

Barra Asia Pacific Equity Model (ASE1)

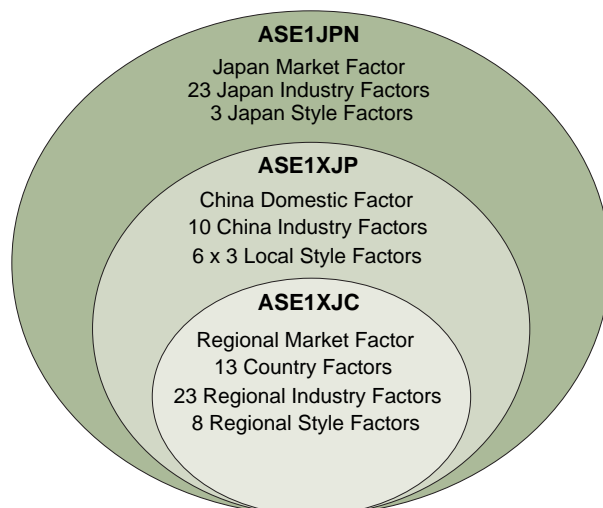
The new Barra ASE1 multi-factor model supports institutional investors in the construction, risk management, and performance analysis of broad and concentrated Asia Pacific equity portfolios. With Barra ASE1, institutional investors will benefit from high forecast accuracy, an intuitive factor structure, deep data history, and a choice of three model versions to best match their investment universe.

Key Features

- **3 versions to account for different investment universes in a heterogeneous region:**
 - Asia Pacific (ASE1JPN)
 - Asia Pacific ex Japan (ASE1XJP)
 - Asia Pacific ex Japan and China A (ASE1XJC)
- **Daily risk forecast** updates available from July 2008
- **Deep model history** going back to 1995
- **20,000 + assets** included, covering 15 markets
- **8 regional style factors** to model risk sources not captured by the market, country, or industry factors
- **3 local style factors** (Momentum, Size, Volatility) for each of the seven local scopes (see map)
- **23 regional industry factors** based on the leading Global Industry Classification Standard (GICS®)
- **23 Japan industry factors** also based on GICS®, offering direct comparison between Japan and Asia Pacific ex Japan
- **10 China domestic industry factors** also based on GICS® offering insight into the China A market
- **Available in Short- and Long-Horizon variants**
- **Includes the latest Barra model innovations**, such as the new hybrid specific risk model.

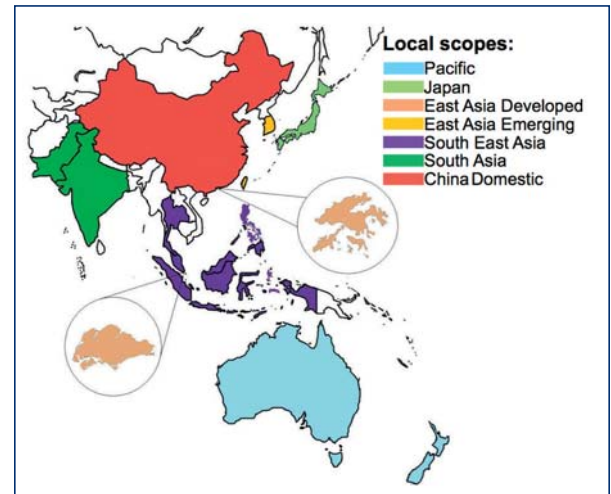
Modeling the Asia Pacific Region

ASE1 models the heterogeneous Asia Pacific region by decomposing equity portfolio risk into currency, common factor, and asset-specific components. ASE1 models regional industry, country and style factors as offsets to a regional market factor. Model accuracy is enhanced with local style and industry factors in the Asia Pacific (ASE1JPN) and Asia Pacific ex Japan (ASE1XJP) versions of the model. These local factors represent deviations from the regional style and industry returns. They further refine the risk forecasts within the seven ASE1 local scopes.



Factor structure of the ASE1 model versions.

Coverage Scope of ASE1



ASE1 covers 15 markets. It segments the Asia Pacific region into seven local scopes and offers drill-down capabilities within each local scope.

Key Benefits:

Insight and Value Across the Investment Process – CIOs, portfolio managers, researchers, and risk managers who work with Asia Pacific portfolios can now benefit from an accurate and flexible regional equity model developed through extensive client consultation, quantitative and empirical research, and based upon the same high quality data used to construct the MSCI indices.

Broad Market Coverage – Institutional investors manage a range of strategies and mandates across Asia Pacific as broad as the region itself. ASE1 offers flexibility in coverage. It offers special consideration for Japan and China, high forecast accuracy, and drill down capabilities to analyze the sources of risk and return in diverse and concentrated regional portfolios.

Deep Model History – allows investors to scrutinize changes of risk and return in markets, industries and styles across time, reflecting events such as the Asian financial crisis or the more recent global financial crisis.

