# MPI for Alternative Investment and Hedge Fund Analysis

# A New Era in Hedge Fund Analysis

MPI's Stylus Pro Suite, the company's flagship research and reporting software platform, provides hedge funds, fund of funds and institutional investors with proprietary transformational methodologies and models for analyzing alternative investments.

# MPI's Patented Dynamic Style Analysis (DSA) Model -

This innovative methodology from MPI presents a major breakthrough in returns-based style analysis (RBSA). Based on pattern recognition technology, it is the first significant advance in this area since it was developed by Nobel Laureate William Sharpe in 1992.

Overcoming traditional RBSA's difficulties in analyzing alternative investments, DSA delivers:

- Superior Accuracy MPI's proprietary methodology accommodates dynamic strategies, long-short products and hedge funds— where traditional RBSA tools fall short
- Proprietary Cross Validation MPI's Predicted R-Squared, a proprietary cross validation technique, enables users to determine the credibility of the model beyond standard r-squared measure
- Detection of Shifts in Portfolio Strategy Breakpoint analysis allows users to isolate strategy shifts before they would become apparent in traditional RBSA
- Protection from Spurious Correlations Technique maximizes the stability of the results (a common issue when analyzing hedge funds)
- Detect Leverage Identify shorting, leverage and hedging
- Analyze Products with Limited Histories Uniqueness of methodology allows for analysis with less than 12 monthly data points

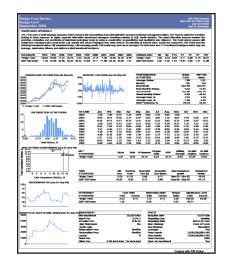
#### Inside the Application

📴 mpi Siyhu = [mena 4 or wen shakaty] 💷 💷		
ND the Carlow Look state		_E×
의 유럽 🕨 🤒 🏝 🖿 🖬 👘		
		Provide the second seco
Anther and an and an an an		He can a

# **The Economist**

"To those who want to invest in hedge funds, as well as those who want to invest like hedge funds, Markov Processes has a lot to offer."

> *— " In the Garden of Good and Evil "* The Economist



### MPI's Powerful Applications

- Reconcile performance with strategy due diligence
- Evaluate and monitor risk
- Communicate risks to investors
- Assess levels of leverage
- Understand skill (added value)
- Detect fraud

#### Who Benefits

Fund of funds managers

Hedge fund managers

Lending institutions, banks

**Risk managers** 

Plan sponsors, endowments, foundations, family offices

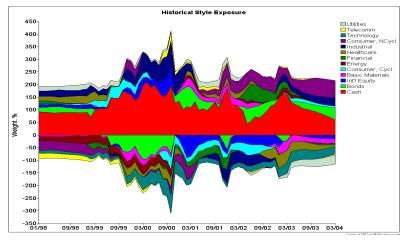


### Features

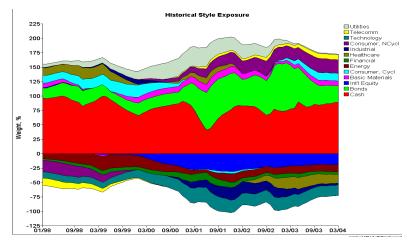
- Value At Risk (VAR) MPI has pioneered a VAR model that utilizes Returns-Based Style Analysis (RBSA)
- Performance Attribution MPI provides a framework to determine the drivers of performance and distinguish skill from luck
- Customized Graphics Generate powerful and easy-to-use reports
- Unlimited Analytics Create virtually any analytic or ratio
- Factor Analysis Regress strategies against unlimited independent variables
- Back-Testing Evaluate effectiveness of fund selection methodology on a historical basis
- Index Selection Model—MPI's unique model uses empirical search techniques to help determine the best mix of indices for each regression

# Comparison of DSA vs. Traditional RBSA

## Traditional RBSA



### MPI's Patented DSA Model



# Applications of MPI's Patented DSA Model

- Ideal for risk management, fund evaluation, selection and monitoring
- Important for internal risk management even when complex derivatives are involved
- For a hedge fund, DSA provides risk management "on a shoestring"

### **DSA Advantages**

- Accurately capture portfolio dynamics
- Identify "breakpoints" (rapid strategy changes)
- Effectively analyze products with short histories
- Dramatically improve long-only analysis
- Evaluate long-short products without spurious correlations
- No window effect (rear or forward looking)

# About MPI

Markov Processes International, LLC (MPI) is an industry leader in quantitative investment tools and technologies with more than 350 client organizations worldwide.

MPI's software solutions and consulting services are employed by the most respected institutions and financial services organizations to enhance their investment research, reporting, data integration and content distribution.

For more information about MPI's solutions, contact MPI Sales at +1 908 608 1558 or sales@markovprocesses.com.