

Valuation

Owing to low interest rates, political developments and intense competition, it can be increasingly observed that gains today can only be achieved by means of complex structures and derivatives.

In addition, many hedging strategies require the use of derivative products.

Product Information

Key Benefits

- ◇ Fully integrated solution (front to back)
- ◇ Up-to-date valuation methods, also suitable for negative interest rate environment
- ◇ Coverage of all major asset classes (including: Interest Rates, Fixed Income, FX, Equities, Inflation, Mortgaged Backed Securities, Commodities and Structured Credit)
- ◇ Independent and accurate valuation of derivatives based on our multi curve framework (OIS discounting, taking into account netting, collaterals, XVA)
- ◇ Support of “What-if scenarios”
- ◇ Sensitivity calculation
- ◇ Comparison with counterparty prices and support in dispute cases
- ◇ Full transparency plus audit trail to enable traceability
- ◇ Flexible report creation and provision via “Price-it” online, by email, FTP or web services
- ◇ Expert support for calculation models and valuations

Risk Estimation

Our quantitative analysts offer years of expertise and experience in the valuation of complex, exotic and highly structured products.

Term sheets allow us to represent any type of instrument in our **PMS (Portfolio and Risk Management System)** software and to



subsequently provide automatic valuation as well as risk measurement.

Your benefit is a quick, accurate and independent valuation of multi-asset derivatives and fixed-income portfolios.

Key Functions

A wide range of valuation models and methods have been implemented in PMS, which allow for a comprehensive evaluation of a variety of instruments, structured products and certificates. The PMS system integrates regulatory, finance-mathematical, data/software technology-related, procedural etc. aspects which are updated on an ongoing basis and which are the foundation for a wide range of functionalities and financial key figures (e.g. in relation to risk management).

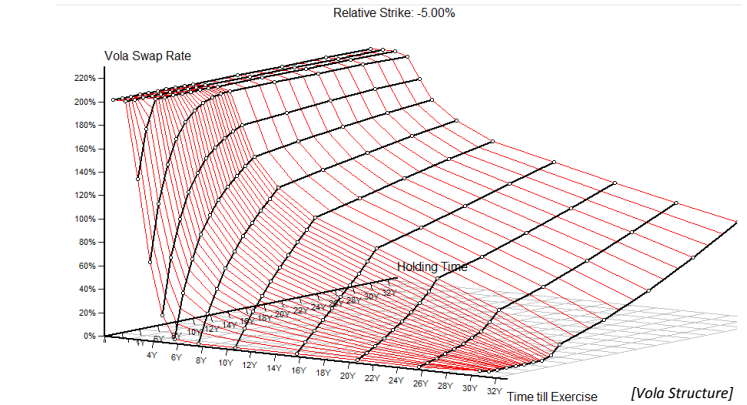
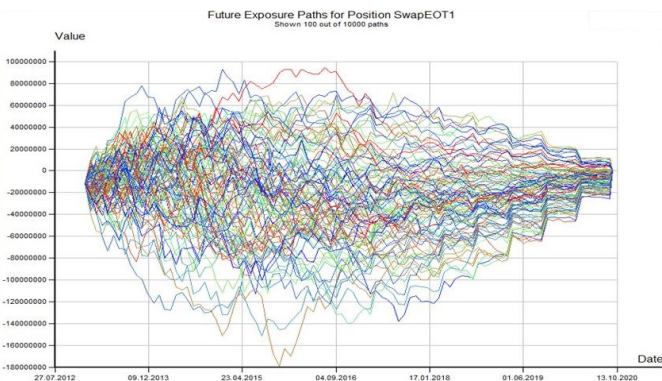
Model Coverage

Hull White 1-Factor Model	Longstaff Schwartz	Garman Kohlhagen	PSA Prepayment Model
Hull White 2-Factor Model	Quasi Monte Carlo	Binomial Tree	Large Homogeneous Pool Model
Hybrid Hull White Model	Analytical Barrier	Trinomial Tree	Black
Extended Vasicek	Analytical Asian	Turnbull Wakeman	Black Karasinski
Libor Market Model	Deterministic Methods	Kemna Vorst	Finite Difference Methods
Hybrid Libor Market Model	Cash Flow Discounting	JP Morgan CDS Model	PDE Methods
SABR Model	Black Scholes	JP Morgan Unwind Method	Bachelier Model
Multi-Factor Monte Carlo	Barone Adesi	ISDA Standard CDS Model	Cox Ross Rubinstein
Heston Model	Buehler		

Calibration methods: Amoeba Algorithm, Simulated Annealing, Levenberg-Marquardt, Tikhonov Regularisation

Derivatives valued in PMS

- Commodity Derivatives
- Credit Derivatives
- Dividend Derivatives
- Stock Derivatives
- FX Derivatives
- Inflation Derivatives
- Interest Rate Derivatives
- Money Market Derivatives
- Volatility Derivatives



[Monte Carlo]

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