Low score firms are those with model scores of 0 or 1. The sample period spans the period from January 1st, 2007 to December 31st, 2007. Results are reported by market capitalization quintile. Abnormal returns are calculated with respect to an equally weighted portfolio of all stocks within the same quintile. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels respectively.