

Several exchanges list mimics of CBOT Treasury futures. The main enticements they hawk to prospective contract users are that (i) the best bid/offer spread in the market for the look-alike futures is as tight as in the market for the corresponding CBOT futures, and (ii) the applicable transaction and clearing fees are pitched at bargain levels.

Lost in the clamor is that a tight bid/offer spread is only as good as the volume tradable at the best bid or best offer. Worse, ***a patchy order book is apt to rack up trading costs far greater than any savings to be found in exchange fee differentials.***

Exhibit 1 demonstrates these points for the lead 10-Year Treasury Note futures contract listed at CBOT, as well as for mimics listed at ELX and at NYSE Liffe, during the six weeks from Monday, 1 August, through Friday, 9 September. In the representative (median) instance, ***a trader at CBOT could transact well over 250 lots entirely at best bid or offer. A trader attempting the same in ELX mimic contracts would have blown through the four best price levels on the resting side of the order book. A third trader trying to do this in NYSE Liffe mimic contracts would have taken out resting amounts at the three best price levels.***

Exhibit 1 -- Order Book Depth for 10-Year T-Note Futures
(Median Values, 1 August to 9 September 2011)

	CMEG	CMEG Cumulative	ELX	ELX Cumulative	NYSE Liffe	NYSE Liffe Cumulative
1 st (Best) Bid/Offer	417	417	17	17	33	33
2 nd	1,017	1,434	73	100	81	114
3 rd	1,137	2,571	74	174	96	210
4 th	1,068	3,639	67	241	79	289
5 th	936	4,575	56	297	64	353

To see what this means for effective transaction cost, assume all three traders pay customer (non-member) exchange fees, and assume each bid or offered price level is separated from its neighbors by the contract minimum price increment of ½ tick (ie, one half of 1/32nd of a price point), or \$15.625 per contract –

For the *CBOT* contract user trading cost is limited to crossing the best bid/offer spread, or \$15.63 per contract. Adding the nonmember exchange/clearing fee of 56 cents makes an average all-in cost of \$16.19 per contract.

For the *NYSE Liffe* mimic, trading costs stack up as follows:

- ½ tick (\$15.63 per contract) on the first 33 lots,
- one tick (\$31.25 per contract) on the next 81 lots,
- 1½ ticks (\$46.88 per contract) on the 96 lots at the third best price level, and
- two ticks (\$62.50 per contract) for the trailing 40 contracts.

The weighted average trading cost is \$40.19 per contract. Adding the NYSE Liffe nonmember exchange fee of 45 cents brings average all-in cost to \$40.64 per contract.

A similar calculation produces a weighted average trading cost of \$44.88 per contract for a 250-lot market order in the *ELX* mimic. Tossing in the 9 cent exchange fee puts average all-in cost at \$44.97 per contract.

For either of the mimics – ELX or NYSE Liffe – the effective average all-in cost is two and a half times more than the all-in cost of the CBOT Treasury future.

The same differences apply more generally. For instance, if one performs the same exercise several times each US trading day (say, every 10 seconds between 8am and 5pm ET) during the same six-week interval, then:

For CBOT Treasury futures, the typical (ie, median) all-in cost of filling a 250-lot market order is \$16.50 per contract for those paying exchange fees at member rates, and \$16.95 per contract for those who pay nonmember fees. See Exhibit 2.

Irrespective of the level of one’s exchange fees, the effective cost of making this transaction in either ELX or NYSE Liffe mimics is between 2-½ and 2-¾ times greater.

Exhibit 2 – Median Cost Comparison

(1 August to 9 September 2011, Daily, 8am to 5pm ET)

	CBOT	ELX	NYSE Liffe
Member	16.50	45.98	42.89
Nonmember	16.95	45.98	43.18

Managing risk in volatile markets: Run toward the gunfire, not away from it.

