16th Annual Babson Trading Competition

October 28, 2026

In the competition, you will play the role of a **liability trader** operating at the principal trading desk of a broker-dealer (e.g., Morgan Stanley). Institutional clients (e.g., a buy-side firm such as Fidelity Investments) will ask you to be the counterparty to a large order in a single off-exchange transaction. The order will have a tender price and quantity of shares. You must first decide whether to accept the **tender order**, based on current market conditions. The tender price to buy (sell) should be sufficiently low (high) to compensate you for the **risk** of using the firm's **capital** to take a large, temporary **inventory position**. Importantly, you have no private information about the value of the stock.

If you accept a tender order, you will then need to unwind the position. The goal is to reduce your inventory risk **as quickly as possible**, while minimizing the **market impact** of the resulting trades. It is a balancing act that depends on current market conditions. The overall objective is to maximize your risk-adjusted P&L by accepting only tenders expected to be profitable and efficiently unwinding inventory positions back to zero. Each round you will receive five different fixed-price tender orders.

The competition will be based on eight different rounds of the liability trading cases (LT3 and LT4) running on the **Rotman Interactive Trader (RIT) Market Simulator**. The Rotman Interactive Trader provides a realistic **simulation** of an electronic limit order book market.

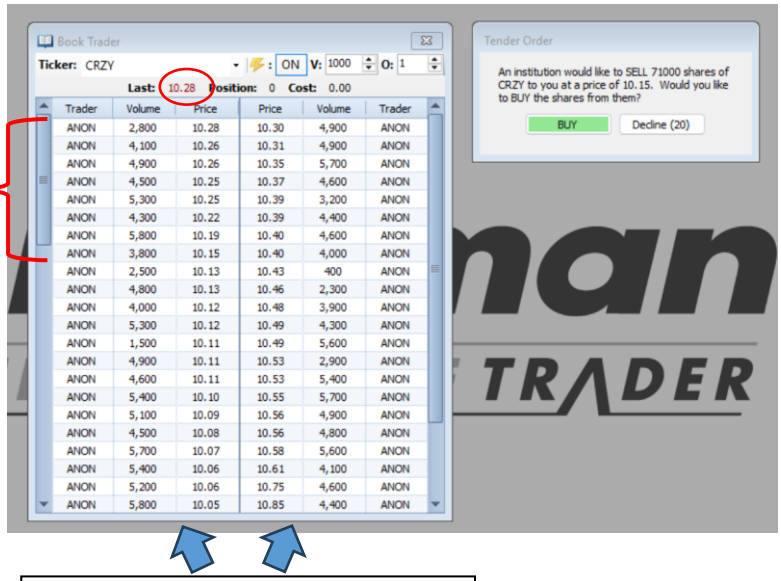
Beginning on October 20th, the eight rounds will run sequentially in a continuous loop on the 155.48.8.52 / 8443 practice server, which can be accessed as shown below. You can use any Trader ID and Password that does not contain any spaces or special characters. *You may need to create a new user profile each time you login to the server.* The practice server allows you to try the case prior to the trading competition. The software is available on all the computers in the Cutler Center finance lab. Alternatively, you can download and install the RIT client on your own Windows-based computer. The practice server can be accessed both on and off campus.



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Consider the following example of a tender order:

35,500 shares available in buy limit orders priced at or better than $10.15



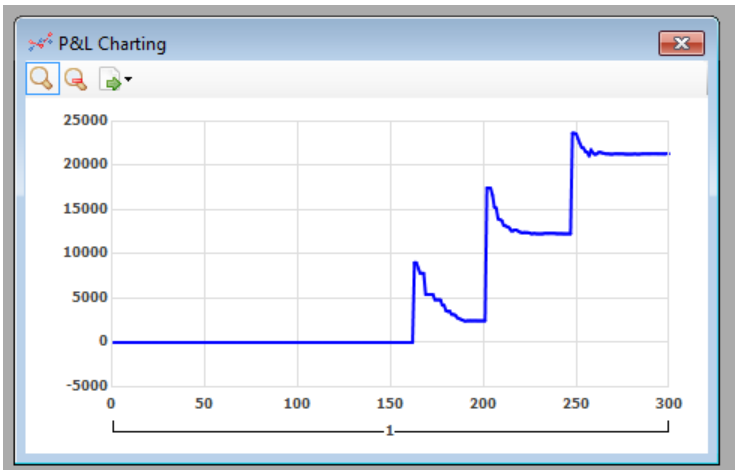
Tender price of $10.15 is a discount of $0.13 to last trade price of $10.28

Bid side and ask side of limit order book are relatively balanced.

