Research Report:

The Evolution of the "NextGen" Active Risk Management System

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The Evolution of the Active Risk Manager

While the latest iteration of the Active Risk Manager is relatively new, the strategy and managers associated with the programs are definitely not.

Mr. David Moenning and the team at Heritage Capital have been managing risk for clients for more than 25 years. In fact, the Active Risk Manager concept dates back to the firm's very first offering, The Capital Preservation Program (CPP), which was first introduced by Mr. Moenning and a colleague to clients in 1987 and then by Heritage in 1989.

The objective of the CPP was simple; keep client accounts mostly invested during bull market periods and mostly out of the market during bear market periods. CPP utilized the Kemper Mutual Fund family from 1987 through 1993.

For the most part, CPP did its job.

Capital Preservation Program

"Conservative Asset Allocation"
Returns are net of maximum management fees

Year	CPP	S&P 500
1987	38.40%	2.03%
1988	7.97%	12.40%
1989	18.40%	27.25%
1990	-2.40%	-6.56%
1991	24.90%	26.31%
1992	8.54%	4.46%
1993	8.10%	7.06%
Cumulative:	**153.06%**	**92.62%**

However, as assets under management grew, Kemper Funds began implementing trading restrictions. And by 1993, the restrictions became untenable.

In response, Heritage began researching a disciplined, unemotional, systems-based risk management approach – Fund Timing System (FTS). The FTS approach utilized a pure trend-following system and was 100% mechanical in nature. Thus, FTS removed emotion from the decision making process. FTS was implemented at American Funds, which, in the early years, did not impose any restrictions on movements within their funds.

FTS proved to be effective and performed quite well in the first 9 years of existence, more than doubling the return of the Lipper Large Cap Growth Fund index (+105.16% vs. +49.76%)

HCM FTS - GFA

A Risk Managed Approach to Growth Funds
Net of Max Fees

Year	FTS GFA	Lipper Growth
1994	-6.83%	-1.77%
1995	17.23%	30.79%
1996	17.38%	19.25%
1997	9.30%	25.06%
1998	28.98%	22.86%

1999	31.73%	38.09%
2000	12.44%	-16.22%
2001	-9.01%	-22.95%
2002	-15.77%	-28.63%
1994 - 2002	**105.16%**	**49.76%**

This disciplined, risk management approach paid off during the Tech Bubble Bear as the program preserved capital by declining just -13.8% from 2000 through 2002. This compared quite favorably to the loss of -53.9% seen in the Lipper Growth Fund Index and the -40.1% loss in the S&P 500 index.

However, in the later 1990's, American Funds began imposing (and then regularly changed) restrictions on trading. As such, the restrictions caused the program to begin to lose some of its effectiveness.

The problem was simple. Heritage could not know what the restrictions would be from year to year. In some years, the restrictions did not pose a problem. But in others, the inability to make frequent adjustments to market exposure proved problematic.

And while the long-term results weren't bad, the restrictions became cumbersome and Mr. Moenning and his team knew they could do better.

In 2000, Heritage introduced the Global Opportunities program at Pacific Life. Heritage recognized that one way to minimize the impact of trading restrictions imposed by mutual fund companies was to broaden the universe in terms of investment selection.

So, instead of focusing on one or two mutual funds to manage risk with, Heritage began taking a more global approach.

The program performed exceptionally well during the 2000-02 Tech Bubble Bear. While the **S&P 500 Index declined -40.12%** during the period and the Lipper Global Fund Index fell -40.34%, the **Global Opportunities program actually gained +21.14%.**

Global Opportunities
Net of Maximum Management Fees

Year	HCM Global Opportunities Program	Lipper Global	S&P 500 Index
2000	14.31%	-10.27%	-10.14%
2001	-4.17%	-17.37%	-13.04%
2002	10.59%	-19.53%	-23.37%
2000-02	**21.14%**	**-40.34%**	**-40.12%**

The program continued to perform well after the Tech Bubble Bear. However, once again trading restrictions were first imposed and then changed over time. As a result, the performance during the 2008 Bear was disappointing as trading restrictions came into play at a most inopportune time.

