# **Asset Risk Modeling Service**

# The Barra Asset Risk Modeling Service (ARMS) is available to users of BarraOne, MSCI Barra's global, multi-asset class platform for portfolio risk analysis and performance attribution.

BarraOne already provides broad asset coverage of pre-loaded "natively" covered instruments, where both security terms and conditions and valuation libraries are available. BarraOne also enables users to model financial instruments as "user assets", where clients upload their own security terms and conditions. While in many cases this provides more than adequate asset coverage of clients' portfolios, there may be instances when the complexity of financial instruments within the clients' portfolios calls for a different approach.

# **Key Features & Benefits**

- Broader coverage and full analytical support of complex financial instruments modeled in BarraOne
- Multiple market standard valuation models available via FEA StructureTool application
- Instrument risk analytics fully integrated in BarraOne
- Lower operational burden for clients wanting to run risk analysis for complex instruments
- Reduced time to model new instruments in client portfolios

# **Asset Modeling**

Asset Modeling is offered on a daily basis, where instrument risk exposures are calculated outside BarraOne using FEA StructureTool, a simulation based tool designed to efficiently compute values and hedge statistics of user-defined exotic and structured products, and then uploaded into BarraOne for risk analysis.

#### Asset Risk Modeling Workflow







FEA StructureTool allows users to specify arbitrary payoffs to value everything from plain vanilla options and bonds to complex structured products such as equity-linked notes, interest-rate "snowballs", exotic basket options, complex trigger options, Asian barrier options, and target return notes.

#### Asset Proxying

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Singapore + 65.6834.6777 Stamford + 1.203.325.5630 Sydney + 61.2.9033.9333 Tokyo + 813.5226.8222 Toronto + 1.416.628.1007 Zurich + 41.44.220.9300 If direct modeling is not available for an instrument, Asset Proxying is offered as an alternative to help BarraOne clients proxy financial instruments. The proxy methodology is presented to the client who then determines whether the proxy approach should be deployed in BarraOne.

### Instruments Currently Supported by the Asset Modeling Service

- Reverse floaters
- Range accrual notes
- Target Accrual Redemption Notes (TARNs)
- Inflation-Linked Notes (ILNs)
- Volatility floaters
- Steepeners
- Snowballs
- Snowblades

For more information please email mscibarra\_arm\_srvcs@mscibarra.com or contact MSCI Barra Client Service.

#### 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 56 equity and 46 fixed income markets. MSCI Barra is headquartered in New York, with research and commercial offices around the world.

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