

## Valuations of complex OTC derivatives and structured products

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Independent valuations of complex OTC derivatives and structured products, as well as evaluations of fixed income securities, are seeing increased demand as a result of a combination of new regulations, market volatility and the credit crunch. Financial institutions have been working to ensure that they have a firm grasp on the value of their holdings. Assessing risk exposure is a key focus.

At the same time, the growth of alternative investment funds and the opportunity for asset managers to invest in derivatives under UCITS III has led to exponential growth not only in volume traded, but also in the levels of complexity.

Transparency and standards are fundamental to the valuation process. Investors and regulators expect consistent, transparent and fair pricing across all alternative investment classes.

In response to this industry challenge, Interactive Data's Pricing and Reference Data business now provides valuations of highly complex OTC derivatives and structured products as part of its wide-ranging pricing and evaluation services through an exclusive agreement with Prism Valuation. Prism Valuation – whose philosophy to valuation is built on three pillars 'people-data-models' – provides services that replicate the pricing and risk analysis capabilities of a structured products dealer, with an emphasis on hard-to-value assets.

The structured products valuation service, available via Interactive Data's FTS<sup>SM</sup> portfolio administration service, can provide valuations on a daily, weekly, monthly or quarterly basis. In all cases, a full service is provided with a user friendly FTS front-end that enables clients to submit deal confirms or other source documents directly, rather than having to input the structure and select and calibrate models.

### **Valuation Transparency Report**

A key feature of the service is an innovative Valuation Transparency Report, in which the valuation process for even the most complex structures is illuminated in plain language. This includes the choice of: underlying market data, appropriate model selection and calibration strategies culminating in a valuation. The Valuation Transparency Report will include such information as:

- Required underlying market data
- Model and calibration choices, along with reasons behind the choices, including details on determination of any model parameters which are not directly calibrated to market data
- Primary and secondary sensitivities

## Valuation Discrepancy Report

With increased market volatility, clients need to better understand what factors can cause a difference in valuation. Therefore, a further value-added analysis that can be provided, on an ad-hoc request basis, is a detailed Valuation Discrepancy Report. This analysis compares any differences between a customer's valuation (counterparty and/or internal valuations) and the Prism Valuation service. The analysis provides customers with a detailed report that breaks down what, in Prism Valuation's opinion, are the maximum variances that can be caused by different market data inputs, model selection, calibration choices, parameter sensitivities, and numerical methods. The Valuation Discrepancy Report concludes with what is believed to be the maximum valuation deviation for that product.

## Coverage

**The service is capable of providing valuations for most flavours of OTC derivatives and complex securities, and new structures are continually being added. The following is a small sample of the types of products currently covered:**

### Interest rates

Bermudan swaptions, Callable Zeroes,  
Callable Range Accruals (single index, CMS spread...),  
Callable CMS Spread Options, Callable Basis Swaps,  
Digital Caps / Digital Swaptions / Target Redemption Notes (TARNs),  
Snowball / Snowbear / Snowblade (callable path dependents),  
Quantos, including callable quantoed structures, Hybrids.

### Inflation

Swaps, Hybrids.  
Caps/Floors/Swaptions

### FX

Power Reverse Dual Callable, Power Reverse Dual Triggerable,  
Digitals / Barriers / Knock-outs, FX Range Accruals,  
FX Baskets, Rainbow Options.

### Equity

Basket Options, Index and single stock Digitals / Barriers / Knock-outs,  
Autocallables, Cliquet, Mountain Range Options (Himalaya, Altiplano, Everest),  
Variance swaps, Variance options, Dispersion swaps.

### Commodity

Baskets,  
Hybrids.

### Hedge Fund / Managed Fund / Mutual Fund

Baskets,  
CPPI Structures.

### Credit

Asset Swaps,  
Bespoke and index CDOs, CPDOs, CDO-Squared  
Basket default swaps, X-to-Y to default baskets, Hybrids.

Prism Valuation's series of strategic data partnerships provides the underlying market data required to calibrate valuation models:

- Interactive Data for access to exchange-traded equity and derivatives data, corporate action information, fund data and over 2.5 million bond evaluations
- ICAP, the world's premier interdealer broker, for underlying market data, including generally hard-to-obtain market data and private data
- GFI, a leading interdealer broker for credit data

The underlying modelling framework is based on numerical models from NumeriX, one of the foremost global providers of cross asset pricing and risk analytics for exotic derivatives and structured products. Using this foundation, Prism Valuation's quantitative analysts develop and extensively test appropriate structured product valuation engines.

### **Independent evaluations**

Interactive Data evaluates approximately 2.5 million fixed income issues every day and provides independent valuations for a broad range of alternative investments, including single name credit default swaps (CDS), CDS index trades, interest rate swaps and bank loan prices.

Services include:

- Evaluations of global fixed income instruments including corporates, high yields, governments and agencies, securitised debt issues such as ABS, CMBS and CMOs, US municipal securities, hybrid securities and money market securities
- Fair Value Information Services for international equities, options and index futures
- CDS valuations\*
- Interest rate swap valuations
- Bank loan valuations\*
- Intra-day indicative valuations for equity and fixed income ETFs and ETNs
- Risk analytics data from Interactive Data's Fixed Income Analytics business

Interactive Data's teams of experienced evaluators incorporate available transaction data, credit quality information and perceived market movements into the evaluated pricing applications and models for fixed income securities.

*\*CDS and bank loan valuations provided by Markit Group Limited*

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**Interactive Data Corporation (NYSE: IDC) is a leading global provider of financial market data, analytics and related services to financial institutions, active traders and individual investors. The Company's businesses supply real-time market data, time-sensitive pricing, evaluations and reference data for millions of securities traded around the world, including hard-to-value instruments.**

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