



## 2009 CBOE Risk Management Conference

# Active Management of Option Positions

*Using Options to Help Reduce Risk and Enhance Potential Returns*

March 2009

**Steven S. Marco, CFA**  
*300 Atlanta Financial Center  
3343 Peachtree Road NE  
Atlanta, Georgia 30326  
404/504-8600*

# Important Disclosures

The following pages may include (i) a sample Research Report (the “Research Report”) produced by Marco Investment Management, LLC (“MIM”); (ii) screen shots from Bloomberg, L.P. used by MIM in its stock analysis (the “Screen Shots”); and (iii) an example showing the use of a call option (the “Stock/Call Example”) the use of put options (the “Put Write Example”) and expected returns via various option strategies. The purpose of these pages is to demonstrate the hedging and income effect that an options strategy may have on a client portfolio with a large position in a single stock or options used on a broad market index. Important disclosures for each of these pages is set forth below. These are examples only and do not represent an investment recommendation. Please review these disclosures carefully.

Screen Shots: The Screen Shots have been downloaded directly from Bloomberg to demonstrate the types of graphical charts and analysis MIM uses from Bloomberg on a regular basis. MIM makes no warranties or representations regarding the information in the Screen Shots. Nothing in the Screen Shots is intended to recommend the stock discussed for you or any MIM account, nor does it represent a stock recommended for client accounts in the past.

Performance Measurement: The enclosed example portfolio is to highlight how investment results of an overwrite portfolio can be communicated to end customers. Performance is calculated gross of any fees and designed to highlight the affects options can have on an underlying long equity portfolio and measured against an unhedged equity benchmark. The Performance results and commensurate risk measurement analysis is not part of a performance composite, but rather an example portfolio to show how options would likely affect the overall portfolio return during the measurement period. This example is for a short duration. Stocks can and may lose value and the options strategy offers limited downside protection. The example is not a solicitation for business development, and no future performance should be interpreted from the example portfolio.

Stock/Call Example: The Stock/Call Examples demonstrate how a call option strategy may be used to enhance returns and provide limited downside risk protection with respect to stocks. The examples may contemplate various scenarios including buying an individual stock or stock index and writing call options against that asset and attempts to show the expected return from that combination. Where a Dividend has been declared on a stock, the Dividend would be received regardless of whether an option strategy is used. As with the Research Report and Screen Shots, nothing in the Stock/Call Example is intended to recommend the stock or index discussed for you or any MIM account, nor does it represent a stock recommended for client accounts in the past. The Stock/Call Example is intended to provide an illustration of how a call option strategy may be used in the context of overall portfolio management. Additional important disclosures regarding the Stock/Call Example are set forth in the text of the Stock/Call Example.

Put Write Examples: The Put Write Examples demonstrate how a Put option strategy might be used to enhance returns within a portfolio, but adds a significant level of risk to an overall portfolio as the short put can lose substantial value. The examples contemplate various scenarios including selling put options on a underlying index and attempts to show the potential return. As with the Research Report and Screen Shots, nothing in the Put Write Example is intended to recommend the stock or index discussed for you or any MIM account, nor does it represent a stock recommended for client accounts in the past. The Put Write Example is intended to provide an illustration of how a put option strategy may be used in the context of overall portfolio management. Additional important disclosures regarding the Put Write Example are set forth in the text of the Put Write Example.

All investments are subject to risk, and you can lose money on stock purchases. Some option strategies provide limited downside risk protection, but also limit potential gains. Whether a particular stock, index or option strategy is appropriate to meet individual investment objectives can only be determined on a case specific basis. Additional disclosure information including the firms SEC form ADV can be obtained by contacting Marco Investment Management, LLC.

