

Misys Opics Plus

Structured Products

Pricing and Valuation Powered by Numerix

As a result of the Credit Crisis, the structured credit market has been thrust into the global spotlight. Credit standards have become more stringent, counterparty risk more challenging and uncertainty remains as to the impact of recent and future regulations across securities and derivatives. As a knock-on effect, there is a growing demand to simplify Structured Product vehicles and provide higher transparency of the underlying strategies to both internal stakeholders and external regulators, all while increasing overall time to market from vanilla to bespoke structured products.

Opics Plus Structured Products

Opics Plus Structured Products enables institutions to trade sophisticated structured instruments. On a single platform, Opics Plus Structured Products processes a variety of vanilla and complex instruments.

Structured product transactions are created utilizing templates that combine various instruments into a single deal entry point complete with front-to-back support for a wide array of complex foreign exchange and interest rate based structured instruments. All of the structures can be issued as a note or a swap and are priced and valued using the Numerix pricing engine.

The solution allows organizations to decrease operational risk through high levels of straight-through-processing (STP) rates, and in turn reduces the known cost per trade while minimizing reconciliation. Workflow features include deal capture, pricing, position management, customer credit, Profit and Loss (P&L), exception based workflow, payments and accounting.

Complex Pricing and Valuation

To give users the computational power required to price complex instruments, Opics Plus has embedded Numerix CrossAsset framework for structuring, providing a flexible and transparent pricing architecture and access to the industry's most comprehensive library of cross-asset models and methods. Opics Plus calls the

Supported Structures:

- + CMS Spread Range Accrual
- + CMS Steepener TARN
- + CMS Steepener
- + Dual CCY Note
- + Index Linked Note
- + Inflation Linked Note
- + Inverse Floater
- + Inverse Floater TARN
- + Libor Range Accrual
- + Periodic Capped FRN
- + Power Reverse Dual Currency (PRDC)
- + Snowball
- + Snowball TARN
- + Step up Callable
- + Triple Chooser
- + Zero Coupon
- + Wedding Cake
- + Corridor Range Accrual

Numerix math libraries for pricing of Structured Products. All necessary cash flows are calculated via multiple factor models.

Though this integration with Numerix, Opics Plus now has the enhanced ability to quickly expand the existing inventory of supported products as both client and market demands evolve. Additionally, Opics Plus now provides further flexibility in pricing of sophisticated structured products to our clients, and within their preferred choice of math models and methodologies.

Opics Plus Structured Products enables advanced pricing and valuations while ensuring transparency via inherent, robust Opics Plus workflow processes.

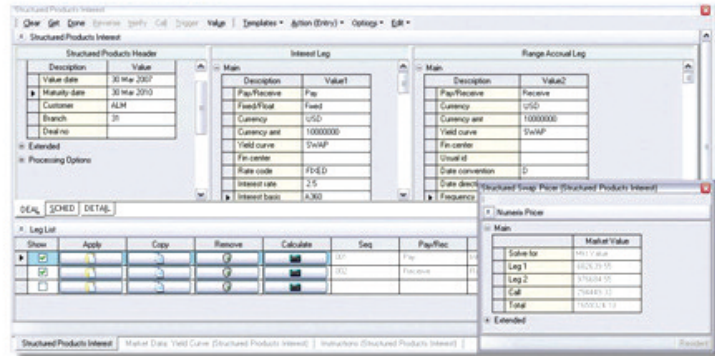
Unmatched Analytic Flexibility

Through the integration with Numerix, Opics Plus allows quants, analysts, structurers and risk managers to further analyze deals using Numerix CrossAsset – an Excel add-in for creating, pricing and testing even the most complex or bespoke structured products. The key link to this unmatched analytic flexibility is Numerix’s unique ability to capture all aspects of a custom deal in computer-readable XML:

1. Export any deal structured in Opics Plus into a Numerix XML file that contains the trade definition, market data, model calibration and all other valuation inputs.
2. Easily “rehydrate” the XML file in Excel using Numerix CrossAsset, leveraging the power of Numerix analytics in a completely transparent spreadsheet environment, enabling:
 - + Pre-trade pricing and scenario analysis, with choice of model and custom calibrations
 - + Custom payoff schedules with Numerix deal-describing language
 - + Comprehensive valuations using historical or live market data
 - + Deal debugging and testing
 - + In-depth risk analysis, including Greeks and custom reports
3. Use deals structured in Excel to clearly specify instruments for future integration into Opics Plus.

