

BarraOne Performance Analytics

BarraOne is a global, multi-asset class portfolio risk and performance attribution platform.



BarraOne Performance Attribution can help clients to analyze the sources of portfolio risk and return on an absolute or relative basis and to help make more informed investment decisions.

Benefits and Features

Multi-Asset Class Analytics: Perform attribution analysis on portfolios across a comprehensive range of global asset classes including derivatives. BarraOne can provide clients portfolio performance analysis on an absolute basis or relative to a benchmark.

Single & Multi-Currency Analysis: BarraOne supports attribution on single or multi-currency portfolios. The currency attribution explains the component of active return attributed to a portfolio's exposure to multiple currencies.

Multiple Attribution Models: BarraOne provides a choice of attribution models to better reflect the investment process:

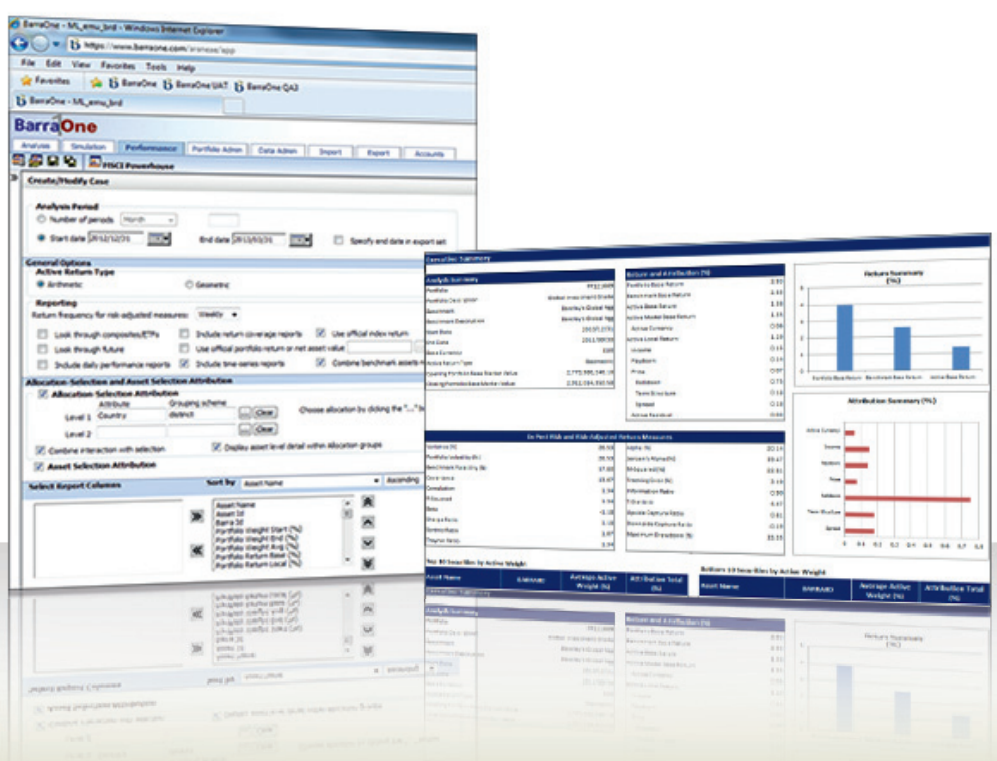
- **Top-Down:** Sector allocation.
- **Bottom-Up:** Asset selection.
- **Fixed Income:** Yield curve positioning and credit spread bets.
- **Factor-Based:** Align risk and return using Barra factors.

One Platform for Risk and Performance: Clients can benefit from a single data loading and reconciliation process for both risk and performance analytics.

Market and Asset Data: Daily market and asset data, including equity, fixed income and derivative asset returns, exist within the system.

Intuitive: A streamlined workflow makes attribution reporting efficient.

Data Loading and Reporting Automation: Tools such as DataConnect, BarraOne Developer's Toolkit and Barra PartnerLink help to automate the importing of portfolio holdings, returns, attributes and custom benchmarks. The generated results are simple to export and customizable performance reports can be shared across an organization.



Multiple Attribution Models

- **Equity Classic Allocation-Selection Attribution:** Industry-standard Brinson-Fachler attribution for top-down / sector allocation strategies for equity or balanced portfolios.
- **Equity Classic Asset Selection Attribution:** Clients can evaluate bottom-up / stock-picking investment strategies for equity or balanced portfolios using asset selection attribution.
- **Fixed Income Attribution:** Clients can identify sources of active return due to yield curve movement and credit / spread bets using fixed income attribution.
- **Equity Factor-Based Attribution:** Clients can align sources of risk and return using the Barra factors.

Functionality

Asset Class Coverage: BarraOne supports equities, fixed income, commodities, ETFs, derivatives and mutual funds across markets globally.

Portfolio Trend Analysis: Clients can analyze portfolio evolution over reporting periods using multi-period snapshots.

Returns Calculator: Returns for many derivatives are computed by BarraOne for attribution reporting. BarraOne also allows users to import returns for all assets and prioritize these with BarraOne provided returns.

Asset ID	ISIN	Holdings	FTEB Value	Asset Name	Month Rating
001310	0013100010	2,362,811,207.00	5,562,417,022.77	EU-FROM TRFOND INTERNATIONAL FRANCE BY 4.0% 20131015	BBB
001310	0013100020	1,500,000.00	2,670,000,000.00	AUTONOME-RE-SCHULDFRAGENFONDENFRANKE 4.00% 20131015	AAA
001310	0013100030	1,500,000.00	2,670,000,000.00	E.ON INTERNATIONAL FRANCE BY 4.00% 20141015	A2
001310	0013100040	1,500,000.00	2,670,000,000.00	COMPTON SA 10% 20131015	BBB
001310	0013100050	1,500,000.00	2,670,000,000.00	PIRELLA GÖTTSCHE LOW CARBON 20131015	AAA
001310	0013100060	1,500,000.00	2,670,000,000.00	LANEIGE 10% 20131015	AAA
001310	0013100070	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100080	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100090	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100100	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100110	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100120	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100130	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100140	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100150	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100160	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100170	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100180	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100190	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100200	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100210	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100220	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100230	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100240	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100250	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100260	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100270	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100280	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100290	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100300	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100310	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100320	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100330	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100340	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100350	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100360	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100370	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100380	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100390	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA
001310	0013100400	1,500,000.00	2,670,000,000.00	CELESTINE 10% 20131015	AAA

For more information on Performance Analytics go to www.msci.com/products/risk_management_analytics/performance

Methodology

Arithmetic and Geometric Attribution: BarraOne supports both arithmetic and geometric definitions of active return and attribution within the analytics.

Data

Daily Data: All the attribution computations are carried out based on daily data. Holdings can be loaded in any frequency; daily, weekly or monthly.

Preloaded Benchmarks: A large universe of equity and fixed income benchmarks are delivered daily and can be permissioned for licensed clients.

Market Conditions: A wide range of market data and bond terms and conditions are delivered daily reducing the client data management effort.

Flexibility

Attribution Grouping: Both BarraOne-supplied and user-supplied attributes can be used for grouping purposes. Examples include region, country, Global Industry Classification Standard (GICS®), industry, market cap, sector, rating or any other attribute that best reflects an investment process.



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¹ As of September 30, 2012, as published by eVestment, Lipper and Bloomberg on January 31, 2013