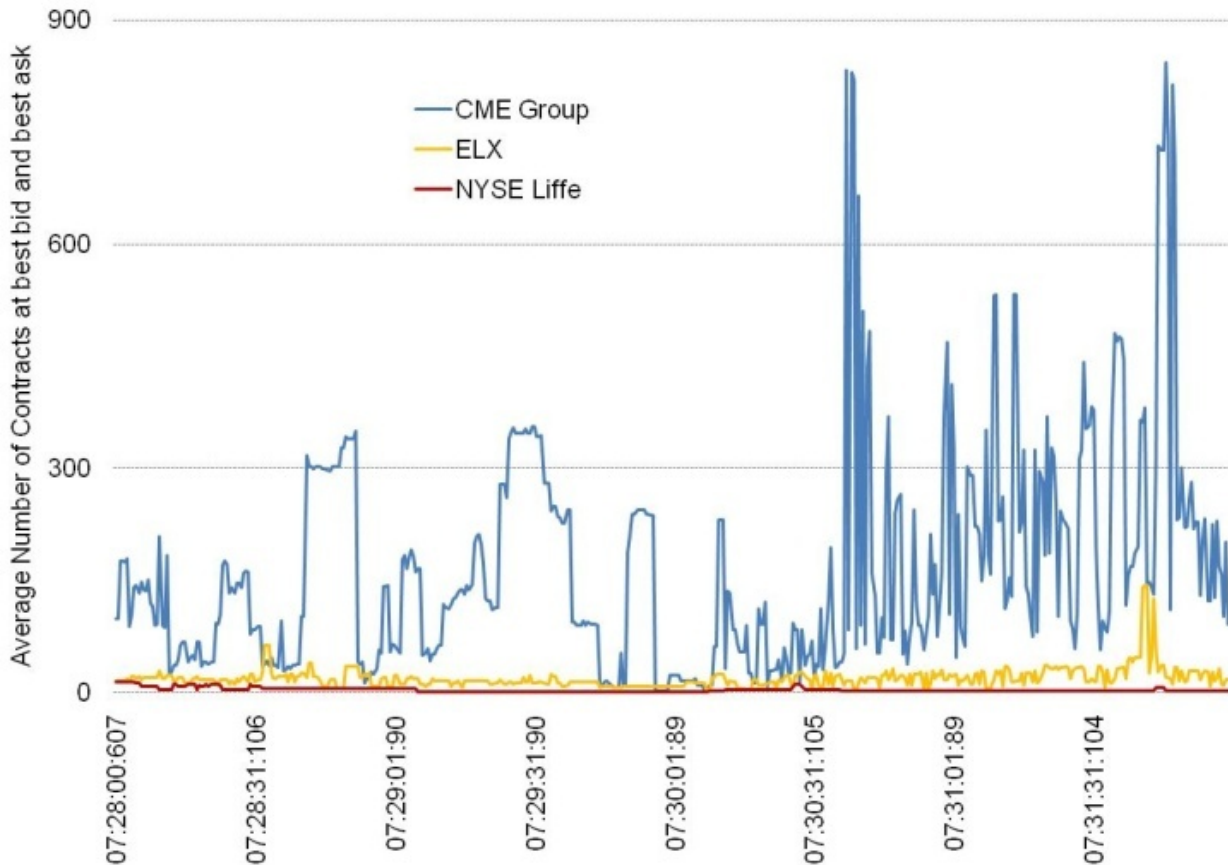
A telling measure of a central limit order book’s integrity is how well it functions in a fast market. Exhibit 3 exemplifies this for lead-month 10-Year Treasury Note futures, in terms of a second-by-second comparison of resting quantities at best bid/offered price levels during the four minutes bracketing the US Labor Department’s employment report on Friday, 5 August.

In the two minutes up to headline, resting amounts quoted at the top of the CBOT order book fluctuate around 150 contracts. Within 45 seconds after headline, they have rocketed back to around 250 contracts.

The *ELX* mimic maintains commendably steady quoted sizes at best bid/offered price levels throughout the four minute window, albeit for quantities that are an order of magnitude smaller than those posted at the top of the CBOT order book.

Quotes for the NYSE Liffe mimic zero out at around 30 seconds before headline. Moreover, they appear to regain little or no pulse during the two minutes following the headline.

**Exhibit 3 – Monthly US Employment Report, Friday, 5 August 2011, 8:28-8:32am ET
Depth of Order Books at Best Bid/Offer for Sep2011 10-Year Treasury Note Futures**



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Data source for all calculations and graphics in Exhibits 1, 2, and 3 is Bloomberg LP. Treasury Note and Bond futures are listed with, and subject to the rules and regulations of, the CBOT.

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