

Bernstein Cube

- Bernstein Cube is a comprehensive, stand alone, portfolio construction, risk analytics and pre trade system.
- Cube runs on Windows and leverages Bloomberg terminal market data to create solutions based on the latest pricing data.
- Cube provides a breakdown of the risks and exposures for a portfolio versus cash or against a benchmark.
- Optimization, hedges, long/short strategies and screens can be evaluated.
- Trade lists can be created along with optimal pre trade impact cost estimates.
- Bernstein Fundamental and Quant Research data is incorporated in Cube.

Portfolio Analysis

Cube analyzes the realized and forecast risk highlighting value at risk, tracking error, beta, volatility, contribution to risk and exposure to macro economic factors. Back tests can be performed over different time periods to compare risk estimates against the realized values and conduct what-if scenario testing. Cube filters the risk on a sector, country, currency and factor level.

Portfolio Construction

Portfolios are constructed using the Cube risk model, which is built using a proprietary principal components analysis approach. Cube's optimizer has an easy-to-use interactive interface and allows quick results, even when large benchmarks are involved. Constraints can be assigned on stock, sector, country and currency levels. Alpha signals on securities can be incorporated. Cube can create thematic baskets with tilts towards exposures (macro factors, beta etc.) or quant factors and styles. This makes the task of creating market neutral low volatility baskets much quicker and easier.

Risk Models

Cube's dynamic user-defined statistical factor risk model and macroeconomic factor model provides the freedom to select data frequency, time horizon, and the level of risk to be explained. The macro factor model provides the option to dynamically select the macroeconomic and style factors. Risk models can be constructed over historical time periods to enable back testing. Cube offers advanced features for explaining risk of equities that have short history if, for example, they are an IPO in the date range selected for the analysis. Cube detects highly correlated stocks and warns of potential multi-line holdings.

Trade Calculation

Trades can be calculated to transition from the portfolio to the optimal basket or fully replicating benchmark. Trade calculation can incorporate cash injections, manage round lots and minimise the number of small tickets.

Pre Trade Analysis

The estimated impact cost to implement a loaded portfolio trade list or the rebalance trade can be evaluated using Cube's pre trade model. Cube's pre trade accounts for intraday and overnight risk as well as the effect of open and close times of non-overlapping global markets and trading holidays. Pre trade users can screen trade baskets by stock trade cost estimates including but not limited to average daily volume, impact cost and risk cost. Taking account of a user's risk aversion Cube's pre trade can determine the participation rates and start/end times for optimal trade implementation. Clients wishing to obtain bids for a risk trades can use Cube's bid report to summarise their trade list controlling the extent of the trade information provided. How much to settle and in each currency is displayed in calendar format alongside the corporate actions affecting the basket over the next 10 days.

FAQs

- Q** Does Bernstein monitor Cube usage?
A No, Cube is a standalone system, no details of holdings or usage are tracked by Bernstein.
- Q** What kinds of portfolio can be analyzed?
A Cube can provide solutions for long and long-short, local, regional or global portfolios with mixed instruments.
- Q** Can Cube construct portfolios?
A Yes, Cube has an optimizer that can create baskets with multiple single securities, group constraints and incorporate alpha inputs.
- Q** Can cube help with trade implementation?
A Cube comes with trade rebalancing functionality as well as the ability to estimate pre-trade expected impact cost.
- Q** What is the cost of Cube?
A Cube is provided as part of the portfolio trading service for clients actively trading with Bernstein.
- Q** Can I export to and import from Excel?
A Yes. Cube can export single or all screens to Excel. Cube also supports cut and paste to and from Excel. Analysis can be exported to Excel for subsequent review.
- Q** How do I install Cube?
A Cube is quick to set up on a PC running Windows and a Bloomberg terminal.

