Research Report:
Upgrading HCM's Active Management System For the U.S. Stock Market - Developing an "Adaptive System"

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Research Report: Upgrading the Active Risk Management System

Executive Summary:

During 2010-2011, we came to believe that the character of the stock had changed as moves that once took weeks now were occurring in a matter of days (or in some cases, hours). Because of this, we felt it was vital that our systems adapt to the changing environment. In short, this meant it was time to upgrade our active risk management system.

We have developed a new and improved "adaptive" risk management system, which represents a significant upgrade to the system we had been using. This research report examines the thinking behind the new system and provides detail on the way the system functioned in a testing environment.

In redesigning our active risk management system, we established the following goals: Our big-picture "Market Environment" Model had to be updated daily. Our trend signals needed to be more timely and sensitive to trend changes – especially when the markets are in "iffy" or neutral environments. The system needed to be able to adapt to changing market environments. The system needed to be multi-strategy. The system needed to utilize multiple time frames. The system needed a systematized decision matrix for the use of leverage and short positions. We wanted a 100% Rules-Based approach. And we wanted something we could "live with" from an emotional standpoint.

Similar to the original active risk management system, the heart of the new "adaptive" risk management system is a robust model-of-models – the Market Environment Model – which replaces our Weekly Timing Model. The primary objective of the model is to tell us when the odds favor the bulls, the bears, or neither team. And one of the important changes to the new system is the Environment Model is updated on a daily basis.

In addition, the Daily Timing Model (which was originally designed as a 'trend confirmation' model and was never intended to function as a stand-alone trading system) is being replaced with our Short-Term Trend-following system. This shorter-term trading system is designed to make sure that we are never "out of sync" with the market's trend for long and will be implemented when the Environment Model is neutral.

In summary, we believe the new "adaptive" system is a dramatic upgrade to the current active risk management approach.

For all the details on the system development and the performance results of our testing, continue on and read the full report. It is my sincere hope that you find this report of value.

All the best,

Dave M.

David D. Moenning
President
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Upgrading the Active Risk Management System

One of the keys to success in the stock market is to recognize that the market environment is always changing and evolving. As such, it is important to be able to either identify the changes in real time as they occur – or – to utilize a market management system that can adapt on its own.

One example of the changing face of the market can be easily seen when one studies the long-term or secular cycles of the stock market. Since 1920, there have been three secular bull market periods and three secular bear markets. For example, from 1942 through 1966, the stock market enjoyed a secular rise. But then the market went largely sideways (with several vicious bear market declines during the period) for the next 21 years before embarking on the secular bull that began in 1982.

Most investors today remember the roaring bull markets that then ensued during the 1980's and 1990's but have also become all too familiar with the secular bear market that took over in 2000 – and is still in place in April 2012.

Thus, my first point is that investment strategies must be able to change over time. Using the same pedal-to-the-metal strategy that was all the rage in the 1990's was a recipe for disaster as the market morphed into a secular bear in 2000. And similarly, using the same defensive, capital preservation oriented strategies that were successful in 2007-2008 was not helpful when the bulls returned to Wall Street in March 2009.

In addition, it is vital to understand that the structure, drivers, and the players controlling the markets change over time.

From what is generally referred to as the "modern era" of the stock market, which began in the mid1960's, it was pension funds and large institutions that controlled the market. Then from the mid 1980's through 2000, mutual funds were the primary players. But since the turn of the century, the hedge fund industry has emerged as the dominant player in the market.

Along with the growing hedge fund dominance has come a little something called HFT (High Frequency Trading). In short, like portfolio insurance and program trading before it, HFT has changed the character of the market as the stock market indices now move farther and faster than ever before. Examples include the "Flash Crash" as well as the extreme volatility seen during the European Sovereign Debt Crisis in the summer/fall 2011.

Although the European Crisis had been brewing for the better part of 15 months, in August 2011, the S&P 500 plunged 19% in just nine days. Then, thanks to a little help from HFT, the market spent the better part of four months bucking up and down several percent at a time (with moves of 5% - 8% occurring in just a handful of days).

The point is that market's character changed in 2010-2011 as moves that once took weeks now occur in a matter of days (or in some cases, hours). And because of this, we feel it is vital to change with the times. In short, this means it was time to upgrade our systems.

The Starting Point: The Existing Active Risk Management System

The current active risk management system was designed to focus on the intermediate-term (defined as 3-weeks to 3-months) trends of the markets. The goal was simple: we wanted to be on the correct side of the important trends and experience as few whipsaws as possible.