Marco Investment Management LLC

PORTFOLIO APPRAISAL

*Coke portfolio*

*December 31, 2006*

<u>Quantity</u>	<u>Security</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Price</u>	<u>Market Value</u>	<u>Pct. Assets</u>	<u>Yield</u>
<b>COMMON STOCK</b>							
<b>CONSUMER STAPLES</b>							
245,377	Coca Cola	48.25	<u>11,839,440</u>	48.25	<u>11,839,440</u>	<u>101.5</u>	<u>3.2</u>
			<u>11,839,440</u>		<u>11,839,440</u>	<u>101.5</u>	<u>3.2</u>
COMMON STOCK Total			11,839,440		11,839,440	101.5	3.2
<b>CALLS</b>							
-400	Coca Cola Feb 47.5 exp 2/17/07	1.33	-53,200	1.55	-62,000	-0.5	
-400	Coca Cola Jan 47.5 exp 1/20/07	0.39	-15,600	1.10	-44,000	-0.4	
-300	Coca Cola May 47.5 exp 5/19/07	1.77	<u>-53,100</u>	2.35	<u>-70,500</u>	-0.6	
			-121,900		-176,500	-1.5	
<b>CASH AND EQUIVALENTS</b>							
Schwab One Money Market Fund			<u>100</u>		<u>100</u>	0.0	0.9
			100		100	0.0	0.9
<b>TOTAL PORTFOLIO</b>			<b>11,717,640</b>		<b>11,663,040</b>	<b>100.0</b>	<b>3.2</b>

## Using Delta

### Creating a Synthetic Short Position

Portfolio Holdings:	Portfolio Impact
245,000 Coca-Cola at \$48.25	+245,000
-400 KO Jan 47.50 Call Delta of 485	-19,400
-400 KO Feb 47.50 Call Delta of 531	-21,240
-500 KO May 47.50 Call Delta of 565	-28,250
<b>Net Long Position</b>	<b>176,110</b>

By calculating the portfolio delta, we are able to determine the net long exposure we have to the underlying stock. We then buy or sell more options to alter our long exposure.