CONTACT US

Americas 1.888.588.4567 Amsterdam +31.20.462.1382 Atlanta +1.404.551.3212 Boston +1.617.532.0920 Cape Town +27.21.673.0100 Chicago +1.312.675.0545 China North 10800.852.1032 China South 10800.152.1032 Frankfurt +49.69.133.859.00 Geneva +41.22.817.9777 Hong Kong +852.2844.9333 London +44.20.7618.2222 Madrid +34.91.700.7275 Milan +39.025.849.0415 Monterrey +52.81.1253.4020 Montreal +1.514.847.7506 New York +1.212.804.3901 Paris 0800.91.59.17 San Francisco +1.415.836.8800 São Paulo +55.11.3706.1360 Seoul +827.0768.88984 Singapore 800.852.3749 Stamford +1.203.325.5630 Sydney +612.9033.9333 Tokyo +81.3.5226.8222 Toronto +1.416.628.1007 Zurich +41.44.220.9300



Style Factor Overview

- Volatility, Momentum, and Liquidity styles describe market-driven sources of risk
Size style captures systematic risk differences between large cap and small cap assets
Value, Growth, Leverage, and Foreign Sensitivity styles associate aspects of a firm's business model with systematic risk premia

Japan in a Pan-Asian Context

Japan is a large, developed market and is considered by investors both in isolation and in the context of broader regional investing. Correlations between the Japan and Asia Pacific ex Japan equity markets have gradually increased over the last decade and recently exceeded 70%.

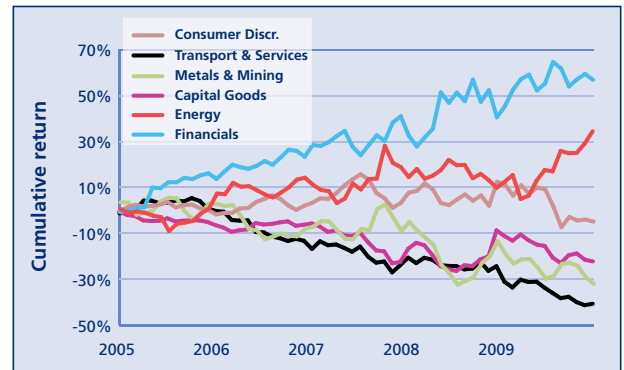
ASE1 enables investors to put Japanese equities in a pan-Asian context; it provides good forecast accuracy for Japanese assets and helps to compare drivers of return and risk between Japan and the rest of the Asia Pacific region. To achieve this, ASE1 attributes a separate Japanese market factor and 23 Japanese industry factors that correspond one-to-one with the Asia Pacific ex Japan industries. It also includes the three local style factors available in the other six local scopes.

Portfolio Performance and Risk

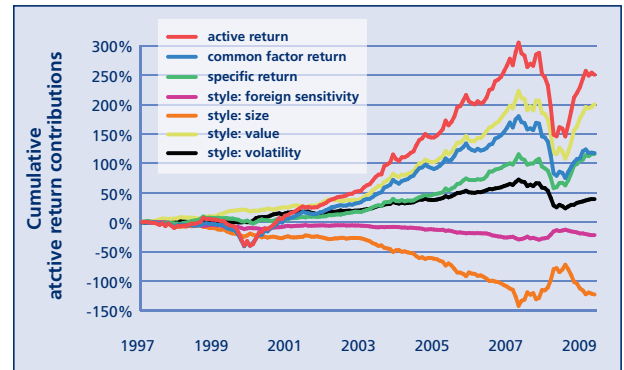
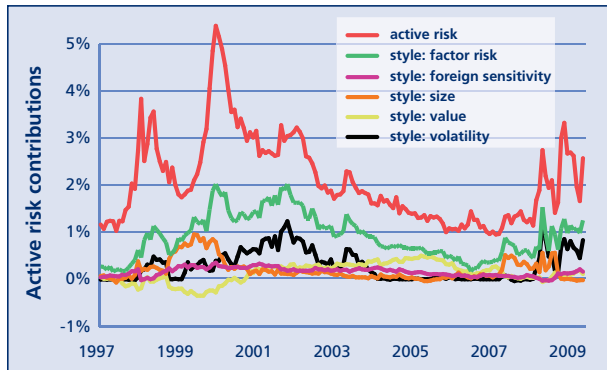
ASE1 gives managers of Asia Pacific equity portfolios a detailed understanding of the sources of risk and return. By attributing past performance to the model's risk factors, ASE1 helps managers understand how their factor bets and the asset-specific returns have contributed to their overall portfolio performance. The high level of detail in the factor structure and precise forecasts over both regional and local scopes make ASE1 attractive for the analysis of market-neutral and traditional long-only portfolios, whether broadly diversified or concentrated.

Greater Insight on China Domestic Market in a Regional Context

Assets in the China Domestic market (China A shares) are excluded from the estimation of the ASE1 regional factors. This implies that investors can replicate the regional factors without gaining exposure to China A shares. Ten local industries and three local styles are included for China A in the Asia Pacific (ASE1JPN) and Asia Pacific ex Japan (ASE1XJP) versions. These improve forecast accuracy and provide further insight into the China Domestic market.



Examples of cumulative China A industry factor returns. Financials and energy outperform; capital goods underperform.



Examples of selected contributors to active return and risk of an Asia Pacific style portfolio with positive exposure to Value and negative exposure to Leverage and Foreign Sensitivity, measured relative to a style-neutral Asia Pacific benchmark.

About MSCI Barra

MSCI Barra is a leading provider of investment decision support tools to investment institutions worldwide. MSCI Barra products include indices and portfolio risk and performance analytics for use in managing equity, fixed income and multi-asset class portfolios. The company's flagship products are the MSCI International Equity Indices, which include over 120,000 indices calculated daily across more than 70 countries, and the Barra risk models and portfolio analytics, which cover 59 equity and 48 fixed income markets. MSCI Barra is headquartered in New York, with research and commercial offices around the world.

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