The decision about whether to accept the tender order should be based on whether the tender premium (about $0.13 in this example) provides sufficient compensation, given the stock's price level and volatility, market liquidity, order book imbalances, and other factors.

If you accept this tender order, you will have a **large position** in CRZY of 71,000 shares which creates **inventory risk** (i.e., the price may move unfavorably). Since you have no private information about the value of the stock, you should unwind your position by repeatedly placing sell orders **until your position returns to zero**. The goal is to unwind your position in the market **quickly**, while minimizing the price impact of your trades. A typical target would be to unwind your position in approximately 15-20 ticks, depending on market conditions. The difference between the tender price and the average price obtained unwinding your position is your profit and loss (P&L). Ideally, your P&L chart should look something like a step function, with a jump when you accept the tender and then a slight decrease as you unwind your position and impact prices. Once you unwind your entire position, the profit will remain at the same level as you wait for the next tender offer.

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Some tips:

- **Be very careful about submitting market orders.** In active markets, market orders can receive unpredictable and often very unfavorable prices. Instead, think about placing aggressive limit orders at the top of the order book or place marketable limit orders that cross the spread.
- The **lighting function** is strongly recommended. Select an order size that is appropriate to your trading style (e.g., 1000 shares, 2500 shares) and reflects the size of the tender offers.
- **You should not accept every tender offer.** Some tenders do not provide sufficient expected compensation for inventory risk and market impact, particularly in the later iterations of the competition.
- **Watch for price differences between the main and alternative markets.** In general, distribute your trades between the two markets and seek the best price available. Prices can change rapidly, so be sure to keep checking for differences in prices as you unwind your position.

In rounds 1-4, you will be fined for any trades that do not unwind an existing position obtained with a tender order. As such, you will be fined for any speculative trading and for any trades that occur before accepting the tender (front-running). The fines can be represented by four parameters: (A, B, C, D)

- $**A** / share for front-running and speculative trading up to **B** shares (the limit is based on aggregate amount over the iteration)
- $**C** / share for amount exceeding **B** shares (aggregate over the iteration)
- $**D** / share for any shares not covered by end of iteration.

In rounds 5-8, there will be no fines, and you can trade in any manner without restrictions.

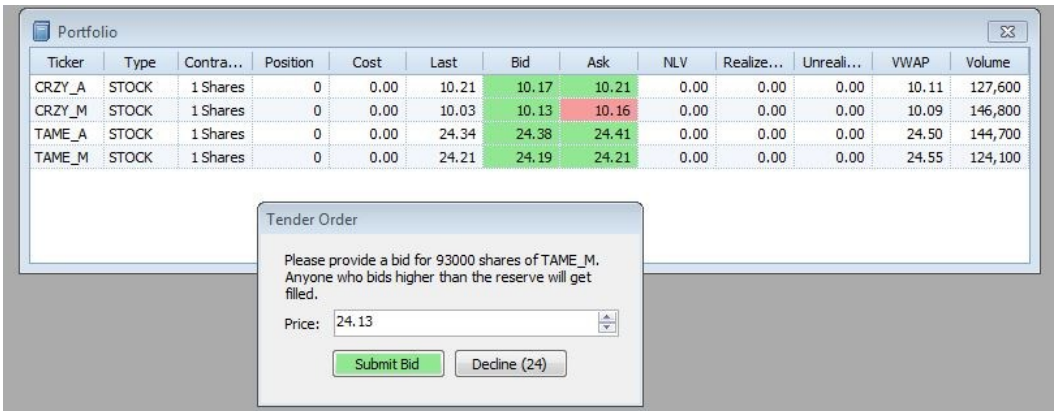
In rounds 6 and 8, there will be two special additional tender offers:

Competitive Auction Tenders:

- Sent to every participant at the same time.
- Traders are required to determine a competitive, yet profitable price to submit for a given volume of stock from the auction.

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- Any trader that submits an order that is better than the base-line reserve price (hidden from traders) will automatically have their order filled, regardless of other traders' bids or offers.
- If accepted, the fills will occur at the price that the trader submitted.
- "Submit bid" (Green Button) indicates you are buying the stock. "Submit offer" (Red Button) indicates you are selling the stock. Buy low, sell high.
- Since multiple traders can win competitive auctions (each receiving the indicated number of shares), there is the possibility that a large order imbalance will follow the auction as numerous traders begin to unwind their positions.