# Coca-Cola

January 1, 2007 through December 31, 2009



# Performance Summary

## KO Portfolio

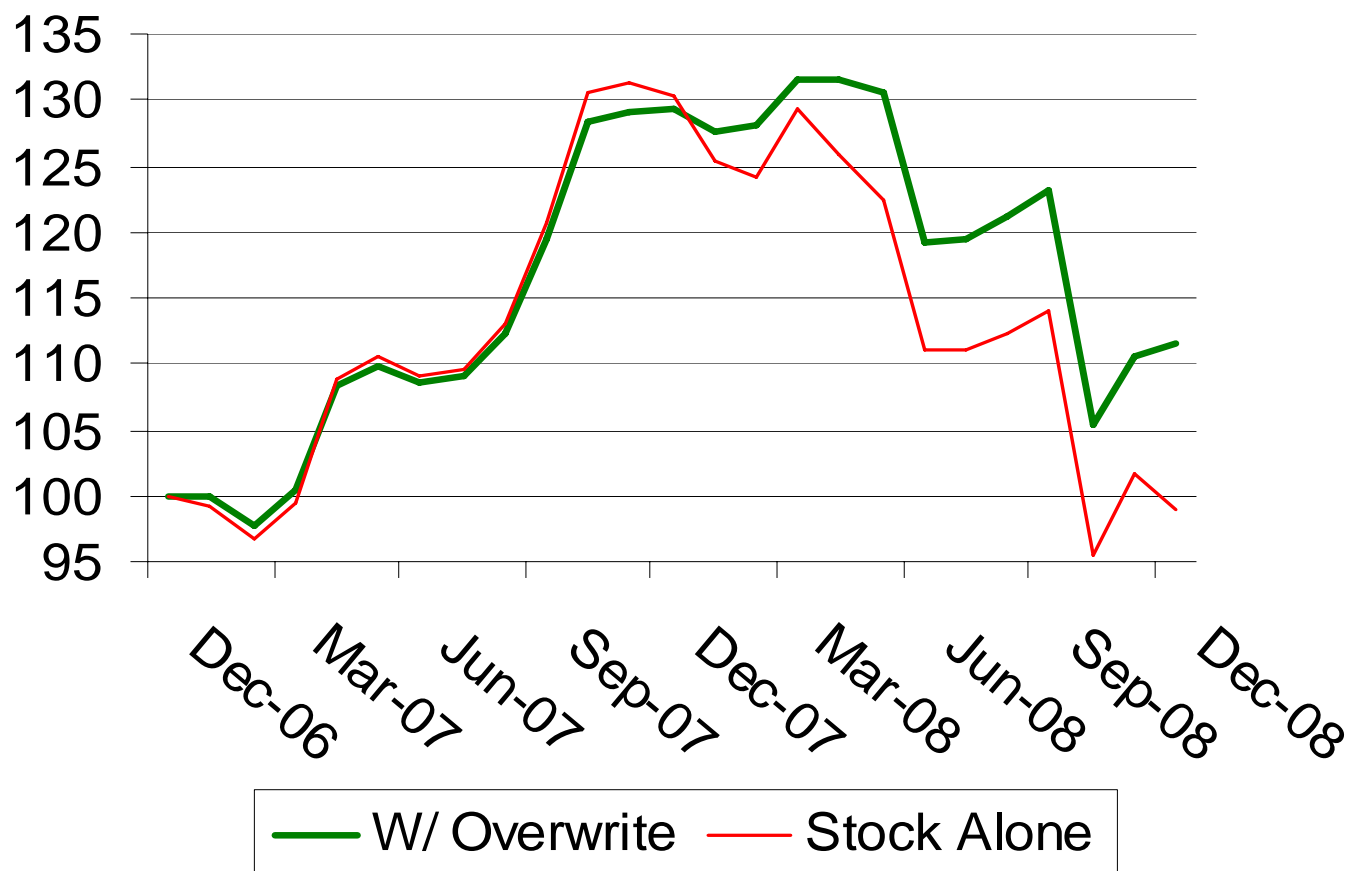
as of December 31, 2008

	Hedged Portfolio	Unhedged Benchmark
Total Return <sup>1</sup>	11.61%	-0.96%
Annualized Return	5.65%	-0.48%
Standard Deviation <sup>2</sup>	4.75%	5.31%
Sharpe Ratio <sup>3</sup>	2.10	-0.55

- <sup>1</sup> The total return number is the actual return of the stock along with the call options written benchmarked against the stock alone. The Hedged portfolio has generated cash from the sale of options which has been excluded in the performance calculation. This cash has earned additional return which is excluded from the above figure.
- <sup>2</sup> The Standard Deviation is the variance in monthly returns since inception. The lower Standard Deviation of the Hedged Portfolio highlights the lower risk associated with the Hedged Portfolio
- <sup>3</sup> The Sharpe Ratio is a measure of risk-adjusted returns of an investment or trading strategy. It is calculated as the Return less the risk free rate (2%) divided by the standard deviation of the investment. The Sharpe Ratio characterizes how well the return of an asset compensates the investor for the risk taken. The asset with the higher the Sharpe Ratio is considered more efficient and has likely earned a higher return for given level of risk.