Opics Plus Structured Products Leveraging the Power of Numerix CrossAsset

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Numerix CrossAsset

FX_TARN_Swap			
Trade Input			
Deal Number	Trade abc	Book	Book A
Counterparty	Bank X Y Z	Trader	Trader A
Comment	Comment here		
Deal Definition			
DealID	FX_TARN_Swap	Coupon FX Strike	105.00
Deal Start Date	23-Dec-2008	Coupon Fixed Rate	5.0000%
Deal End Date	23-Dec-2018	Coupon Cap	7.0000%
Initial Exchange	TRUE	Coupon Floor	0.0000%
Final Exchange	TRUE	Coupon Target Level	20.0000%
Coupon Leg Position	Receive	Funding Leg Position	Pay
Coupon Leg Currency	JPY	Funding Leg Currency	USD
Coupon Leg Notional	1,000,000,000.00	Funding Leg Notional	10,000,000.00
Coupon Leg Convention	CONV.JPY_SWAP	Funding Leg Convention	CONV.USD_LIBOR
Coupon Leg Bases	ACT/360	Funding Leg Bases	ACT/360
Coupon Leg Frequency	6m	Funding Leg Frequency	3m
Coupon Intra Period	TRUE	Funding Spread	0.2000%
Coupon Intra Rate	2.5000%	Funding Index Fixings	FIXINGS.USD.3m
Coupon Intra End Date	23-Dec-2009	FX Fixings	FIXINGS.USD.JPY
Risk Reports			
Delta Shft	0.0100%	Vega Shft	1.0000%

Opics Plus Structured Products is a complete "out-of-the-box" solution

Key features

- + Each structured product is available as a fixed income or swap instrument
- + All structures (except for the Inflation linked and TARN) are callable. The TARN includes an automatic knockout provision
- + All structures can have multiple caps, floors or both
- + Step Up and Step Down structures are supported
- + Knockout triggers can be attached to any or all call schedules for the PRDC and Index linked structures
- + Many structures support Formulaic Rates
- + Users can define Formulaic Rate parameter inputs per deal
- + Each structure is priced and valued using Numerix pricing engines
- + Customized payoff scripting
- + User-defined, event-driven accounting

Trading Desk

The flexible design and architecture of the Opics Plus Front and Middle Office ensures fast pricing and risk calculations; allowing users to cope with increasing volumes and the growing complexity of financial instruments. The end result means fewer systems, less manual processing the ability to introduce new products and be able to more effectively service your clients. Deal entry, pricing and risk monitoring tools are consolidated on the trader's desktop. Each trader can configure and save their individual settings, including the screens and blotters required, preferred layout of screens and the order and content of the data based on the products traded and the positions managed.

Pricers and calculators are integrated with deal entry and allow for deals to be automatically priced using real-time market data. Current market data can be manually changed and deals can be re-priced allowing for what-if scenario analysis and simulations.

Rates are updated instantly from market data providers such as Reuters and Bloomberg enabling for real-time position, P&L and risk statistics. Other market data sources can also be easily integrated if required.

Key features include:

- + Real-time positions, P&L and desk level risk management
- + Pre-deal customer exposure checks
- + What-if deal and scenario analysis
- + Deal interfaces from Fenics, Reuters, EBS and other Electronic Dealing Systems
- + Real-time market data feeds from sources such as Reuters, Bloomberg and other market data providers
- + Limits monitoring and exception processing

Back Office Operations and Controls

Automated, integrated processing of structured product instrument operation functions includes accurate workflow based event processing. Opics Plus processing delivers configurable STP and exception management. The Opics Plus Workflow Manager consolidates all Back Office processing with a configurable exception based processing engine. The result is a single front through back STP solution where only the exceptions are highlighted.

Multi-Currency Accounting

Opics Plus multi-currency accounting allows users to perform sub ledger functions before they are rolled up into the final parent ledger. Highlights of the accounting offering include:

- + Full multi-entity, multi-currency, multi-account general ledger, giving financial institutions the flexibility to define their own accounting structure and posting rules
- + Valuations, accruals, and P&L entries generated daily
- + General Ledger and transaction level reporting

Reporting

Opics Plus reporting provides the ability to closely monitor transactions, cash and position activity. The solution contains a comprehensive suite of several hundred predefined real-time inquiries and reports.

An open database structure allows for immediate access to any data views. Users can easily export to Excel for further analysis or to a file for emailing. The solution also contains seamless integration with third-party reporting applications such as Crystal Reports.



Opics Plus Structured Products is fully integrated with Opics Plus Fixed Income and Swap functionality and workflow processing



Misys Opics Plus Structured Products addresses the needs of clients who require an out-of-the-box, easy to implement solution.



Future Integration of Opics Plus to Numerix Portfolio

Opics Plus will be extending the reach of its structured product offering via future, planned integration with the Numerix Portfolio solution.

Numerix Portfolio is a powerful front office application that provides a consistent valuation framework for pricing and hedging complex OTC portfolios.

The combined Opics Plus and Numerix Portfolio offering will deliver further customization and flexibility with a faster time to market on bespoke structured products instruments.

For more information on how Misys Opics Plus can help you please visit:
www.misys.com

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