Winner Take-All Auction Tenders:

- Request traders to submit bids to buy, or offers to sell, a fixed number of shares.
- After all prices have been received, the tender is awarded to a **single trader**, with the highest bid or lowest offer.
- The winning price must meet a baseline reserve price (hidden from traders).
- If no bid or offer meets the reserve price, then the trade may not be awarded to anyone (i.e., if all traders bid $2.00 for a $10 stock, nobody will win).
- Winner-take-all auctions reward aggressive pricing but can create a **winner's curse** if traders bid too aggressively.

Base Case Parameters:

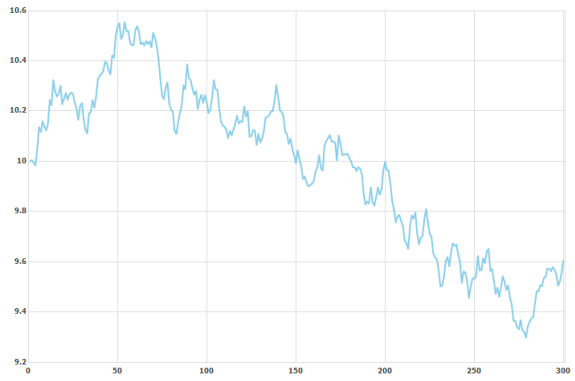
CRZY: Start price = $10; Volatility = 7%; Medium Liquidity
TAME: Start price = $25; Volatility = 5%; Medium Liquidity

Main Market:
Net trading fee for all orders: 2 cents / share

Alternative Market (maker-taker fee model):
Net trading fee for orders that remove liquidity: 1 cent / share
Net rebate for orders that provide liquidity: 0.5 cents / share

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Liquidity is determined by the arrival rate, aggressiveness, and size of orders placed by the anonymous traders (ANON). The anonymous traders place orders that tend to move the market towards a pre-determined underlying price path, such as:



The path is determined by a data generating process, such that:

- Let $\tilde{a}$ denote a random variable that is uniformly distributed between 0 and 1.
- Then the price at tick $t+1$, P_{t+1}, is determined as: $P_{t+1} = P_t \times (1 + \sigma \Phi^{-1}(\tilde{a}))$ where σ is the volatility (standard deviation) and Φ^{-1} is the inverse of the cumulative normal distribution function.
- There is no drift (expected return is zero).

The observed, realized price path will differ from the underlying price path due to frictions caused by limit orders and due to the trades of all participants.

The parameters for each round are described below.

Round	Description
1	LT3 Base Case (70% speed) Fines: {A, B, C, D} = {0.2, 5000, 0.4, 1.0} Main market only
2	LT4 Base Case (80% speed) Fines: {A, B, C, D} = {0.2, 5000, 0.4, 1.0} Main and alternative market
3	LT4 Base Case (100% speed) Fines: {A, B, C, D} = {0.2, 5000, 0.4, 1.0} Main and alternative market
4	CRZY: Start price: $16; Volatility: 9%; Medium liquidity TAME: Start price: $35; Volatility: 3%; High liquidity Fines: {A, B, C, D} = {0.01, 10000, 0.02, 1.0} Main and alternative market

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5	LT4 Base Case Parameters No Fines Main and alternative market 15 second tender offer window
6	LT4 Base Case Parameters No Fines Main and alternative market 15 second tender offer window, less favorable tenders Winner-take-all and competitive auctions (30 second decision window)
7	CRZY: Start price: $10; Volatility 12%; High liquidity TAME: Start price: $25; Volatility 3%; Low liquidity BBSN: Start price: $50; Volatility 6%; Medium liquidity No Fines Main market only All orders shown as ANON
8	CRZY: Start price: $12; Volatility 8%; High liquidity TAME: Start price: $18; Volatility 11%; High liquidity BBSN: Start price: $80; Volatility 7%; Medium liquidity No Fines Main market only Time and Sales information available Winner-take-all and competitive auctions (30 second decision window)

The LT3 and LT4 cases have a high signal-to-noise ratio: the impact of luck will be minimal and your overall performance across multiple iterations will reflect your decision-making and trading skills. In each iteration, the total tender spreads (i.e., potential profit from the tenders) will be the same across participants. For example, participants 1-4 might receive the following tender spreads (red indicates the institution is selling):

	Tenders					
Spread Profile	**1**	**2**	**3**	**4**	**5**	**Total Absolute Spread**
1	$0.03	$0.25	$0.30	$0.20	-$0.22	$1.00
2	$0.24	$0.13	$0.29	-$0.22	-$0.12	$1.00
3	$0.35	$0.13	$0.25	$0.02	$0.25	$1.00
4	$0.25	$0.20	$0.17	-$0.25	-$0.13	$1.00

REST API Trading and Direct Market Access

Advanced users can use Client REST API and Direct Market Access (DMA) REST API to interact with the RIT server. These features are optional and are not required to perform well in the competition. API use

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does not inherently create an advantage; successful strategies still depend on sound tender-acceptance and inventory-management decisions.

