

ICE Data Services Continuous Evaluated Pricing in the Charles River Investment Management Solution

Immediate And Accurate Evaluated Bond Prices Across Multiple Asset Classes

Global Fixed Income markets are undergoing significant change. These changes are making it difficult for traders and portfolio managers to accurately price the bonds they are looking to sell or acquire:

- Record corporate and sovereign debt issuance has fueled a dramatic increase in the size of global fixed income markets. The majority of these issues trade infrequently, so the most recent trade price may be days or weeks old.
- The decline of principal-based trading means that broker/dealers are no longer the go-to source of price information for the majority of bonds.
- The rapid growth of electronic trading venues has fragmented pricing data across over 100 venues, making it difficult to obtain a holistic view of prices.

These developments put a premium on timely and accurate pricing data. ICE Data Services provide continuous, independent evaluated pricing for traders and portfolio managers directly within the Charles River Investment Management Solution (Charles River IMS). This provides critical decision support at the time of trade and helps fixed income managers discover potential trading opportunities.

Continuous Evaluated Pricing Benefits

Pre-Trade Price Transparency and Discovery – The flow of pre-trade pricing information is changing. Traditional sources of pre-trade transparency focus on a narrowing segment of the fixed income market. New trading venues are providing alternative pricing sources, but the anonymity these venues provide to their participants may leave pre-trade participants seeking additional information about the quality of the prices they see. The trading community increasingly looks for pricing information from recognized independent sources to help them quickly identify the best option for each trade. ICE Data Service's Continuous Evaluated Pricing provides investment managers with the tools to assess quote quality and enhance price discovery, enabling quicker decision-making.

Measuring Execution Quality – With Continuous Evaluated Pricing incorporated directly in the Charles River IMS, traders, portfolio managers and compliance officers can more closely monitor trading activities and measure trading effectiveness across a growing number of venues and protocols. The Charles River Execution Analysis framework helps firms analyze execution quality by trader, issue or venue, for both current and past trades. ICE Data Services' Best Execution score provides a trade-by-trade measure of relative execution quality; the score is a percentile rank of the trade vs. comparable transactions in the marketplace.

Intraday NAV Calculations – Continuous Evaluated Pricing ensures that funds can calculate NAVs at any time during the trading day, using continuously updated evaluations for constituent securities. This facilitates the intraday monitoring of a fund’s holdings to ensure early identification and isolation of those positions most likely to have significant changes during the official overnight NAV setting process. Some institutions elect to match the timing of the official NAV setting with local market convention. Institutions are able to consider Continuous Evaluated Pricing during their official NAV setting process.

Shifting Roles – As all-to-all trading models grow in importance, the buy-side will require tools that enable their transformation from price-takers to price-makers in the marketplace. Accurate, real-time pricing is critical to support accurate price-making in thinly traded issues and venues.

Asset Class Coverage

The ICE Continuous Evaluated Pricing Service is available for the following asset classes:

Global	US
Corporate Bonds (Investment Grade & High Yield)	Agencies
Emerging Markets	MBS Pass-throughs
Money Markets	TBA Mortgages
Sovereigns	Munis
	Leveraged Loans