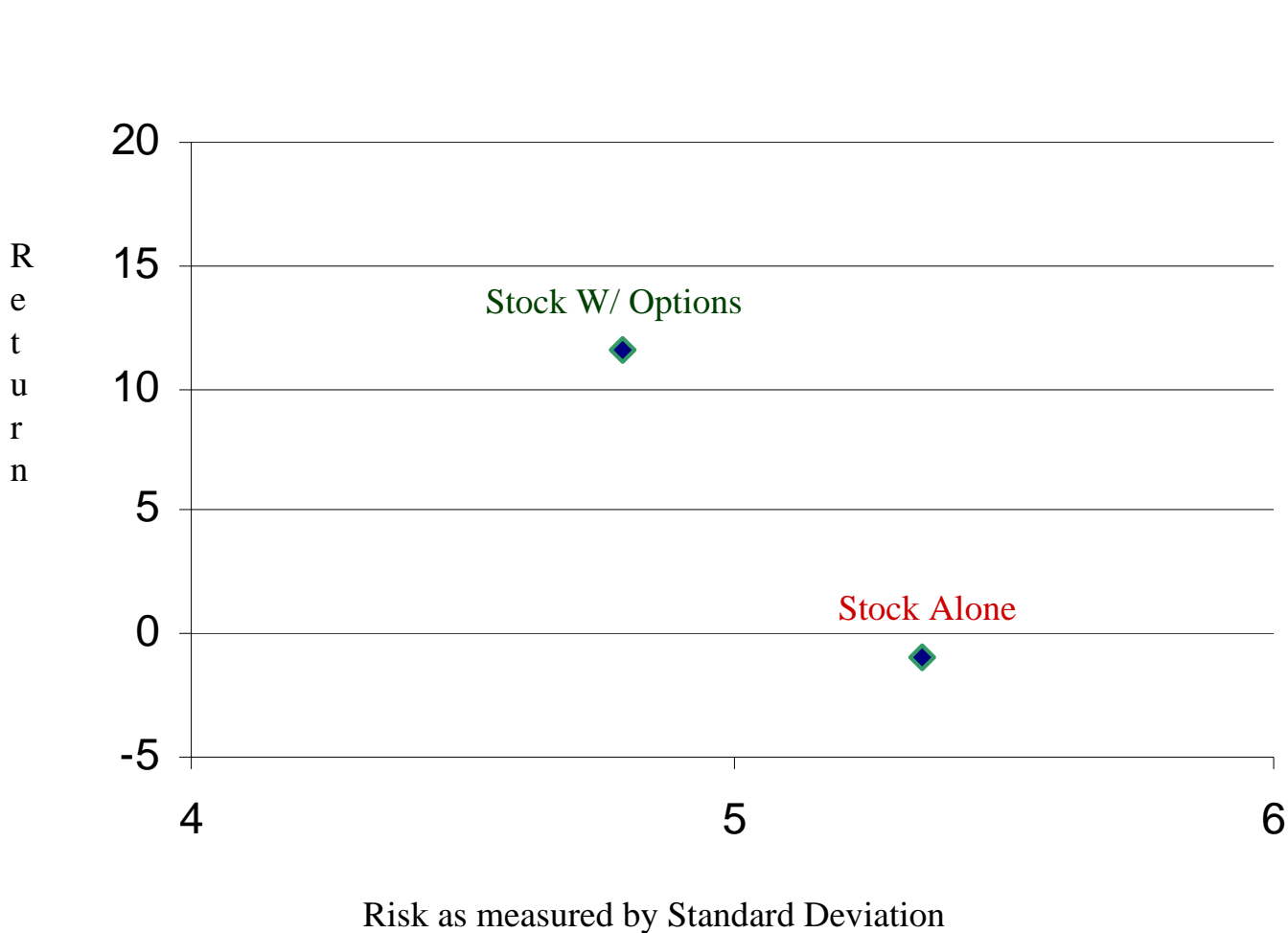
# Portfolio Return

January 1, 2007 through December 31, 2008



# Risk and Return

Two Year Portfolio Return and Standard Deviation as of December 31, 2008



# In the Money Buy Write

---

## Example

- Buy SPY at \$68.50
- Write the April 17, 2009 SPY call with a \$66 strike for \$5.30
- Breakeven Return at \$63.20 (7.7% downside protection)
- Expected Return =  $\$5.30 - 68.50 + \$66.00 = \$2.80$
- Return with an April Assignment at \$66.00 is \$3.10 or +4.3%