To be sure, the current system has performed admirably since its launch in 2009 it identified the important rallies and the most vicious declines during 2009, 2010, 2011, and the early part of 2012. And while there were some definite bumps, missteps, and plain-old bad trades along the way, for the most part, we can say with confidence that the system did a fairly good job at staying in tune with the primary trends.

To review, the current active risk management system employed two different "Timing Models" in order to identify when (and how much) to be invested: The Weekly Timing Signal and our Daily Timing Model. We

started each week with the "guide" from our weekly model and then turned to our Daily Model each day for guidance on keeping us in tune with the market's primary trend.

The primary driver of the original active risk management system was the Weekly Timing Model. The Weekly Timing Model consisted of 10 component models or indicators. Each component had proven effective over time in its own right. However, together, the components provided a 'weight of the evidence' approach to the overall market environment.

But since markets don't restrict their turning points to Mondays, we also utilized the Daily Timing Model, which was dominated by trend and momentum indicators. In short, the Daily Timing model was designed to keep us in line with the overall trend of the market between weekly signals or when the Weekly Model got "out of whack" with the trend (it happens, no system or model is perfect).

This approach performed well enough in the good and bad times since we began live testing of the system in 2009. However, it was clear to us that the character of the market changed in the middle of 2011 and we felt we could – and should – do better.

Conclusion: Adjustments Were Needed

Over the past 18 months, it has become clear to us that reviewing the big-picture indicators and the market's environmental factors (the indicators contained in our Weekly Model) on a weekly basis is just not enough. No, today's market requires that these models and indicators be updated each and every day.

We also felt that our Daily Timing Model was not sensitive enough to trigger timely buy/sell signals in today's market. But to be fair, it is important to recognize that the Daily Model was not originally intended to be a stand-alone trading system. The purpose of the model was to be a 'market confirmation system' which was designed to confirm when a trend had changed.

The idea was that if the market proved to be trending opposite the Weekly Timing Model reading, the Daily Model would get us in sync with the prevailing trend – but only AFTER there was confirmation that a trend was in place. Thus, the Daily Model signals have never been all that timely.

In addition, the existing active risk management system had a small degree of "manager discretion" involved with the decision making process. For example, when both the Weekly and Daily models are neutral, decisions were left largely to the discretion of the manager. Next, the leverage and index decisions were also up to the manager. And while we felt we did a decent job when these situations arose, we will admit to some missteps and frankly, we would prefer to have our systems dictate the action when things are neutral or "iffy."

In sum, we felt that (a) our big-picture oriented Weekly Timing Model needed to be updated on a daily basis, (b) our Daily Timing model needed to be more sensitive and act as a trading signal in its own right, (c) leverage decisions needed to be systematized, and (d) manager discretion needed to be minimized. Thus, we set out to improve upon and upgrade our current system.

Goals of the new "Adaptive" Risk Management System

In redesigning our trading system for the new "adaptive" risk management Service, we established the following goals:

1. Our big-picture "Market Environment" Model had to be updated daily
2. Our trend signals needed to be more timely and sensitive to trend changes – especially when the markets are in "iffy" or neutral environments
3. The system needed to be able to adapt to changing market environments
4. The system needed to be multi-strategy
5. The system needed to utilize multiple time frames
6. The system needed a systematized decision matrix for the use of leverage and short positions
7. We wanted a 100% Rules-Based approach

8. We needed something we could "live with" from an emotional standpoint on a long-term basis – in good times and bad

The New "Adaptive" Risk Management System

Similar to the original system, the heart of the new "adaptive" risk management system is a robust model-of-models, which we've titled the Market Environment Model. The primary objective of the Environment Model is to tell us when the odds favor the bulls, the bears, or neither.

As was the case with our original Weekly Timing Model, the new Environment Model, which is updated daily, utilizes a model-of-models approach. Each of the Environment Model's components contains scores of indicators and/or individual models, each of which has proved to be successful in their own rights from a trading perspective.

The Environment Model is made up of four component models that focus on what we believe are the key drivers of stock prices:

- ✓ Market Trend & Momentum
- ✓ Market Sentiment
- ✓ Monetary Conditions
- ✓ Misc Market Model/Indicators

While the first three component model categories are fairly self explanatory, the final group of models and indicators, which we have not-so creatively labeled "Miscellaneous," contains a group of our favorite, time-tested models and/or indicators. This group also includes some of the market's "external" or fundamental indicators such as valuations and global factors.

