Credit derivatives

Fusion Invest provides a window on the market with real-time capabilities and risk mitigation, enabling investment managers to react quickly when economic forces impact asset classes

Our economy has been rocked by the impact of Brexit and the global pandemic. Inflation is rising, and it's only a matter of time before interest rates begin to climb to prevent the economy from overheating.

Therefore, institutional investors are keeping a watchful eye on the markets as they struggle to navigate the choppy waters ahead.

Portfolio and investment managers are constantly looking to perform better in a market that's becoming ever more complex and highly regulated. Throw into the mix the transition from LIBOR to risk free rates (RFR), and you have a seismic shift in the treasury and capital markets landscape.

The impact will be vast, with the need to adapt pricing models, updating compliant workflows, and implementing operational changes across all lending segments.

Fusion Invest, the leading solution for investment management, ensures better transparency and collaboration throughout the investment process delivering a consistent analytics framework on top of a real-time Investment Book of Record.

Key benefits

Leveraging the broadest financial product coverage on the market and strong functional coverage, portfolio managers, get a real-time, bird's eye view of the market.

- Extensive coverage of standardized and OTC credit swap transaction types for trading and pricing.
- Comprehensive life cycle from initiation to expiry including settlement, assignment and notation.
- Support high volumes of trades thanks to live feed from execution platforms and real-time interface to affirmation/confirmation platforms.
- Extensive set of risk analytics to carry out real-time risk management and hedge with maximal efficiency.
- Simulate and monitor the impact of default events or credit migration on P&L.

Product coverage

Swap

- **Standard corporate and government CDS**

- **Index CDS (iTraxx, CDX)**

- **OTC swaps with fixed or floating interest rates**

- **Credit asset swaps**

- **ABCDS and loan CDS**

Derivatives

- **Credit default swaption (single name and index)**

- **Synthetic CDO, CDO^2**

- **Nth to default**

- **Convertable bonds**

- **ABS/MBS**

Credit Structures

- **Credit-linked note with leverage and principal protection - quanto and compo**

- **Credit structuring tool (e.g. CDSO)**

Covering a broad range of products and markets, the Finastra solution delivers a comprehensive view of your portfolios and eliminates the challenges of onboarding new strategies or assets.

Conventions following latest market updates:

- OTC, SNAC and STEC conventions are supported (starting with ISDA, 2009).
  - Quotation per issuer, currency, seniority, default event and maturity for a set of predefined CDS rates (100bps, 500bps, etc.), with proxies for missing data.
  - CDS dates and adjusted coupon dates: IMM ISDA 3M and 6M (ISDA, 2015).
  - Standard financial transaction types (ISDA, 2014) and restructuring event codes (XR14, MM14, etc.).
- SRO transactions and new governmental intervention event (bail-in) are supported (ISDA, 2014).

Price models

Finastra's experienced quant team continuously support and invest in product development to address the constantly evolving market challenges for all types of assets, such as management of credit big bang and ISDA conventions, negative interest rate/OIS discounting, and most recently, the transition from LIBOR to new alternative reference rates.
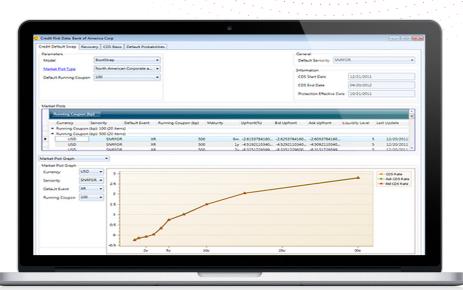
- BGJM (Barclays, Goldman Sachs, JPMorgan and Markit; ISDA 2009) model, conversion between upfront prices and conventional spreads.
- One-factor copula model (Gaussian, Clayton).
- Multi-factor conditional Monte-Carlo.
- Convertible bonds: regime switching with default rate, jump rates and transition probabilities between regimes, taking into account the correlation between equity and credit risk.

Market data management

Fusion Invest's accelerated solution deployment has a set of pre-packaged interfaces for data providers. In addition, for any interface, standards can be adjusted to fit specific requirements based on configuration and customization, leveraging Fusion Invest's powerful Software Development Kit (SDK).

- Automatic update of the static data and definition of underlying tranches of ABS Deals, with connectivity to Intex.
- Automatic update of ABS tranches cash-flows from Intex according to assumptions on the prepayment, default, delinquency, severity, recovery.
- Automatic update of the static data and prices of ABS tranches, with connectivity to Bloomberg.
- Real-time, same day and EOD credit curves from Markit: par spread curve (composite), fixed coupon upfront and conventional spread (quoted spread) curve.
- SRO (ISDA 2014) information updated from Markit SRO list.
- Latest data provider updates (Markit v7, 2015) are supported, including new short-end tenors in credit curves (0m, 3m and 9m).
- Basis spread over CDS rates for cash securities.
- Management of bond spread curve per sector and rating on top of the government bond rate curve. Calibration using Nelson-Siegel curve fitting or splines algorithms.

Standard CDS data for Bank of America

Portfolio management and lifecycle

Fusion Invest's dynamic reporting and monitoring capabilities align optimally for C-level, portfolio managers, risk managers, performance, and compliance officers, as well as middle office operations. With access to decision support tools from their portfolio dashboards, portfolio managers can quickly simulate, test, and validate investment decisions. Integration to execution platforms and broker networks guarantee efficiency.

While comprehensive tracking of execution processes across all portfolios, and control with automated pre-trade checks, ensure transparency and compliance with regulatory and internal guidelines.

- Real-time portfolio aggregating all positions: position keeping, hedging and PnL calculation with marked to market and theoretical prices.
- Easy drill-down of the portfolio with on-the-fly aggregated reports by currency, issuer, maturity, counterparty; ISDA contract standardization and consolidation.

- Dedicated credit indicators available in the portfolio view: seniority, default event, recovery rate, CDS par spread, CDS coupon rate, theoretical price, conventional spread, implied credit risk, CS01, credit convexity, crossed credit sensitivities, recovery rate sensitivity, credit spread duration, DTS.
- Lifecycle.
  - Quick booking of trades via user-defined blotters and screens dedicated for flow business.
  - Live feed from execution and clearing platforms such as Trade web, Bloomberg, MarketAxcess.
  - Affirmation and confirmation through MarkitWire and DS Match.
  - Automatic management of coupons, expiries, default events.
  - Generation of alerts.
- User management: audit, user rights, user preferences.
- Distributed computations of the portfolio with risk analysis and real-time P&L breakdown: unrealized, realized, accrued, cash income.

Risk management

With the ability for all departments within an investment management company to work together seamlessly, risk management is transformed. Investment managers have consistent, comprehensive, real-time pricing and risk capabilities across all asset classes. Risk regulatory standards and internal requirements are met at every stage of the lifecycle from pre-trade to ex-post.

- Breakdown and aggregation of credit risk sensitivities (also available in front office views): CS01, credit convexity, crossed credit sensitivities, recovery rate sensitivity.
  - By issuer/seniority/default event/ currency/fixed coupon.
  - By maturity buckets.
- Breakdown of index (e.g., Itraxx) exposure per component.
- Analysis by spread, upfront or time to default, jump to default analysis.

- Automatic hedge computation with standard sets of CDS.
- Stress tests with shocks on instrument spreads.
- VaR (parametric, historical, Monte Carlo) with shocks on market spreads.
- Decomposition of the bond risk into pure interest rate, sector-specific and issuer-specific components.

Credit carry and roll-over analysis

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