The Depository Trust & Clearing Corporation

BENCHMARKS™ DATA ANALYTICS

HOW BROKER REPORT CARD SCORE WORKS

1. The purpose the Broker Report Card is to compare aggregate volume over a month, quarter or year to determine relative performance of Brokers in a given region.

2. Anonymous Peers are selected for each Broker for whom the analysis is performed.
   Selection criteria includes:

   - region
   - similar volume
   - similar trading patterns (cross border diversity)
   - similar company profile (where possible)

3. Each peer group consists of the subscribing broker plus 7 to 11 peers

4. The Broker Report Card (BRC) score uses the six (6) metrics and the measures as indicated in the BRC Weightings.

   - The maximum score is 100. The minimum is 0.
   - The sum of the scores for each weighted metric is what determines the overall BRC score.
   - The best performing broker in a weighted metric is attributed the full weighting, the worst broker is given 0.
   - The brokers who are neither best or worst are scored based on their relative closeness to the best or worst performance.
   - The formula for the Broker report card is worked out in the following way:

((SPREAD - (BEST BROKER VALUE - SUBSCRIBING BROKER VALUE))/SPREAD) * METRIC WEIGHT

SPREAD = the difference between the best and worst Broker values.

An example using Same Day Match Agreed Market (SDMAGR) with a metric weighting of 15.

BEST VALUE: Broker E = 99.4
WORST VALUE: Broker K = 85.5
SPREAD: 99.4 - 85.5 = 13.9
SUBSCRIBING BROKER SDMAGR VALUE = 98.8
SDMAGR WEIGHTIGN = 15
SUBSCRIBING BROKER BRC is ((13.9 - (99.4 - 98.8))/13.9) * 15 = 14.35

METRICS

The six (6) metrics comprising the Overall Broker Report Card Score and their weighting factors.

METRIC	WEIGHTING FACTOR	
	EQUITY	FIXED INCOME
Market Close To CTM Receipt (MCTCTMR) This metric shows the time between Market Close and the receipt by CTM of the Broker block or the first Broker allocation. This number is positive after Market Close, and negative if the entry was before Market Close. The metric includes only trades that are at Match Agreed (MAGR) status and in known markets. This metric is useful in determining how early/fast booking is taking place. The major factors determining this metric are: ■ Front Office failing to send the trade to Middle Office. ■ Volume weight average/market close pricing requiring end of day booking. ■ Trades being cancelled/rebooked. Market is the market of execution. Benchmarks has reference data on the Market Close time for each dominate exchange in every country in the world. The market is determined for each trade using the Broker supplied Place of Trade or when absent when 2/3 of Currency/ISIN/Broker Country are the same. We use the same metric for Fixed Income trading as an approximation of booking speed. Although Fixed Income trading is not on an exchange ITP data shows it occurs during normal business hours so the exchange close times are still a useful measure of booking latency.	15	10
Match to Match Agreed (MTMAGR) This metric shows the average time from when CTM first matched the Broker & IM blocks until the trade was Match Agreed. This number will be zero or greater & includes only trades that are at Match Agreed (MAGR) status. As the blocks have matched any delay in the portion of the flow indicates sending/receiving or matching the allocations. This metric which most closely tracks the confirmation process. The major factors determining this metric are: ■ static issues (account opening, SSI) ■ mismatches ■ It is possible that the IM has also not sent the allocations however in practice this is rare enough as to be ignored. CTM is very efficient so many trades are STP that the average duration time itself is normally very small. The longer relative durations are indicative of less STP or greater issues with high volume IMs thus impacting the number. All brokers will have some clients where the timing here is limited to the network bandwidth speed along.	15	20
Same Day Entry Market (SDE MKT) This metric shows what trades were booked in CTM on trade date before midnight in the Market of execution. The metric includes only trades that are at Match Agreed (MAGR) status and in known markets. For example a Broker based in GB has until: 16:00 GMT T to book a HK market trade by 00:00 HKT 00:00 GMT T to book a GB market trade by 00:00 GMT 05:00 GMT T1 to book a US market trade by 00:00 EST	20	20
Same Day Match Agreed Market (SDMAGR MKT) This metric shows what trades were match agreed in CTM on trade date before midnight in the Market of execution. The metric includes only trades that are at Match Agreed (MAGR) status and in known markets. For example a Broker based in GB has until: 16:00 GMT T for a HK market trade to be Match Agreed by 00:00 HKT 00:00 GMT T for a GB market trade to be Match Agreed by 00:00 GMT 05:00 GMT T1 for a US market trade to be Match Agreed by 00:00 EST	15	15

METRIC	WEIGHTING FACTOR	
	EQUITY	FIXED INCOME
Touch Rate (TCHRATE BK) This metric shows the percent of blocks that the Broker touched. This metric does not include those trades only the IM touched. Each time that the broker rebook or amends a block (or allocation effecting a block field) counts as one touch. For example, if a party makes five amends to a block at five separate times, the block has five touches. However, if a party makes five amends to a block at the same time, the block has one touch. A touch rate over 100% is possible. Formula: (# trades you touched * 100) / # trades. The metric includes all trades, regardless of Match Agreed (MAGR) status.	20	20
Mismatch Correction Time Broker (MISM BK) This metric shows the average time between the first pairing and final matching when the Broker touched the block. This metric is for blocks that do not match first time. The metric includes only trades that are at Match Agreed (MAGR) status. The purpose behind this metric to show the how quickly brokers can deal with mismatched trades (if it wasn't MISM then the duration between pair and match would be instant). Most trades are STP so it is only those where there are issues that are included (the opposite of MTMAGR) hence it represents the average time to correct a trade when the process has broken down.	15	15