returns do not include the impact of commissions or fees

Reduced Portfolio Volatility

Reduce Net Equity Exposure

Enhance Income Production via Premiums

Reduce Upside to Underlying Position

## Addition of Put Writing

Replace Equity Risk in the Portfolio

Increase Volatility of Portfolio

Significantly Enhance Income Production

# CBOE VIX Index

1991 through March 6, 2009

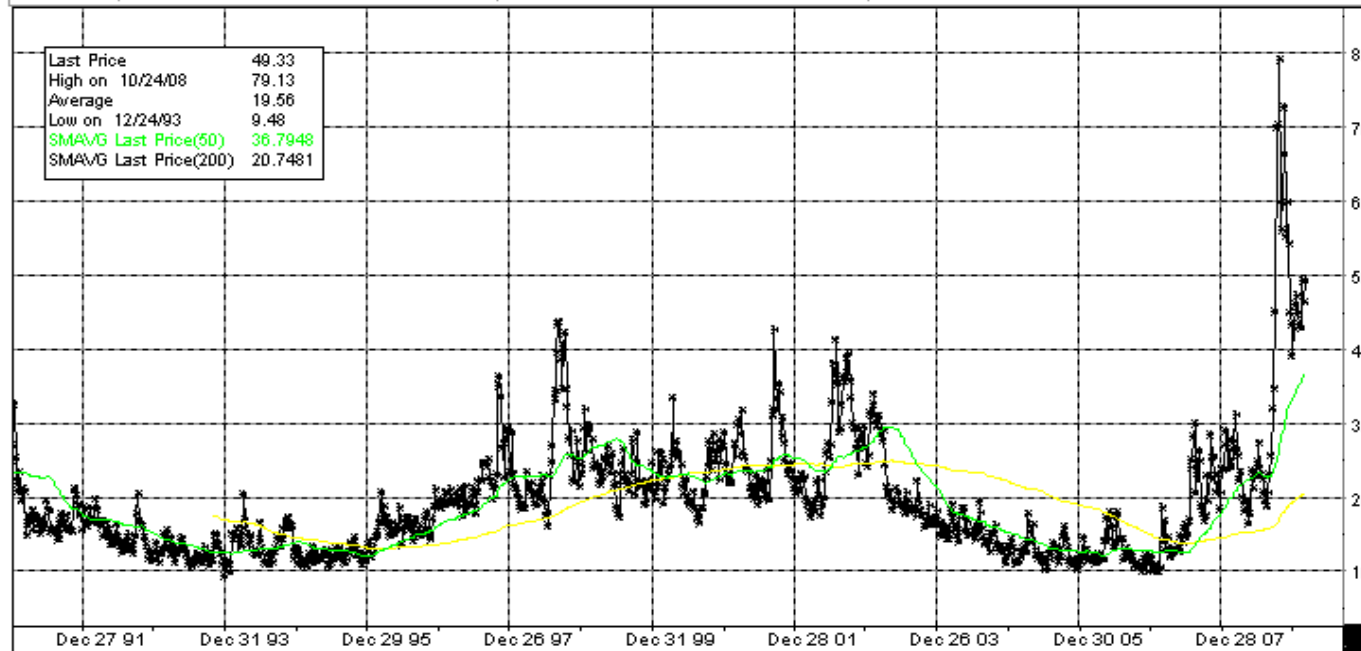
**VIX 49.33Y** as of close 3/ 6

Index **GP**

MIX INDEX Hide GP - Line Chart Page 1/26

Range  Upper     Currency

Period  Lower



# Put Write Enhancement

---

## Example

Assumptions: SPY at \$68.50, VIX at 49

### Out of the Money Put

Write the April 17, 2009 SPY Put with a \$66 strike for \$3.30

Cash Secured Expected Return =  $\$3.30 / \$66$  in cash or 4.9%

SPY must close above \$62.70 to avoid Loss

### In the Money Put

Write the April 17, 2009 SPY Put with a \$69 strike for \$4.60

Cash Secured Expected Return =  $\$4.60 / \$69$  in cash or 6.6%

SPY must close above \$64.40 to avoid Loss



## **2009 CBOE Risk Management Conference**

# Active Management of Option Positions

*Using Options to Help Reduce Risk and Enhance Potential Returns*

March 2009

**Steven S. Marco, CFA**  
*300 Atlanta Financial Center  
3343 Peachtree Road NE  
Atlanta, Georgia 30326  
404/504-8600*