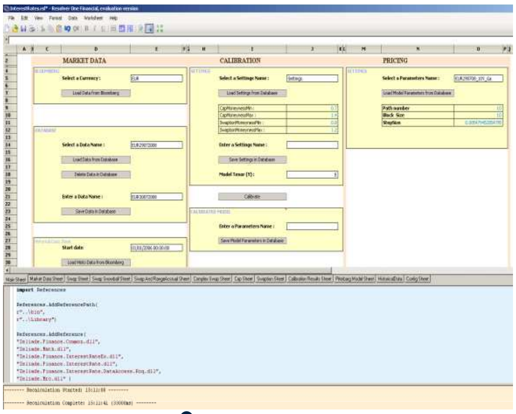
Zeliade Quant Framework



- *Calibrate, price, and risk analyze a wide range of derivatives*
- *Covers Equity, Credit, Interest rates, Inflation and Forex*
- *Native .NET library*
- *Source code provided*

- *Flexible event-based product description*
- *Advanced market and reference data handling*
- *Fully functional examples for each market*
- *Powerful (optional) distributed computing solution*

Zeliade Systems

Zeliade Quant Framework (ZQF)

An industrial-strength/fully functional open development framework for the valuation and risk management of derivatives across all asset classes

Credit

Products
Credit SingleName :
- Fixed Rate Bond
- Floating Rate Bond
- Credit Default Swap
- Credit Default Swaption
- CDS Index

Credit MultiName :
- Synthetic Single Tranche CDO
- Bespoke Tranche
- CDO–Squared
- First To Default
- Nth To Default
- Credit Linked Note
- Synthetic Swap
- Zero Coupon Tranche
- Leveraged Super Senior

Models
- One-Factor Gaussian Copula, Random Factor Loading model
- Fixed/Random recoveries

Pricers
- Closed or semi-closed formula
- Monte Carlo

Interest rates

Products
- Vanilla Swap/Swaption
- CMS Swap/Swaption
- Knock–Out Swap
- Barrier Swap
- Callable Swap/Swaption
- Multiple Structures Swap
- Sunrise Swap
- Range Accrual Swap
- Callable Range Accrual
- Cap/Floor
- Tip-Top
- Snowball
- Target Redemption Note

Models
- 'Flat' and stochastic volatility BGM models

Pricers
- Closed or semi-closed formula
- Monte Carlo

Equity

Products
Equity SingleName :
- European Option
- American Option
- Bermudean Option
- Barrier Option
- Global Cliquet Option
- Local Cliquet Option
- Ratchet Option
- Variance Swap

Equity MultiName :
- Basket Option
- Basket Cliquet
- Mountain Option

Models
- Heston model

Pricers
- Closed or semi-closed formula
- Monte Carlo

Foreign Exchange

Products
- Quanto FX Options
- European/American Call/Put
- Multi–Asset FX Options

Models
- Heston model

Pricers
- Closed or semi-closed formula
- Monte Carlo

Inflation

Products
- Year on Year Swap
- Cap/Floor

Models
- Jarrow Yildirim

Pricers
- Closed or semi-closed formula
- Monte Carlo

What is ZQF?

- ZQF is the nucleus of all Zeliade business. It relies on a 100% .NET-native quantitative library, which provides production-grade models and pricers on Equity, Credit, Interest Rates, Forex, Inflation markets, an event-based financial products description, and connects seamlessly to Bloomberg®, Markit® and BBA® data.
- ZQF is bundled with preset components for numerics, handling of market data, distributed computing, spreadsheet design, web apps design making it easy to extend the framework inhouse with new products and new models, and design your own spreadsheets
- ZQF targets Front/Middle Office Quant/IT teams who want to benefit from industrial-grade implementations of market standard models and the most widely praised quantitative methodologies in a fully documented and transparent way, with the ability to extend the framework in-house with new products and new models.
- Models and pricers are enriched on a regular basis within short and reliable production cycles
- ZQF .NET library is provided with the source code for all of its critical parts

About Zeliade Systems

Zeliade Systems provides state-of-the-art software products and services for financial institutions to model, price and process complex financial products.

Our team of developers and quants have gained their expertise from major banks and first rank academic institutions.

Prestigious actors in the derivatives market have chosen Zeliade Systems software and services.

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