Global Opportunities
Net of Maximum Management Fees

Year	HCM Global Opportunities Program	Lipper Global	S&P 500 Index
2000	14.31%	-10.27%	-10.14%

2001	-4.17%	-17.37%	-13.04%
2002	10.59%	-19.53%	-23.37%
2003	8.92%	32.05%	26.38%
2004	8.67%	13.91%	8.99%
2005	0.96%	10.76%	3.00%
2006	12.44%	18.77%	13.62%
2007	1.97%	11.03%	3.53%
2008	-29.37%	-41.26%	**-38.49%**
2009	16.60%	33.92%	23.45%
2010	8.95%	14.22%	12.78%
2011	-11.37%	-8.97%	0.00%
2012	3.70%	15.47%	13.41%
2013	13.59%	12.96%	29.60%
Cum:	**55.48%**	**39.84%**	**25.78%**

Although the cumulative returns over 14 years were solid, once again, Heritage knew there was significant room for improvement. Most importantly, Mr. Moenning and his team realized that they needed to break free of the mutual fund and variable annuity trading restrictions once and for all.

During 2007-2008 period Heritage decided that the market's structure had changed and that their approach needed an overhaul. Thus, Mr. Moenning and his team at Heritage embarked on an extensive research project in order to design a disciplined, unemotional Active Risk Management System for the U.S. stock market. And this time, the system would focus on ETFs.

After all, ETFs trade without restriction every minute the New York Stock Exchange is open. Thus, the team believed that trading restrictions would soon become a thing of the past.

The results of this project can be found in the research report describing the process:
http://heritagecapitalmanagement.com/wp/wp-content/uploads/2013/02/Research-Report-Developing-an-Active-Risk-Management-System-for-the-US-Stock-Market-9.9.11.pdf

The Market Model Approach

In an attempt to avoid the pitfalls of a pure trend-following and/or single market-model or rule-based signals and the issue of changing market environments, Heritage looked at another approach; something called the "model-of-models" method. Instead of using a single indicator or model, this approach combines a series of market indicators and/or market models in order to create of model made up of many other models.

Think of this approach as a recipe that an investor "stirs up" in help order to guide their investing decisions. Typically a model-of-models includes trend and momentum indicators, as well as any number of other indicators such as economic, monetary, fundamental, sector, etc. The ingredients can vary widely – as can the results.

The key to the model-of-models approach is that each category of market analysis itself contains multiple models or indicators. These indicators are then summed to create a "weight of the evidence" signal for the category.

The model-of-models system researched and tested contained ten categories of analysis:

- ✓ Market Breadth
- ✓ Liquidity
- ✓ Seasonality
- ✓ Sentiment
- ✓ Trend

- ✓ Volatility
- ✓ Volume
- ✓ Economic
- ✓ Fundamental
- ✓ Individual Equity Ratings

Each of the ten categories is itself made up of between two and five separate, individual indicators or models (a total of 33 different market indicators or models are employed in the overall model-of-models) that have been tested and proven successful in their own rights.

Below is a table showing the hypothetical test of the model-of-model system the Heritage team developed to manage the risk in the U.S. stock market.

10-Model-of-models Decision System
Historical Test Results Using Long/Short/Neutral Strategy

Year	Weekly L/S/N Test		S&P 500	
1987	22.60%	$ 10,000.00	5.69%	$ 10,000.00
1988	28.80%	$ 12,260.00	16.64%	$ 10,569.00
1989	43.10%	$ 15,790.88	32.00%	$ 12,327.68
1990	24.60%	$ 22,596.75	-3.42%	$ 16,272.54
1991	16.40%	$ 28,155.55	30.95%	$ 15,716.02
1992	6.00%	$ 32,773.06	7.60%	$ 20,580.13
1993	7.20%	$ 34,739.44	10.17%	$ 22,144.22
1994	24.30%	$ 37,240.68	1.19%	$ 24,396.28
1995	21.80%	$ 46,290.17	38.02%	$ 24,686.60
1996	19.30%	$ 56,381.43	23.06%	$ 34,072.44
1997	19.00%	$ 67,263.04	33.67%	$ 41,929.55
1998	39.50%	$ 80,043.02	28.73%	$ 56,047.23
1999	57.70%	$ 111,660.01	21.11%	$ 72,149.60
2000	39.40%	$ 176,087.84	-9.11%	$ 87,380.38
2001	35.20%	$ 245,466.45	-11.98%	$ 79,420.02
2002	31.00%	$ 331,870.64	-22.27%	$ 69,905.51
2003	0.30%	$ 434,750.53	28.72%	$ 54,337.55
2004	24.30%	$ 436,054.79	10.82%	$ 69,943.29
2005	14.60%	$ 542,016.10	4.79%	$ 77,511.16
2006	10.20%	$ 621,150.45	15.74%	$ 81,223.94
2007	24.40%	$ 684,507.79	5.46%	$ 94,008.59
2008	42.60%	$ 851,527.70	-37.22%	$ 99,141.46

Please see important disclosures at the end of the research report regarding the inherent limitations of hypothetical backtested results.