API trading will be enabled for all eight rounds. The server will accept up to 100 Client REST API orders per second (across all traders). DMA REST API will allow 80 API reads per second and 10 API writes per second.

Due to Babson network restrictions, a separate DMA-enabled server will run the eight rounds prior to the competition. This server is available only on the Babson network (on campus). Details will be posted on the competition webpage.

Overall Rank

Your overall rank in the competition is determined based on the sum of your ranks in each of the eight rounds, as illustrated below:

Trader ID	R1	Rank	R2	Rank	R3	Rank	R4	Rank	R5	Rank	R6	Rank	R7	Rank	R8	Rank	TOTAL	OVERALL
USER117	61,126	3	47,722	8	95,499	1	94,713	3	119,299	1	49,730	2	74,382	8	2,475	15	41	1
USER118	57,344	5	70,576	3	61,315	4	79,710	5	31,692	14	73,846	1	15,321	20	-84,959	20	72	3.5
USER207	-8,653	21	27,002	13	4,948	14	57,500	6	70,749	4	25,478	9	909,112	1	-232,052	22	90	10
USER208	37,584	14	63,988	4	45,437	7	11,306	17	88,688	2	8,815	17	55,203	10	-16,590	16	87	9
USER245	69,683	2	53,093	6	20,948	12	7,154	18	43,437	9	27,428	7	80,901	7	-84,934	19	80	6
USER246	42,064	12	-177,317	23	44,306	8	110,005	2	49,828	7	-2,702	19	391,300	2	46,997	9	82	7
USER265	-28,497	22	45,985	9	48,078	5	14,159	16	39,342	11	13,031	14	34,156	15	86,919	2	94	14
USER266	54,534	6	-88,927	22	43,942	9	34,104	10	26,116	20	31,130	5	41,671	14	72,237	5	91	11.5
USER276	57,982	4	31,110	10	34,309	10	26,446	11	29,491	15	35,987	3	88,133	5	59,606	7	65	2
USER277	49,810	8	23,288	16	-21,037	18	51,355	8	22,003	21	-59,242	22	50,347	11	5,905	14	118	18
USER359	26,585	17	53,636	5	-2,232	17	26,232	12	79,635	3	17,887	12	61,530	9	81,588	4	79	5
USER360	-31,886	23	-6,867	21	61,455	3	2,964	19	36,239	13	-9,404	20	44,415	12	7,179	13	124	21
USER434	70,453	1	85,341	2	2,502	15	26,010	13	-24,827	23	28,337	6	3,080	22	28,735	11	93	13
USER435	6,515	20	16,894	18	-42,295	20	45,481	9	17,201	22	-521	18	16,121	18	-47,196	18	143	22
USER474	47,978	9	-2,172	20	-55,038	22	-178,801	23	48,683	8	-21,313	21	134,368	3	-40,582	17	123	20
USER475	40,607	13	25,018	14	15,102	13	113,922	1	27,135	17	18,850	10	41,819	13	41,635	10	91	11.5
USER504	51,893	7	23,749	15	47,577	6	85,772	4	37,015	12	25,774	8	16,036	19	128,661	1	72	3.5
USER505	7,478	19	18,076	17	2,442	16	-48,636	22	52,690	6	-69,879	23	-593,950	23	-234,657	23	149	23
USER584	47,627	10	7,758	19	-68,305	23	20,829	14	29,035	16	12,810	15	122,504	4	57,491	8	109	17
USER585	28,910	16	27,461	12	-26,331	19	54,073	7	27,121	18	10,528	16	14,724	21	17,157	12	121	19
USER650	10,694	18	30,250	11	32,449	11	-12,563	21	26,976	19	18,595	11	84,096	6	85,992	3	100	15.5
USER651	37,040	15	47,999	7	67,070	2	18,423	15	40,772	10	17,152	13	33,463	16	69,390	6	84	8
USER688	42,887	11	117,890	1	-50,512	21	-7,253	20	55,135	5	33,589	4	31,207	17	-101,634	21	100	15.5

The lowest cumulative total of ranks wins the overall competition. This scoring method rewards consistent performance across the eight iterations. The top five traders overall will win cash prizes.

Interested in learning more?

Consider enrolling in one of these courses in the Fall 2027 semester:

FIN4505 Financial Trading Strategies and Risk Management (Advanced Undergraduate Elective)

FIN7545 Financial Trading Strategies (Graduate STEM Elective)

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