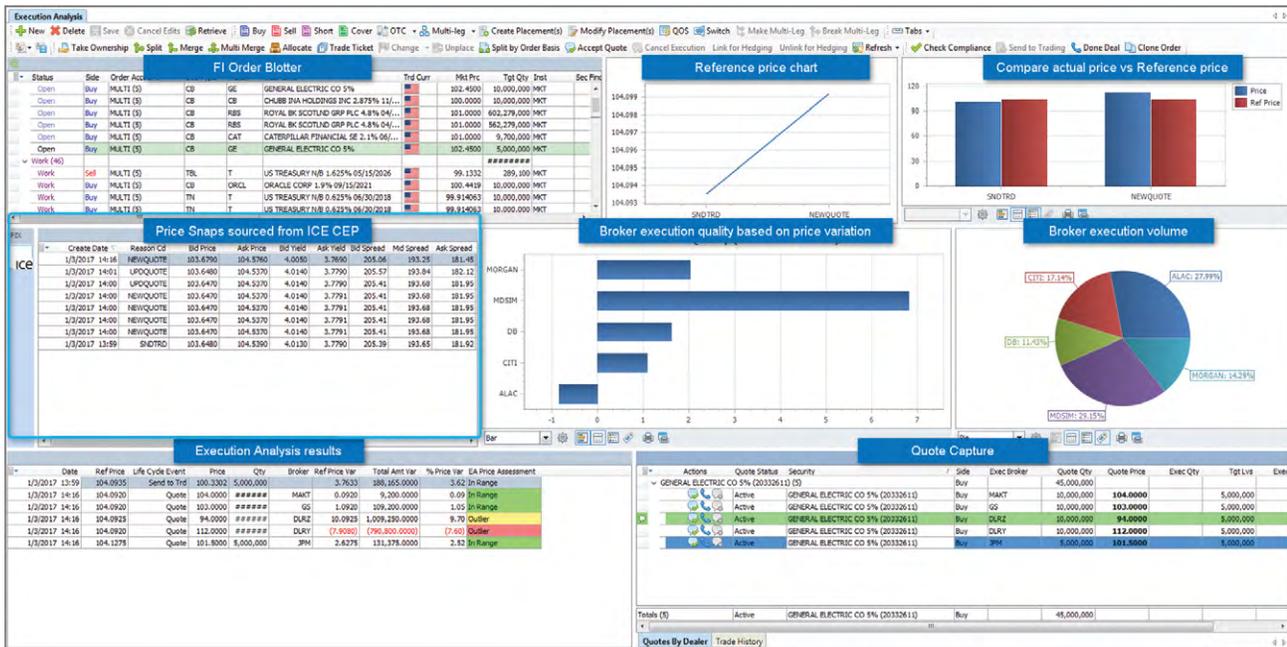
Process Integrity

The evaluation workflow is designed to rapidly process and apply incoming data while retaining close evaluator oversight of market conditions. Automation rules drive the generation of continuous fixed income evaluated prices as market data is received and processed, and our team of experienced evaluators are notified as exceptions are identified based on the built-in tolerances.

1. Evaluators map the characteristics of the securities and data sources in their assigned sectors.
2. Automation rules continuously drive evaluation changes as market data is received and processed, and alert evaluators to data exceptions based on established exception tolerances.
3. During primary business hours, evaluators review the generated exceptions and apply various tools to analyze exceptions, including, as appropriate, review against additional data sources, information obtained through market contacts, comparable bonds, and application of the evaluator’s judgement and expertise.
4. The established alert configurations are examined regularly and recalibrated based on lessons learned from the exception review process and current market practices.

Full Trade Life Cycle Support

The Charles River IMS consolidates all fixed income trading into one scalable and simplified platform. Charles River provides full trading life cycle support that incorporates key data at the point of execution and direct connectivity to leading trading venues. This eliminates switching between external systems and streamlines the fixed income trading process. Traders can easily access critical information, find liquidity and quickly execute trades. All information is stored for later execution analysis and regulatory audit requirements.



The Charles River IMS provides a consolidated view of orders, quotes, evaluated pricing and trade history

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About Charles River

Charles River enables sound and efficient investing across all asset classes. Over 350 firms worldwide use Charles River IMS to manage more than US\$25 Trillion in assets in the institutional investment, wealth management and hedge fund industries. Our SaaS-based solution automates and simplifies investment management on a single platform – from portfolio decision support and risk management through trading and post-trade settlement, with integrated risk and compliance throughout. Headquartered in Burlington, Massachusetts, we support clients globally with more than 750 employees in 11 regional offices.

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Charles River Development reserves the right to change plans, priorities and future enhancements at any time without notice. (Updated March 2017)