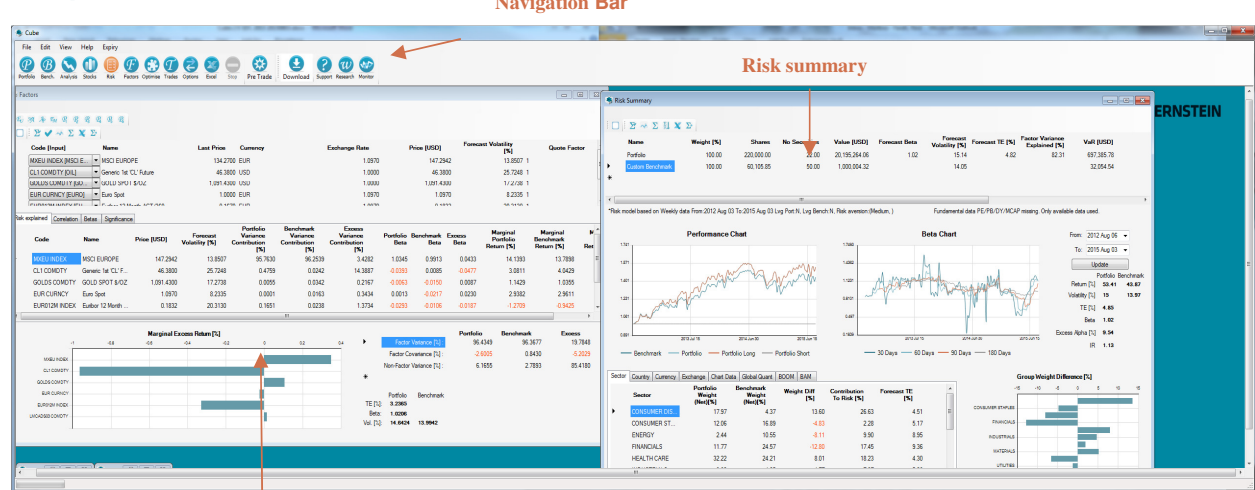
Bernstein Research

Cube highlights securities covered by Bernstein's industry-leading research, identifying research published in the last 24 hours. A single click on a security gives access to the most recent reports. Many of Bernstein's Global Quantitative Research factors and ratings are also available within Cube. The Growth, Quality, Size and Crowding ratings are already available on stock and portfolio levels. Portfolio exposure to these factors can also be controlled.

Global

Cube supports global securities consistent with the full Bloomberg universe of stocks, currencies, commodities, indices, futures and macroeconomic and style factors where a price history is available.

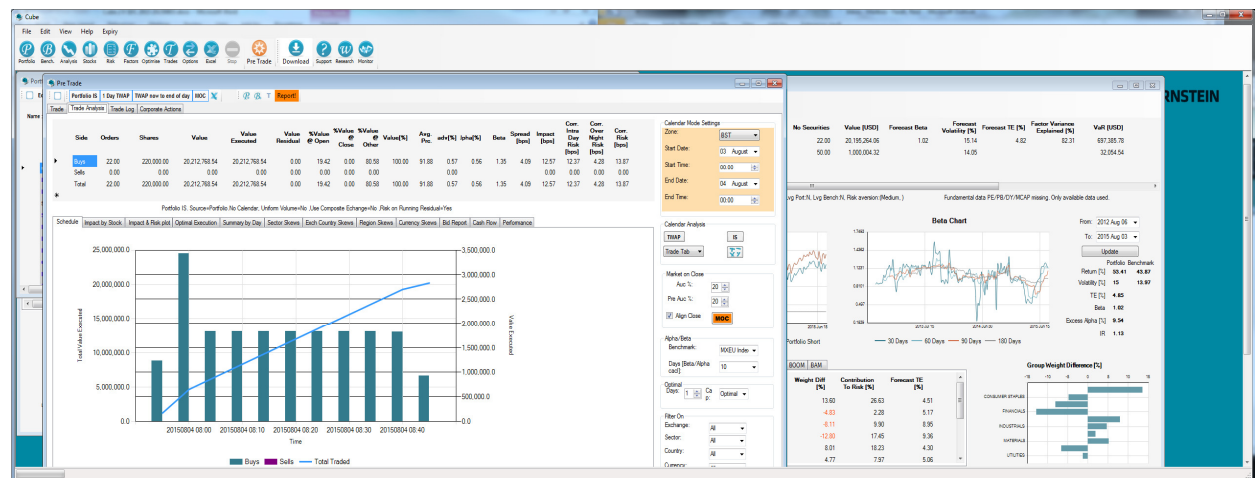
Sample Cube Risk Screen Shot



Source: Bernstein

Risk measured by factor model

Sample Cube Pre Trade Shot



Source: Bernstein

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