

# Barra China Equity Model (CNE5)

The **Barra China Equity Model (CNE5)** captures the short- and long-term dynamics of the China local market and includes the latest advances in risk methodology that can help institutional investors align the risk model with their investment processes. CNE5 captures the new reality of the China markets, particularly the richness of their factor structure, and provides significant explanatory power.

## Key Features

- » **Volatility Regime Adjustment** calibrates factor volatilities to current market levels, resulting in faster response to market trends. It reduces the under-prediction of risk when entering a regime of increased volatility and the over-prediction of risk when exiting a period of elevated volatility.
- » **Refined set of style factors** with special treatment of factor co-linearity. New factors include Residual Volatility and Beta (replacing the CHE2 Volatility factor) and Non-linear Size. The CHE2 Value factor is split into two factors: Book-to-Price and Earnings Yield.
- » **Optimization Bias Adjustment** improves risk forecasts for optimized portfolios. Forecasting bias is reduced within the factor covariance matrix by scaling up where risk is under-forecast and scaling down where risk is over-forecast.
- » **Next-generation specific risk model** uses time series methods and the Volatility Regime Adjustment methodology.
- » **Separation of market effect from industries** results in increased forecast accuracy and more responsive correlations.
- » **Daily model updates** are designed to improve risk monitoring, exposure control, intra-month portfolio rebalancing, scenario/stress testing, and backtesting. Technical exposures, fundamental factors (with re-standardization), and industry membership are now updated daily.
- » **2,200+ assets** covered, including all China A Shares.
- » **Deep daily model history** back to February 1999.
- » **32 industry factors** based on GICS®, including increased granularity of the Industrial sector.
- » **10 style factors** that model risk sources not captured by market or industry factors and incorporate the latest factor construction methodology.
- » **Introducing a new class of China equity models at the Daily Forecast Horizon** where the Volatility Regime Adjustment plays a key role in adjusting the model forecasts to daily market movements. Also available in Short- and Long-horizon versions.
- » **Available in Barra Portfolio Manager, Barra Aegis, and Barra Models Direct.**

## Key Benefits

### More Responsive Model Forecasts

Incorporating the new Volatility Regime Adjustment, CNE5 is able to respond to market trends and shocks more rapidly while controlling sample noise. This methodology is a key innovation in the factor covariance matrix, as well as an important component of the redesigned specific risk model, which offers a significant advancement in forecast accuracy.

### New Daily Forecast Horizon Model

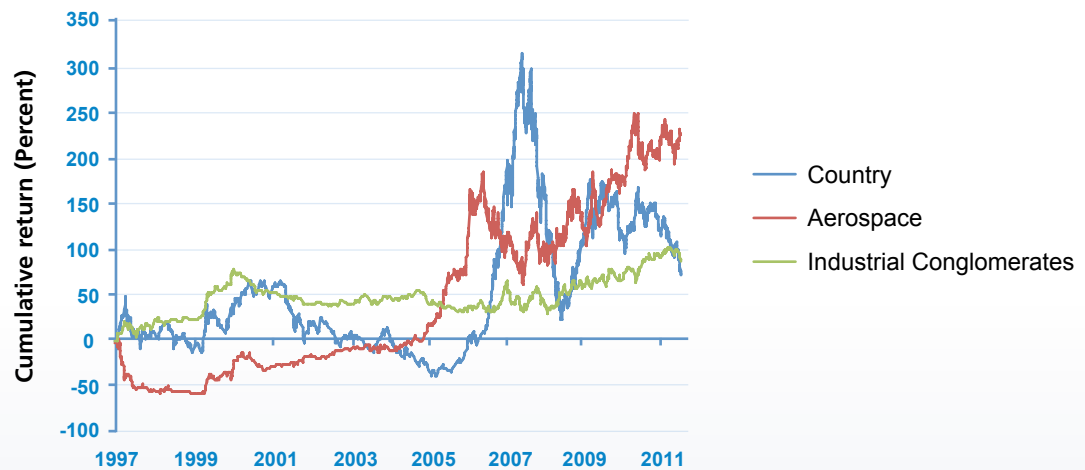
The CNE5 Daily Forecast Horizon model can be used by portfolio managers who trade and rebalance their portfolios frequently to capture short-term market dislocations. It is also suitable for portfolio managers who want to have a better understanding of sources of risk and return in the short run, as well as the ability to analyze how factor tilts affect their portfolio risk and performance.

### Insight into the Investment Process

Chief Investment Officers, portfolio managers, researchers, and risk managers working with China domestic portfolios can now benefit from enhanced style factors that provide detailed forecasts for both long-only and long-short portfolios.

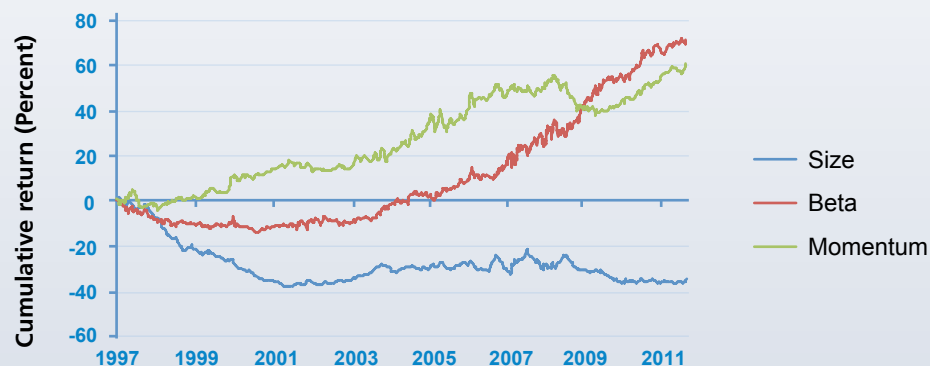
## Cumulative Returns of the CNE5 Country Factor, Aerospace and Defense Factor, and Industrial Conglomerates Factor

The Country factor represents the overall level of the China equity market. The past six years are characterized by large-scale cycles in the Country factor, while the Aerospace and Defense factor has exhibited vigorous growth.



## Cumulative Returns of the CNE5 Size Factor, Beta Factor, and Momentum Factor

Over the history of the model, Momentum has been a solid performer. In the most recent half of the CNE5 model history, Beta has exhibited steady positive returns.



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<sup>1</sup> As of March 31, 2013, as reported on July 31, 2013 by eVestment, Lipper and Bloomberg.