

The ultimate **solution**  
for fund research *and* analysis

PackHedge™

by **FinLab**  
Solutions SA

**FOR IMMEDIATE RELEASE**

**FinLab Solutions SA announces the addition of Attribution Analysis, Principal Component Analysis (PCA) and Cluster Analysis plus enhanced Contribution Analysis available with the latest release of its solution PackHedge™ v.5.1.**

**8<sup>th</sup> January 2016 – FinLab**, the provider of PackHedge™, is pleased to announce the addition of Attribution Analysis, Principal Component Analysis (PCA) and Cluster Analysis as well as enhanced Contribution Analysis tools to complement the extensive portfolio construction and management functionalities and risk analysis tools provided with PackHedge™.

The Attribution Analysis tool uses the Brinson/Hood/Beebower methodology to decompose Active Returns attributable to a manager's selection skills for assets by any classification (style/strategy, currency, geography, sector, etc.) selected. Decomposition of the Active Returns are calculated for the Allocation, Selection and Interaction. Charts display Active Returns, Allocation, Selection and Interaction over different horizons for both the manager's portfolio and the benchmark portfolio.

PCA is based on a linear transformation to convert the return time series space of all assets into an orthogonal space with a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables known as Principal Components. PCA analysis can be performed on either the Covariance or the Correlation using Eigenvectors. The Number of Principal Components can be either defined by the user or determined using the Lambda Ratio. The loadings (exposures) of each asset to each of the main principle components is calculated and the corresponding R-Squared, Systematic, Idiosyncratic and Total Risk are reported.

Cluster Analysis classifies any number of assets into a few groups of assets with similar characteristics providing a deeper understanding of Risk and diversification. The Closeness (1/Distance) of assets is measured using either the Principal Component Analysis (based on the Euclidean distance of the loadings) or the Correlation Cluster Analysis (returns correlations between assets). Cluster Analysis can be performed using the Complete Linkage, Average Linkage or Single Linkage methods. The Minimum acceptable closeness can be set by the user to adjust the termination threshold and the sensitivity of the analysis. The output provides a list of the Clusters with the assets listed in each cluster.

The enhanced Contribution Analysis provides an extensive choice of analysis options with a large choice of Returns based, Risk and other generic Contribution statistics by asset and by any classifications (style/strategy, currency, geography, sector, etc.) The results provide tables with the Weight, Contribution, Ratio, Marginal Contribution and Implied Return as well as pie charts for Contribution and Weight v/s Contribution.

"The addition of the Attribution Analysis, Principal Component Analysis (PCA) and Cluster Analysis as well as the enhanced Contribution Analysis are part of our ongoing and continual evolution of PackHedge™'s comprehensive analysis tools resulting from our close cooperation and review with our clients" states FinLab's CEO, Denis de Pentheny O'Kelly. "Our clients need to understand their risk exposures, concentrations and diversifications by any segmentation as well as the value added of the managers they invest with. PackHedge™ provides them with an easy to use solution to better understand, track and manage these aspects of their portfolios" Denis de Pentheny O'Kelly added.

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## About FinLab

FinLab Solutions SA is a software solutions company that develops, distributes and supports one of the world's most advanced systems for investment research, analysis, risk analysis, asset allocation, portfolio construction and management, due diligence, document management, work flow and financial innovation for alternative funds, traditional funds and other investment instruments.

The company's solution PackHedge™, provides a suite of state of the art modular software tools in a single fully integrated platform that provides: Unmatched portfolio construction and management tools for complete pro-forma portfolio simulation and/or comprehensive portfolio management for mixed asset managed accounts or Funds of Funds with liquidity ladder analysis, Contribution analysis, Attribution analysis and investment exposures. PackHedge™ offers the most advanced analysis tools including: Stress Testing, Scenario analysis, Sensitivity analysis, Portfolio Optimization, Style analysis and Peer Group analysis, extensive Risk analysis and statistics, PCA (Principle Component Analysis) and Cluster Analysis. It provides a unique and powerful multi-source, multi-currency, multi-frequency qualitative and quantitative data management model. PackHedge™ includes data aggregation, extensive statistical analysis and charting, a multi-dimensional query engine, and extremely flexible custom reporting capabilities. In addition, tools to manage time series imports and customizable due diligence questionnaires are provided to ensure full data integrity. The company was founded in 1999 and is headquartered in Geneva, Switzerland, with offices in the United States and Singapore.

For more information please visit FinLab's web site [www.finlab.com](http://www.finlab.com) or please contact:

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