

**Table 8: Trading Profits Based on Call-Volume Changes Using Different Securities**

Prior to takeover announcements, the moving average trading rule generates a buy signal when the short-term call option volume exceeds the long-period volume by  $k\%$  ( $k=25\%$ ,  $200\%$  and  $500\%$ ) on day  $t$ . To account for transaction costs, all available calls within a particular maturity category with expirations greater than the holding period are bought at the closing ask price on day  $t$  and are liquidated after  $x$  weeks ( $x=1, 2$ , and  $4$  weeks) at the closing bid price. Trades in the underlying stock are made at the daily closing price. For each firm that subsequently experiences a takeover bid, trading rule profits are examined from 145 days prior to the announcement through the takeover announcement day  $(-145, 0)$ . The average daily trading profit is found by averaging the profits to all call trades for a particular stock each day and then averaging across securities which are held that day. The time-series average of the daily trading profits are reported for trading rules with long-period volume benchmarks of 30, 60, and 100 days. The reported numbers are respectively, the daily average percentage return, the standard error (in parentheses), and the total number of triggers (in curly brackets) for each trading rule. OTM, ATM and ITM denote out-of-the money, at-the-money, and in-the-money options, respectively.

Trading Rule	Trade OTM Calls			Trade ATM Calls			Trade ITM Calls			Trade Stocks		
	Holding Period			Holding Period			Holding Period			Holding Period		
	1 week	2 weeks	4 weeks	1 week	2 weeks	4 weeks	1 week	2 weeks	4 weeks	1 week	2 weeks	4 weeks
(100, 25%)	1.13 (0.36) {554}	1.78 (0.24) {380}	2.43 (0.18) {256}	0.58 (0.23) {491}	1.15 (0.16) {341}	1.57 (0.10) {235}	-0.09 (0.10) {588}	0.45 (0.08) {410}	0.53 (0.05) {278}	0.22 (0.02) {616}	0.21 (0.02) {432}	0.16 (0.01) {297}
(100, 200%)	5.44 (0.95) {157}	7.82 (0.87) {122}	5.68 (0.41) {94}	3.62 (0.56) {138}	4.85 (0.55) {106}	3.86 (0.25) {79}	1.57 (0.26) {177}	1.70 (0.18) {134}	1.54 (0.10) {104}	0.44 (0.05) {182}	0.45 (0.03) {141}	0.32 (0.02) {111}
(100, 500%)	11.70 (2.68) {43}	14.53 (1.82) {32}	12.61 (0.98) {28}	4.52 (1.11) {38}	7.27 (0.96) {31}	4.46 (0.40) {25}	2.60 (0.49) {50}	3.25 (0.34) {40}	2.28 (0.17) {33}	0.64 (0.08) {51}	0.75 (0.06) {41}	0.56 (0.03) {35}

**Table 11: Out-of-Sample Call Volume-based Trading Profits Using Different Securities**

For each of the 365 firms used in the out-of-sample test, trading rule profits are calculated for the period from January 1, 1986 to August 31, 1994. The moving average trading rule generates a buy signal when the short-term call option volume exceeds the long-period volume by  $k\%$  ( $k=25\%$ ,  $200\%$  and  $500\%$ ) on day  $t$ . To account for transaction costs, all available calls with expirations greater than the holding period are bought at the closing ask price on day  $t$  and are liquidated after  $x$  weeks ( $x=1, 2,$  and  $4$  weeks) at the closing bid price. For stocks, we account for the cost of the spread by calculating the return for trades at the closing prices and then adjust for trading costs by using an average daily bid-ask spread of  $1.20\%$  (taken from Huang and Stoll (1996)). Trades in the underlying stock are made at the daily closing price. The average daily trading profit for each day is found by averaging the profits to all call trades for a particular stock and then averaging across securities which are held that day. The time-series average of the daily trading profits are reported for trading rules with long-period volume benchmarks of 100 days. The reported numbers are respectively, the daily average percentage return, the standard error (in parentheses), and the total number of triggers (in curly brackets) for each trading rule. OTM, ATM and ITM denote out-of-the money, at-the-money, and in-the-money options, respectively.

Trading Rule	Trade OTM Calls			Trade ATM Calls			Trade ITM Calls			Trade Stocks		
	Holding Period			Holding Period			Holding Period			Holding Period		
	1 week	2 weeks	4 weeks	1 week	2 weeks	4 weeks	1 week	2 weeks	4 weeks	1 week	2 weeks	4 weeks
(100, 25%)	-1.79 (0.04) {15331}	-0.68 (0.03) {10723}	-0.04 (0.02) {7003}	-1.18 (0.04) {14449}	-0.41 (0.03) {10188}	-0.04 (0.02) {6738}	-0.95 (0.03) {16799}	-0.41 (0.02) {11765}	-0.15 (0.01) {7641}	0.02 (0.01) {16966}	0.02 (0.01) {11957}	0.02 (0.01) {7882}
(100, 200%)	-1.77 (0.08) {2961}	-0.53 (0.05) {2437}	-0.03 (0.03) {1946}	-1.16 (0.07) {2810}	-0.37 (0.04) {2340}	-0.05 (0.02) {1921}	-0.84 (0.04) {3378}	-0.35 (0.03) {2800}	-0.11 (0.02) {2231}	0.02 (0.01) {3380}	0.02 (0.01) {2827}	0.02 (0.01) {2305}
(100, 500%)	-1.03 (0.25) {627}	0.17 (0.15) {529}	0.66 (0.09) {463}	-0.91 (0.14) {580}	0.38 (0.16) {504}	0.41 (0.07) {450}	-0.60 (0.07) {724}	-0.08 (0.05) {622}	-0.03 (0.03) {538}	0.06 (0.02) {732}	0.05 (0.01) {630}	0.03 (0.01) {564}