The key is that this particular combination of models and indicators provide a stellar "weight of the evidence" view of the overall market environment.

The Market Environment Model

The new Market Environment Model has been designed to provide three signal modes: Positive, Neutral, and Negative.

When the Environment Model is positive, history indicates that the market's trend tends to be healthy and the indices are "likely" to head higher. In other words, the odds favor the bulls.

When the Environment Model is neutral, our historical work tells us that things are "iffy" and the trend could go either way.

And when the Environment Model is negative, the message from the model is simple: the odds favor the bears.

On its own, our testing indicates that the Environment Model has a strong track record. From 1997 through 2011 (15 years), going long the S&P 500 when the model was positive, short the S&P 500 when the model was negative and then moving to the sidelines when the model was neutral would have produced an average annual compound rate of return of 18.57%. In dollar terms, if an investor had started on 12/31/1996 with $10,000 and then traded the system, that investment would now be worth $141,638 as of April 13, 2012.

This compares quite favorably to the buy-and-hope approach to the S&P 500, which gained just 3.59% per year on average from 1997 through 2011. And for comparison purposes, that same $10,000 invested in the S&P 500 cash index would now be worth$18, 342.

Below are the details of the historical backtesting of the system:

Market Environment Model Backtest		
Year	Environment Model	S&P 500
1997	33.38%	31.01%
1998	34.88%	26.67%
1999	16.02%	19.53%
2000	32.63%	-10.14%
2001	12.65%	-13.04%
2002	25.04%	-23.37%
2003	22.24%	26.38%
2004	0.23%	8.99%
2005	-2.10%	3.00%
2006	10.76%	13.62%
2007	10.40%	3.53%
2008	52.54%	-38.49%
2009	40.32%	23.45%
2010	-6.99%	12.78%
2011	13.17%	0.00%
2012 (as of 4/13)	9.92%	8.96%
Cumulative Total Return	**1,316.38%**	**85.00%**

Average Annual Compound Rate of Return - From 1997-2011	**18.57%**	**3.59%**

Please see important disclosures at the end of this report relating to the limitations of backtested results. Past performance is not a guarantee of future results. Hypothetical system testing and model portfolios do not represent actual trading. It should be noted that backtested results do not take into account payment of commissions or reinvestment of dividends, have inherent limitations, incorporates the benefit of hindsight in the development of the system, and are for informational purposes only.

Thus, employing the Environment Model would have produced a return 7.7 times greater than the S&P 500 (and traded about 9 times a year) over the 15-year period. Not bad, not bad at all.

Adding Some Offense to the Neutral Mode

While testing shows that the Environment Model has a strong stand-alone testing record over an extended period of time, we felt we could improve upon the results – especially when the model was in the neutral mode.

By definition, when the Environment Model is neutral, it suggests that the environment favors neither team. Therefore, when the environment turns "iffy" we decided that our new risk management system needed to "adapt" to the environment by shifting gears and utilizing a different plan of attack.

Thus, when the Environment Model is in the neutral zone, the new system will employ a completely different trading strategy that is designed to function in a choppier, less trend-oriented environment. In short, we found that we could dramatically improve performance by focusing on the market's shorter-term trends. This means utilizing our proprietary Short-Term Trend-Following System during neutral or "iffy" environments.

The Short-Term Trend-Following System

While we do not believe that investors need to quit their jobs and become day-traders in order to succeed in today's fast-paced stock market, we DO strongly believe that shorter-term strategies are needed today – especially when the environment is "iffy."

As the name implies, the Short-Term Trend-Following (STTF) is a system designed to help navigate the short-term trends (defined as 1-3 weeks) of the stock market.

Although the STTF focuses on the short-term trends of the market, it has also been designed to adapt to trends as they mature. For example, when an uptrend begins and the S&P 500 moves above our first trend-following indicator, an initial buy signal is given.

From there, as long as the S&P stays above our trend-following indicator, the system stays onboard the bull train. But when the index falls below the trend- following indicator, the system will exit the S&P and move to the sidelines. And if the index breaks through an important support zone and into a downtrend, the system will enter a short position.

To be sure, this is pretty basic stuff. However, what makes the STTF effective (and different from the run-of-the-mill trend following indicators) isn't the number of days used in our moving average, the type of MA employed (we use a weighted MA, btw), or even the number of days the MA is offset by. No, the real key is that the STTF **adapts** to the environment as a trend develops.