A "Live" Testing Environment

Next, since backtested results have limitations that are many and varied, Heritage decided to take a new and innovative step in order to further test the system. The goal was to test the trading strategies in a more stringent "live" environment, but avoid putting client assets at risk during the test.

Heritage implemented this test by publishing the buy and sell signals in real-time via an internet website. Whenever a signal was given, the website would send a time-stamped email alert including the exact instruction of the move to individuals subscribed to the service. While this approach is NOT the same as actual trading, this "live testing environment" with subscribers (who were paying subscription fees for the signals), provided a more real-world test of the system than does a computer-generated backtest.

Below are the results of the program based on the "live testing environment" subscription signals through 7/18/14:

	2009	2010	2011	2012	2013	**2014**	**Cum**
Main	63.51%	20.58%	-4.58%	9.81%	19.78%	**1.09%**	**150.16%**
Hybrid	204.78%	33.43%	-7.42%	8.14%	27.27%	**2.58%**	**431.52%**
Aggressive	161.00%	61.20%	-26.80%	16.47%	44.34%	**-1.40%**	**410.53%**
S&P 500	23.45%	12.78%	-0.003%	13.41%	29.60%	**7.03%**	119.01%

Please see important disclosures at the end of the research report regarding the inherent limitations of hypothetical backtested results. The program was taken live for clients in 2012.

Changing Markets Require Strategy Adjustments

In late 2013, Mr. Moenning decided to upgrade the Active Risk Manager System once again due to changes in the character and the structure of the way the stock market moved.

Decimalization, the advent of ETFs, online trading, HFT, and the proliferation of algo-driven trading proved to be examples of developments that had impacted the character of the stock market since the mid-2000's. As a result, Heritage believed that management strategies needed to continue to evolve in order to adapt to the ever-changing market landscape.

Specifically, Heritage believed that the dominance of algo-driven computerized trading, which occurs at the speed of light and according to reports now accounts for upwards of 70% of the daily volume on the NYSE, had caused the size of the daily moves in the stock market to expand. In short, the intraday moves seen in the stock market had become more exaggerated than ever before.

In response to the changing environment, Heritage set out to upgrade their systems for managing risk in the U.S. stock market – I.E. to develop the next generation of the Active Risk Manager Systems.

The primary goal was to diversify both the managers and strategies employed, reduce volatility, limit exposure to whipsaws, incorporate "index selection" into the process, and attempt to create a "smoother ride" for those involved with the program.

To accomplish these goals, Heritage developed the new programs to (a) incorporate additional managers and additional management strategies and (b) make incremental market moves in and out of the market. The overall intent was to diversify the program in terms of strategy, methodology, and managers.

Adding a Swing Trading Strategy to the System

One of the strategies added to the system was a swing trading approach, "The Active Swing" system.

The Active Swing system is designed to trade contrary to the most recent directional move in price to capitalize on an identified short-term statistical tendency to revert to prior price levels – commonly referred to as "mean reversion."

The swing trading system utilizes a "model of models" approach focusing on price oscillations of the S&P 500, price movement relative to volatility across multiple time frames, and a risk and volatility budget scheme, which attempts to limit drawdowns in adverse conditions.

During periods of low volatility, the strategy has an imputed bias to the long side and conversely, a bias toward cash during periods of high volatility.

The Active Swing strategy utilizes an incremental long or short approach using ETFs or index funds.

Incorporating a “risk budgeting” technique makes the Active Swing strategy unique and helps guard against negative market environments. For example, should strategy performance or volatility exceed preset limits, positions are reduced via increased cash levels.

Adding a Tactical Mean Reversion Trading Strategy

The Tactical Mean Reversion Trading System is a “model of models” designed to produce buy and sell signals when the market is not in a strong trending mode. The model consists of five separate indicators or models that produce buy signals and five indicators/models designed to produce sell/short signals.

One of the most important aspects of the Tactical Mean Reversion System is that all of the indicators employed utilize stop losses. In addition, each of the indicators uses a time-based exit strategy. This means that there is a time limit placed on each position.

The overall game plan for this system is to look for specific “set ups” in the market.

Putting It All Together: The NextGen Programs

To review, the NextGen Active Risk Manager programs are the latest iteration of Heritage’s risk management strategies. The NextGen programs utilizes multiple strategies, multiple managers, and multiple methodologies. The NextGen programs move incrementally and can make adjustments to exposure on a daily basis. The overall goal is to keep client accounts on the appropriate side of the market’s big, important trends.

