

# Transaction Cost Analysis

## Understanding Trade Execution Impact

Transaction Cost Analysis (TCA) lets investment managers determine the effectiveness of their portfolio transactions. By providing greater transparency into investment strategies and trading performance, TCA helps investment managers lower their trading costs. The Charles River Investment Management Solution (Charles River IMS) provides TCA seamlessly integrated with order, execution and portfolio management capabilities. Charles River's TCA scales with your analytics needs, from pre-trade to post-trade capabilities. Pre-trade TCA is included as standard functionality in Charles River IMS.

### Key Benefits:

- Evaluate trading costs and trends on one platform
- Measure the performance of portfolio managers, traders & brokers
- Make more informed trading decisions
- Helps improve quality of trade execution
- Can reduce execution costs and slippage
- Seeks to maximize alpha

### Real-Time Decision Support

Charles River's integrated TCA capability produces immediately actionable intelligence, accessible directly from the blotter. Extensive reporting and visualization options provide portfolio managers and traders with highly individualized feedback, helping them improve performance and reduce slippage

Charles River TCA provides insight into questions such as:



Which algorithm is working for me?



What's my optimal execution rate?



Should I use crossing networks for my orders?



Do my orders differ by time of day, order size, sector, PM?



### Advanced Capabilities

- Pre- and post-trade analytics application
- Multi-agent perspective on order life-cycle
- Best-in-class customized reporting
- Optimize trading strategies to fit PM and trader profiles
- Align behavioral profiles with implementation strategies
- Covering: Global Equity Markets, US/Canada inter-listed, EU composite
- Supports entire order life-cycle
- Real-time implementation shortfall
- Real-time unrealized gain/loss (UGL)
- %ADV and liquidity indicators
- UI-based research tool



### Pre-Trade TCA

Pre-Trade TCA provides portfolio managers with estimates of trade costs and market impact based on extensive historical trade information for a particular name. It evaluates all relevant trade execution strategies and recommends the strategy that is most consistent with a manager's risk preferences.



### Post-Trade TCA

Post-Trade TCA helps firms and portfolio managers profile and analyze trader performance across numerous metrics. Users can assess trade execution quality by comparing actual executed prices to user-selected benchmark prices. A full suite of benchmarks are provided, including volume-weighted average price, opportunity cost, performance, open/close/previous close price. Custom benchmarks are also supported.

## Charles River's TCA helps you understand trade execution impact throughout the trade lifecycle

#### Portfolio Manager Window

Portfolio manager initiates the investment action and estimates impact

#### Trader Window

Trader executes the order with best broker and strategy

#### Firm

Firm evaluates overall trading performance by looking at individual performance

#### Improved Execution & Increased Alpha

# Charles River Development, A State Street Company

Investment firms, asset owners, wealth managers, hedge funds and insurers in ~30 countries rely on Charles River's front and middle office investment management platform to manage more than ~US\$35 Trillion in assets. Together with State Street's middle and back office capabilities, Charles River's cloud-deployed software technology forms the foundation of State Street Alpha<sup>SM</sup>. The Charles River Investment Management Solution (Charles River IMS) is designed to automate and simplify the institutional investment process across asset classes, from portfolio management and risk analytics through trading and post-trade settlement, with integrated compliance and managed data throughout. Charles River's growing partner ecosystem enables clients to seamlessly access external data and analytics, applications and liquidity venues that support the demands of their product and asset class mix. Headquartered in Burlington, Massachusetts, we serve clients globally with more than 1,000 employees in 11 regional offices.

(Statistics as of Q3 2021)

Learn more at [crd.com/trading](https://crd.com/trading)

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