Here's how it works. If the market is moving higher and manages to stay above our short-term trend-following indicator for a set number of days, the system acknowledges the trend strength and gives the market some additional room. (This is due to the fact that uptrends often "pause" for a short period and then resume their ascent. And as such, it is helpful not to get knocked out of the trend during the first little pullback.) And then if the market stays above the trend-following indicator for another set period of days, the trend is given some additional room.

The bottom line is this approach allows the system to adapt to the trend, which allows us to stay in the move longer and reduces the number of whipsaws experienced with a traditional short-term trend-following strategy.

On its own, the STTF has proved quite successful in our testing. Since 1997, a test of the system shows that it has produced an average compound rate of return of 20.39%. This means that $10,000 invested in 1997 would now be worth $175,282 as of 4/13/2012 (which is nearly 10 times the S&P's return).

Below is a year-by-year summary of the historical system backtesting done for the Short-Term Trend-following System:

Short-Term Trend-Following System Backtest

Year	STTF System	S&P 500
1997	20.09%	31.01%
1998	54.10%	26.67%
1999	24.66%	19.53%
2000	16.90%	-10.14%
2001	31.02%	-13.04%
2002	33.09%	-23.37%
2003	19.67%	26.38%
2004	10.43%	8.99%
2005	4.01%	3.00%
2006	11.11%	13.62%
2007	12.58%	3.53%
2008	16.83%	-38.49%
2009	24.35%	23.45%

2010	24.36%	12.78%
2011	10.86%	0.00%
2012 (as of 4/13)	8.24%	8.96%
Cumulative Total Return	**1,652.83%**	**85.00%**

Average Annual Compound Rate of Return (From 1997 thru 2011)	**20.39%**	**3.59%**

From 2000	**659.81%**	**-6.73%**
From 2008	**116.79%**	**-6.68%**
From 2010	**49.23%**	**22.89%**

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The Cost/Benefit to Utilizing a Shorter-Term System

In our historical backtests, the STTF system has obviously added significant value over time. Since according to our estimates, the market is in a neutral or "iffy" mode approximately 40% of the time, it makes sense to us to add this strategy to our new "adaptive" risk management system.

However, experienced investors know that there is a cost/benefit tradeoff when utilizing a shorter-term approach to trading the market. The primary benefit to a shorter-term approach is the fact that returns are higher and you wind up getting "onboard" all the important trends very early.

However, there is a cost to such an approach as well that investors need to be aware of. In short, using a short-term trend-following strategy means more trades, more whipsaws and correspondingly, more angst if such things affect your emotions.

For example, only 54.7% of the STTF trades were profitable in our test. Our research shows that 51.4% of the long trades during our 15 year test of the STTF stand-alone system were profitable and 68.7% of the short trades were profitable (note that not all STTF trades would be implemented in the new "adaptive" risk management system as the STTF is used only when the Environment model is in the neutral zone).

And while this approach will indeed "let winners run" and "cut losses short," it is vital to understand that this method can be tough on the psyche at times. Our research shows that there can be multiple consecutive losing trades and while the losses are small and easily outweighed by the gains, it can be emotionally difficult to make the next buy after a string of 3 or 4 straight losing trades.

Introducing the New "Adaptive" Risk Management System

To summarize, we believe that the "new and improved" adaptive risk management system represents a significant upgrade to the original system. The new system adapts to changes in the environment, adapts to the strength of trends, is multi-strategy, employs multiple time-frames, removes manager discretion, and is a 100% rules-based system.

Unlike the old system, the new "adaptive" risk management system will utilize the same trading strategy for all models. However, the risk taken by each model will vary. And finally, all three of the model portfolios will utilize the S&P 500 index.

The New "Adaptive" Risk Management System Trading Matrix:
Below is a summary of how the models will function in response to the different model reading and/or trading signals:

Model/System Signal	Main Model	Hybrid Model	Aggressive Model
Environment Model Buy:	S&P 500	2x Long S&P	3X Long S&P
Environment Model Neutral:			
STTF Buy:	S&P 500	S&P 500	2X Long S&P
STTF Sell:	Cash	Cash	Cash
STTF Short:	Short S&P 500	Short S&P 500	Short S&P
Environment Model Sell:	Short S&P 500	Short S&P 500	2X Short S&P

In summary, we believe the new system is a dramatic upgrade to the current system.