Below is a link to the full research report detailing how the next generation of the Active Risk Manager was developed:
http://heritagecapitalmanagement.com/wp-content/uploads/2014/03/Next-Gen-System-Research-Report.pdf

Below are the hypothetical backtest results for the system in its current form.

HCM NextGen Active Risk Manager
Net of Maximum Management Fees

Year	NextGen Active Risk Manager Growth	S&P 500	HFRI Equity Hedge
2005	**7.61%**	3.00%	10.60%
2006	**6.76%**	13.62%	11.71%
2007	**11.51%**	3.53%	10.48%
2008	**56.84%**	-38.49%	-26.65%
2009	**24.20%**	23.45%	24.57%
2010	**15.74%**	12.78%	10.45%
2011	**11.72%**	0.00%	-8.38%
2012	**14.65%**	13.41%	7.41%
2013	**26.75%**	29.60%	12.94%
Cumulative From Inception:	**368.91%**	**52.50%**	**53.11%**

Please see important disclosures at the end of the research report regarding the inherent limitations of hypothetical backtested results. The program was taken live for clients on 2/1/14.

HCM NextGen Active Risk Manager

Net of Maximum Management Fees

Year	NextGen Active Risk Manager Aggressive	S&P 500	HFRI Equity Hedge
2005	**10.90%**	3.00%	10.60%
2006	**9.44%**	13.62%	11.71%
2007	**17.90%**	3.53%	10.48%
2008	**73.52%**	-38.49%	-26.65%
2009	**36.15%**	23.45%	24.57%
2010	**22.09%**	12.78%	10.45%
2011	**19.07%**	0.00%	-8.38%
2012	**24.47%**	13.41%	7.41%
2013	**45.06%**	29.60%	12.94%
Cumulative From Inception:	**787.33%**	**52.50%**	**53.11%**

Please see important disclosures at the end of the research report regarding the inherent limitations of hypothetical backtested results. The program was taken live for clients on 2/1/14.

See the Fact Sheet for the most recent performance of the "NextGen" Active Risk Manager Program.

To be sure, the stock market is constantly changing. As such, it is important for managers to be able to adapt to changing market environments. If nothing else, over its 25-year existence Heritage has proved that it is not afraid to make adjustments to programs when needed. And since the stock market isn't likely to stop changing/evolving anytime soon, having a management team that has been able to adapt would seem to be a positive.

Performance Disclosures:

Capital Preservation, FTS and Global Opportunities Programs: Performance results shown are net of HCM's maximum management fee, paid quarterly. Results illustrated are based on actual control client account balances that have met the following criteria: 1) money has not been added nor withdrawn from the account during the reporting period, 2) HCM's maximum fee rate has been billed, 3) a minimum account size of $10,000 invested, and 4) the account is not large enough to generate a reduction of fees. Whenever there are discrepancies within the returns of control accounts, HCM utilizes an average of the control accounts. The results portrayed above include the reinvestment of dividends. Performance is calculated based upon the accounts that meet the above stated criteria; therefore control accounts may alternate each period if necessary. Individual client account performance may not match the stated portfolio performance. Performance results may vary from those previously stated due to the criteria currently required.

NextGen Active Risk Manager Program: For the period February 1, 2014 forward, performance results reflect actual control client accounts for Heritage's NextGen Active Risk Manager programs. For the period January 2006 through January 2014, Heritage has utilized hypothetical back testing to create all or part of this performance record to reflect the manner in which an account can be managed. Hypothetical back tested performance results have many inherent limitations and do not reflect the actual results of any client account managed by Heritage.

There is no guarantee that investment results portrayed above will yield the same future results. Consult an investment professional before investing in any investment program. Investors may experience a loss. Do not purchase any security without doing sufficient research. Consult an Investment Professional before investing in any investment program. Investors may experience a loss of principal when investing in stocks and ETFs.

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For the period January 2006 through January 2014, Heritage has utilized hypothetical back testing to create all or part of this performance record to reflect the manner in which an account can be managed. Hypothetical back tested performance results have many inherent limitations and do not reflect the actual results of any client account managed by Heritage.

Hypothetical performance results are achieved by means of the retroactive application that was designed and prepared with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or have losses similar to those shown. Hypothetical testing does not involve risk and may not reflect the impact that any material market or economic factor may have on Heritage's decision making. Further, the performance record may have under or over compensated for the impact, if any, of certain market factors (e.g. lack of liquidity, trading costs, etc.). The conditions, objectives or investment strategies may have changed materially during the time period, or after the time period, portrayed in this performance record, and the affect of such change is not portrayed in the performance record.

