

# BARRA® UK TOTAL MARKET EQUITY MODEL FOR LONG-TERM INVESTORS

The Barra UK Total Market Equity Model incorporates MSCI's most recent innovations for multi-factor equity models. The model includes an enhanced style factor set based on Systematic Equity Strategies and point-in-time fundamental data.

## NEW INVESTMENT INSIGHTS

- **Enhance alpha generation processes, develop and evaluate new equity strategies using Systematic Equity Strategy** factors, high quality research-based factors and point-in-time fundamental datasets.
- **Measure sensitivity to potentially crowded trades** using Systematic Equity Strategy factors.
- **Reduce forecasting bias in optimized portfolios** using Optimization Bias Adjustment.
- **Get a more granular attribution of the portfolio's risk to different industry movements** with 28 industry factors based on the Global Industry Classification Standard (GICS®).
- **Estimate a company's cost of capital for discounted cash flow analysis more precisely** using predicted betas that incorporate Bayesian adjustment techniques.

## ENRICHED DATA SET FOR STRATEGY DEVELOPMENT:

- **Reduce forward-bias when back testing strategies** using daily updated point-in-time fundamental data.
- **Reduce time-to-market and cost of ownership in alpha research** and in building custom risk factors using Barra Descriptors based on premium datasets.

## RISK MONITORING AND PERFORMANCE ATTRIBUTION

- **Stress-test portfolios** with a deep daily model history dating back to July 1995, capturing major market events over a longer period of time.
- **Obtain a timelier prediction of risk** with Volatility Regime Adjustment
- **Reduce exposure to unintended bets and better manage risk budgets** by using detailed factor exposure information.

## BROAD COVERAGE

2600+ assets as of April 2016, including UK-listed Global Depository Receipts and Cross-Listed securities. Coverage of ETFs and Equity Index Futures.

## THE BARRA UK TOTAL MARKET EQUITY MODEL IS AVAILABLE IN:

- Aegis
- Models Direct
- Barra PortfolioManager and
- BarraOne

The model is available in responsive and stable variants with full daily updates.

## UK TOTAL MARKET EQUITY MODEL: STYLE FACTORS

HORIZON	FACTOR	PURPOSE	DESCRIPTORS
Long-Term	Beta	Captures the market risk that cannot be explained by the UK Country factor	<ul style="list-style-type: none"> <li>Historical beta</li> </ul>
	Book-to-Price	Explains the return component attributable to a stock's book-to-price ratio and can be an indicator of value	<ul style="list-style-type: none"> <li>Book-to-price</li> </ul>
	Dividend Yield	Explains the return component attributable to a stock's dividend-to-price ratio and can be an indicator of earnings	<ul style="list-style-type: none"> <li>Dividend-to-price ratio</li> <li>Analyst-predicted dividend-to-price ratio</li> </ul>
	Earnings Quality	Captures differences in persistence of company earnings and uncertainty around company earnings	<ul style="list-style-type: none"> <li>Cash earnings-to-earnings</li> <li>Accruals using Balance Sheet statement</li> <li>Accruals using Cash-flow statement</li> </ul>
	Earnings Yield	Describes return differences based on a company's earnings relative to its price	<ul style="list-style-type: none"> <li>Cash earnings-to-price ratio</li> <li>Earnings-to-price</li> <li>Analyst-predicted earnings-to-price ratio</li> <li>Enterprise multiple (EBITDA to EV)</li> </ul>
	Growth	Describes return differences of stocks based on their prospects for sales or earnings growth	<ul style="list-style-type: none"> <li>Earnings per share growth rate</li> <li>Sales per share growth rate</li> <li>Analyst-predicted earnings long-term growth</li> </ul>
	Investment Quality	Captures return differences between companies with low and high growth in assets, capital expenditure and share issuance	<ul style="list-style-type: none"> <li>Total assets growth rate</li> <li>Issuance growth</li> <li>Capital expenditure growth</li> </ul>
	Leverage	Captures the return differences between high-leverage and low-leverage stocks	<ul style="list-style-type: none"> <li>Debt-to-assets ratio</li> <li>Book leverage</li> <li>Market leverage</li> </ul>
	Liquidity	Describes the return differences of stocks based on their relative trading activity	<ul style="list-style-type: none"> <li>Monthly share turnover</li> <li>Quarterly share turnover</li> <li>Annual share turnover</li> <li>Annualized traded value ratio</li> </ul>
	Long-Term Reversal	Explains the return differences of stocks based on their reversal pattern over the last two years	<ul style="list-style-type: none"> <li>Long-term relative strength</li> <li>Long-term historical alpha</li> </ul>
	Mid Capitalization	Captures the returns of mid-cap stocks relative to large- and small-cap stocks	<ul style="list-style-type: none"> <li>Cube of the size exposure</li> </ul>
	Momentum	Explains the return differences of stocks based on their relative performance over the trailing 6-12 months	<ul style="list-style-type: none"> <li>Relative strength 12-month</li> <li>Historical alpha</li> </ul>
	Profitability	Measures profitability and operating efficiency of a company	<ul style="list-style-type: none"> <li>Asset turnover</li> <li>Gross profitability</li> <li>Gross profit margin</li> <li>Return on assets</li> </ul>
	Residual Volatility	Explains returns associated with high-volatility stocks that are not captured by the beta factor	<ul style="list-style-type: none"> <li>Historical sigma</li> <li>Daily standard deviation</li> <li>Cumulative range</li> </ul>
	Size	Captures the return differences between large-cap stocks and small-cap stocks	<ul style="list-style-type: none"> <li>Logarithm of market capitalization</li> </ul>

Find out more about the Barra UK Total Market Equity Model by calling your MSCI representative or contacting us at [clientservice@msci.com](mailto:clientservice@msci.com)

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