Testing the New "Adaptive" Risk Management System

We don't ever implement a management system without first exposing it to rigorous backtesting. Before we get to the results though, I need to make it very clear that ALL backtests have inherent flaws. However, in order to get a general feel for how the system might function/perform in various market environments, we perform the tests with enthusiasm.

The goals of our backtests are always the same. We want to get a sense of how the system performs…

- ✓ Versus the S&P 500
- ✓ In Bull market environments
- ✓ In Bear markets environments
- ✓ In sideways markets
- ✓ In volatile markets
- ✓ In quiet markets

As for the testing period chosen, we felt that the 1997-2011 period presented us with many and varied market environments against which to test the system. We could certainly go back further in time. However, the environments we were looking for were contained in this 15-year period.

When conducting the testing of the various systems involved with the new "adaptive" risk management system (the tests of the component systems are first done independently and then in combination to form the ultimate system), we wanted to look very hard at certain time frames.

First, did the system outperform in the late 1990's during the end of the great bull run? Next, how did the system handle the 2000-2003 Tech Bubble Bear? And then we wanted to know if the system faltered during the cyclical bull of 2004 through mid-2007, which was actually one of the more difficult trading environments of the period. Next, we wanted to see how the system performed during the Credit Crisis Bear of 2007-2008. And finally, we were very interested in how the system handled 2011 when volatility went through the roof.

While there is no such thing as the "Holy Grail" in trading and the new "adaptive" risk management system can be challenging to deal with at times, overall, we were pleased with how the system performed during our backtest period.

Below is a summary table of the year-by-year performance results of our historical test.

New "Adaptive" Risk Management System Backtest

(Combines Environment Model and STTF Trading System)

Year	New Main Model	New Hybrid Model	New Aggressive	S&P 500
1997	13.10%	**46.08%**	**97.09%**	31.01%
1998	**53.90%**	**85.70%**	**170.47%**	26.67%
1999	**39.48%**	**32.36%**	**70.39%**	19.53%
2000	**28.17%**	**30.93%**	**63.29%**	-10.14%
2001	**26.65%**	**30.64%**	**64.94%**	-13.04%
2002	**24.37%**	**21.52%**	**40.48%**	-23.37%
2003	**32.07%**	**56.23%**	**104.53%**	26.38%
2004	**13.26%**	**11.81%**	**26.86%**	8.99%
2005	1.82%	**5.71%**	**7.26%**	3.00%
2006	**16.05%**	**26.10%**	**47.34%**	13.62%
2007	**20.73%**	**23.91%**	**46.63%**	3.53%
2008	**44.63%**	**44.62%**	**92.78%**	-38.49%
2009	**31.90%**	**78.29%**	**107.12%**	23.45%
2010	**14.39%**	**16.87%**	**39.73%**	12.78%
2011	**9.69%**	**16.18%**	**24.83%**	0.00%
2012 (as of 4/13)	**8.54%**	**12.26%**	**20.50%**	8.96%
Cumulative Total Return	**2,616.87%**	**8,362.90%**	**173,298.00%**	**85.00%**
From 2000	**1,019.14%**	**2,257.00%**	**18,991.45%**	**-6.73%**
From 2008	**159.78%**	**293.02%**	**739.23%**	**-6.68%**
From 2009	**79.63%**	**171.76%**	**335.34%**	**51.71%**
From 2010	**36.18%**	**52.43%**	**110.19%**	**22.89%**
Avg Compound Rate of Return From 1997-2011	**23.93%**	**33.38%**	**60.87%**	**3.59%**

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In reviewing the results of the historical testing, we felt the system had promise.

However, let's understand that trading the stock markets trends can be challenging. So, will producing the results seen above be easy? No. Will the system get every move right? Absolutely not! The backtest shows that we will likely make two, three, or even four, losing trades in a row at times. Thus, it will suffice to say that we will likely look and feel like idiots on occasion if employing such a system. But remember, if this game was easy, EVERYONE in America would be a gazillionaire!