The preceding illustration for the NextGen Active Risk Manager program represents varying combinations of Heritage strategies based on a rules-based decision tree. Indicators designed and maintained by Heritage determine the allocation to the various Heritage strategies utilized in the NextGen Active Risk Manager program. There are three NextGen Active Risk Manager programs offered: Main, Hybrid, and Aggressive. The trading signals for the three programs are identical. The primary difference between the Main, Aggressive and Moderate strategies is the amount of leverage employed within the strategies. At certain times and based on the rules of the strategy, all three NextGen Active Risk Manager programs may utilize leveraged ETFs (ETFs designed to deliver 2x or 3x the performance of the underlying index). The maximum leverage permitted in the main model is 150%, the maximum leverage permitted in the hybrid model is 200%, and the maximum leverage permitted in the aggressive model is 300%. The allocation to strategies in the NextGen Active Risk Manager program change according to the readings of Heritage's market environment indicators. For example, when Heritage's market environment indicators are positive, the NextGen Active Risk Manager program will be allocated to U.S. stock market index ETFs and/or mutual funds, Heritage's mean reversion strategy, and Heritages active swing strategy. The indicators and allocations to strategies, as well as the percentage allocations to the strategies may change at any time. Thus, the investment strategies followed may only partially relate to the type of services currently offered by Heritage. The assets and strategy combinations utilized in this performance record may be different from the assets utilized by Heritage when trading actual client accounts. There is no guarantee that future portfolio management or portfolio/asset selection decisions will mirror the assumptions used in the creation of this performance record.

Performance results illustrated are net of a 2.5% management fees paid monthly in arrears. For the period February 1, 2014 forward, performance results are net of trading and other custodian costs but do not consider the impact of taxes. For the period January 1, 2006 through January 2014 the performance results illustrated are net of a 2.0% management fees paid monthly in arrears, but do not include trading costs, other fees, nor the impact of taxes. Performance results include the reinvestment of dividends and other earnings.

The performance of different assets varies widely. As a result, actual client account results may vary widely from those shown in this performance record. There are numerous other factors related to the markets in general or to the implementation of any specific strategy which cannot be fully account for in the preparation of this hypothetical performance record, all of which can adversely affect results when actually managing client assets.

Other Considerations. Program accounts will invest in leveraged and inverse exchange traded funds and/or mutual funds. Such funds may seek to enhance returns through the use of financial instruments, such as derivatives, swaps, and options, as well short sales. Although such instruments may improve fund returns, they will also increase the funds' risks of loss and magnify the funds' potential volatility. Most leveraged and/or inverse exchange traded funds "reset" daily, meaning that they are designed to achieve their stated objectives on a daily basis. Due to the effect of compounding, the return for investors who invest for a period different than one trading day may vary significantly from the fund's stated goal as well as the target benchmark's performance. This is especially true in very volatile markets or if a leveraged fund is tracking a very volatile underlying index. Such funds are considered speculative investments and should only be used by investors who fully understand the risks and are willing and able to absorb potentially significant losses. Due to the increased risks of leveraged funds and inverse funds, this program is suitable only for investors who are able to withstand significant volatility in the value of their program investment, and who do not foresee the need to liquidate their investment for at least three to five years.

Caution Regarding Statistical Measurements. Prospective investors are cautioned that although statistical measurements may be useful when analyzing an investment, they are subject to material assumptions and limitations, and should not be used as the sole basis for making an investment decision. Favorable statistical measurements do not guarantee that an investment will be profitable or achieve an investor's objectives. Max drawdown and days to recovery calculations are based on daily data during hypothetical testing periods and monthly data for live results. Therefore the statistics may be greater or less than represented on an intramonth basis during live trading.

Comparisons to Indices. The SPDR S&P 500 (SPY) investment seeks to provide investment results that, before expenses, generally correspond to the price and yield performance of the S&P 500 Index. The S&P 500 Composite Index (the "S&P 500 Index") is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the broader stock market, and includes the common stocks of industrial, financial, utility, and transportation companies. Standard & Poor's chooses the member companies for the S&P 500 based on market size, liquidity, and industry group representation.

Information pertaining to CONCERT Wealth Management's advisory operations, services, and fees is set forth in CONCERT's current disclosure statement, a copy of which is available from CONCERT or Heritage upon request. Performance results have been compiled solely by Heritage, are unaudited, and have not been independently verified. Heritage maintains all information supporting the performance results in accordance with regulatory requirements.

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