



The CutterAdvantEdge

Commentary on Investment Systems and Operations

Time is Both Money and Risk

“Time is money,” as the saying goes, but time is also risk. Nowhere is this more evident than in post-trade execution processing and settlement. Trades that fail or linger in an unsettled state represent lost opportunities and make it harder to hit performance targets. To effectively determine the direction of future investments while efficiently managing operational and investment risk, it’s critical to identify which countries and which asset types are most likely to generate a failure.

Opportunity Costs

Mature markets such as those in Europe, North America, and parts of the Far East have robust electronic communications, effective settlement clearinghouses, and fluid currency exchange programs. Thanks to the post-trade execution and settlement infrastructure underlying these markets, firms can be confident of generally timely settlements for major asset classes.

But emerging and frontier markets lack the infrastructure to provide the same high rate of timely settlement seen in mature markets. As firms deliberate about moving into these new markets and into less liquid assets such as CDOs and high yield bonds, they need to factor in the higher failure rate and how it could impact operational risk, investment risk, and most importantly, the cost of lost opportunity.

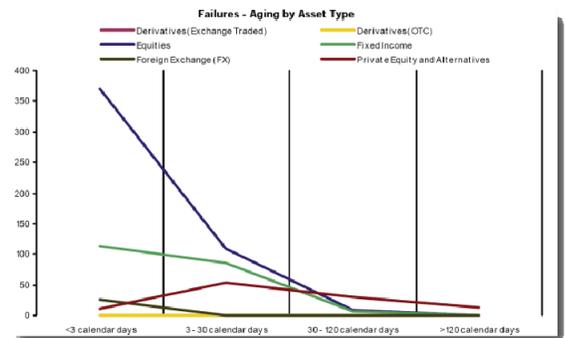
Average Fail Rates (nbr of trades)	Year Current Quarter	Nbr of Failed Trades	Current Quarter (Avg)	Trailing 4 Quarters (Avg)	Trending
Canada	5	17	1.82%	1.84%	↔
United Kingdom	21	100	2.90%	1.99%	↓
United States	156	768	0.51%	4.70%	↑
Asia / Pac Rim	62	62	2.65%	2.55%	↔
Europe - East		5	20.00%	18.55%	↔
Europe - West	33	40	1.82%	2.11%	↑
Nordics	6	14	1.70%	1.69%	↔
Average across all markets	47	144	4.49%	4.78%	↔
< 2% failure rate overall			Fail rates improving		
Between 2% and 5% failure			Fail rates remain neutral		
> 5% failure rates overall			Fail rates worsening		

Fail Rates

Peer Benchmarking

Historically, firms have gauged their settlement success using internal metrics and goals. But to compete effectively, firms need to know how their settlement performance compares to other firms investing in similar assets and similar geographies. Firms who do so gain insight into where they are less effective and where opportunities exist for greater success.

In 2009, TIAA-CREF approached Cutter Associates about collecting this information from the members of Cutter’s research consortia, consisting of 170 firms spanning all markets and geographies. Cutter worked with several leading firms to develop **Operations Metrics**, a quarterly report providing participating firms with clear, concise information on processing efficiency relative to peer firms.



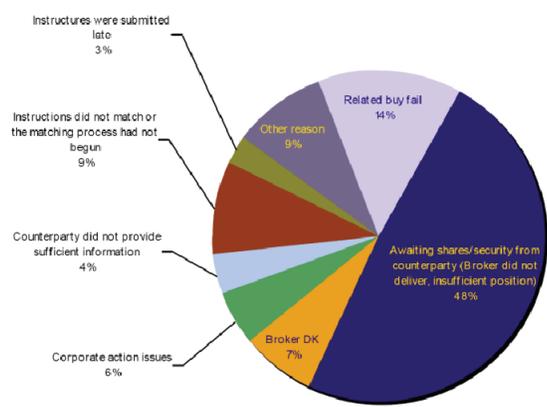
Failures - Aging by Asset Type

Operations Metrics

- Measures your firm's processing effectiveness against peers and best-in-class
- Identifies processing areas that need more support
- Reveals how peer firms solve processing issues that can plague organizations like yours

Operations Metrics draws on a deep and comprehensive understanding of the investment management industry, developed through the synergies of Cutter's three business lines—consulting, research, and benchmarking. **Operations Metrics** includes:

- Trading volume by asset type and geographic region
- Number of cancels/corrects and re-bookings, by asset type
- Percentage of processed securities requiring manual intervention
- Percentage of securities that fail and why they fail, by asset type and geographic region
- Aging of fails



Operations Metrics Data

How it Works

Each quarter, participating firms complete the survey and submit investment processing results. CutterBenchmarking anonymizes participant information, analyzes survey findings, and presents them in a report comparing each firm's processing results to those of their industry peers. Results can be viewed by firm size (AUM), asset types traded, and firm classification. The results can also be compared over time to identify industry trends that can provide insight into operational risk management.

Industry Pulse: Processing Efficiency

Before moving into new markets and new asset types, firms need to understand the source of higher failure rates and how the failures can increase operational and investment risk, as well as the costs of lost opportunities.

Through **Operations Metrics**, the sharing of both peer and best-of-breed intelligence provides a clearer picture into how processing efficiency can be improved so firms can better position themselves for growth. Cutter Associates evaluates issues like this every year for their CutterResearch consortia members, who vote on current topics they see as pivotal in the industry. Participants are substantially reducing investment operations risk through improved technology and more efficient workflow processes.

Upcoming Research

As part of Cutter's focus on post execution trade processing and settlement, we will present pertinent research at the Technology Council meetings in May, 2010. This research is an in-depth investigation into how firms are managing the economic and regulatory pressures for increased efficiency. It will focus on two areas of transaction management: post-trade systems and services, and reconciliation systems. The research covers available systems and services for on post-trade processing across asset classes, including confirmation / affirmation, matching and settlement systems, settlement instruction databases, and networks. The research also evaluates leading systems and services supporting reconciliation between the manager's records and those of their custodians and counterparties.