The Good, The Bad, and The Ugly

One question many analysts have when reviewing any system is what type of losses should be expected from this approach? Below is a table summarizing the best and worst traders each year for the Hybrid Model:

New "Adaptive" Risk Management System

Best and Worst Trades Each Year For Hybrid Model Backtest

Year	Best Trade	Trade Type	Worst Trade	Trade Type
1997	16.18%	Long	-3.75%	Long
1998	23.77%	Long	-1.59%	Long
1999	6.98%	Long	-6.19%	Short
2000	8.36%	Long	-3.26%	Short
2001	12.64%	Short	-4.36%	Short
2002	23.19%	Short	-6.33%	Short
2003	14.33%	Long	-2.28%	Long
2004	4.84%	Long	-3.70%	Long
2005	4.79%	Long	-2.40%	Long
2006	5.27%	Long	-1.36%	Long
2007	7.09%	Long	-2.72%	Long
2008	36.07%	Short	-2.77%	Long
2009	43.03%	Long	-4.42%	Long
2010	12.42%	Long	-9.30%	Long
2011	9.27%	Short	-6.84%	Short

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As you can see, in most years (11 out of 15) the worst trade was less than -5%. And the absolute worst trade occurred in 2010 at -9.30%.

What about the other models you ask? Since all three models execute the same trades, the Main Model's best and worst trades would both be lower than the Hybrid Model's (due to the fact that the Main Model does not use leverage) while the Aggressive Model's trades would both be higher (due to the fact that the Aggressive Model is always leveraged). Note that the Hybrid Model uses 2X leverage on the long side when the Environment Model is positive whereas the Aggressive Model uses 3X leverage when the Environment Model is positive and 2x when the Environment Model is neutral or negative.

In sum, the new "adaptive" risk management system is more complex. It will require more trading and more effort. But I believe this to be one of the best approaches to managing the trends of the market that I've seen to date in my 30+ years in the business.

Wishing you nothing but green screens,

Dave M.

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President
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Important Disclosures Relating to Backtesting:

The test results provided herein are HYPOTHETICAL. The test of the trading system displayed in this research report is for information purposes only and should not be used or construed as an indicator of future performance, an offer to sell, a solicitation of an offer to buy, or a recommendation for any security or investment program.

The return calculations presented are based on historical system testing. It should be noted that test results **do NOT represent actual trading, do NOT take into account either the payment of commissions or reinvestment of dividends, have inherent limitations, and are for informational purposes only. All returns illustrated in this research report are before commissions, management fees, and slippage. As such, returns illustrated cannot be expected to be achieved.** There can be no guarantee, that profits will be made, or even that losses will be avoided. Some of the risks these strategies can be exposed to include: strategy and timing decisions may not always be correct and may adversely affect account performance. The implementation of timing signals may not be done in a timely fashion. The use of leverage may magnify risk. Leverage and ETF's employing derivatives carry other risks that may result in losses, including the effects of unexpected market shifts, default and/or the potential illiquidity of certain derivatives.

The performance results depicted have been produced by application of selected trading signal criteria to historical stock index price data. It is assumed that when on a "buy" signal, the hypothetical test account owns the S&P 500 stock index or the ETF specified in the trade alert. When on a "sell" signal, it is assumed that the hypothetical test account is short the S&P 500 stock index or the ETF specified in the trade alert. When on a neutral signal, it is assumed that the hypothetical test account is invested in T-Bill index. Annual returns are compounded on a trade by trade basis.

The attached hypothetical system test research report is NOT represented as actual trading or client experience, nor does it reflect the impact on decision making of economic or market factors experienced during actual management of funds. Performance between selected dates may be misleading as indicative of overall performance of a strategy, since they may have been selected to present optimum performance. Actual results may differ from results reported for the model portfolio for many reasons, including, without limitation: (i) performance results for the model portfolio do not reflect trading commissions that you may or may not incur; (ii) performance results for the model portfolio do not account for the impact, if any, of certain market factors, such as lack of liquidity, that may affect your results; (iii) the securities chosen for the model portfolio may be volatile, and although the "purchase" or "sale" of a security in the model portfolio will not be made in the model portfolio until confirmation that the email alert has been sent to all subscribers, delivery delays and other factors may cause the price you obtain to differ substantially from the price at the time the alert was sent; and (iv) the prices of securities in the model portfolio at the point in time you begin subscribing to our service may be higher than such prices at the time such stocks or options were chosen for inclusion in the model portfolio.

Index returns are price only and do not include the reinvestment of dividends. The S&P 500 is a stock market index containing the stocks of 500 large-cap corporations, most of which are US companies. The index is the most notable of the many indices owned and maintained by Standard & Poor's, a division of McGraw-Hill. S&P 500 is used in reference not only to the index but also to the 500 companies that have their common stock included in the index.

Past performance is not a guarantee of future results.