Rotman School of Management
UNIVERSITY OF TORONTO

RIT Case Brief – PD0
Build 1.00

Price Discovery 0

Good Technologies (GTT) is a large-cap technology firm that is widely held by mutual, pension and index funds. Most recently, the company has put itself up for sale and five different firms have expressed interest in purchasing the company.

None of these firms have submitted binding offers yet, but they are all going through extensive due diligence and board approvals. Since each firm has different motivations (and synergies) for the deal, they each value GTT differently, but all have an equal probability of submitting a bid. The following are the exact values of each company's bid (if the bid was to materialize).

Bidding Company	Value of Bid
Company A	$20
Company B	$22
Company C	$24
Company D	$26
Company E	$28

Your hedge fund analysts are aggressively evaluating the situation and talking to their contacts to determine which of these five bids will materialize into a binding offer. Through their implied financial analysis and contacts at different firms, they are able to identify when a company drops out of the bidding process. When they tell you that "Company D" will not make a bid, you are 100% confident that they are correct. You are also confident that by the end of the week, one and only one bid will materialize.

You've talked to some of your competing hedge fund managers and have learned that their researchers are doing similar analyses.

Your role as a hedge fund manager is to determine which single bid will survive the due diligence and approval process and ultimately materialize into a takeover. While your primary source of information will be your analysts, you're also aware that the stock market will provide signals as to what other hedge funds are doing, and implicitly reveal the information that they have gathered. Using that information, you will aggressively trade GTT in an attempt to generate profits.

Kevin Mak and Tom McCurdy** prepared this case for the RIT market simulation platform, http://rit.rotman.utoronto.ca/.*
**Manager of the Financial Research and Trading Lab, Rotman School of Management;*
***Professor of Finance and Founding Director of the FRTL, Rotman School of Management, University of Toronto.*

Today is Monday. Your analysts will be able to eliminate one bidder on Tuesday, another on Wednesday, and a third on Thursday. A final bid will materialize on Friday.

Authors' Note: The focus of this case is not about Mergers & Acquisitions. The fact that five companies are bidding is simply used to provide a valuation context for GTT. The mechanical way to think about this case is that GTT has 5 values, {20, 22, 24, 26 or 28}, and the market will settle at one of those 5 values. Your analyst information and market information will allow you to eliminate some of those outcomes providing you with a more precise estimate of the final value of GTT that you should use to guide your trading strategy.

Price Discovery Simulation #0 – PD0

In this trading simulation, you can purchase or sell shares of Good Technologies (GTT). The stock price at the end of the trading case will be valued based on which of the five takeovers materialize. That is, the stock will be cash-settled at one of the following five outcomes:

Final Bidder	Value of Bid
Company A	$20
Company B	$22
Company C	$24
Company D	$26
Company E	$28

GTT Stock will begin trading at $24.00 per share. There is a transaction fee of 2 cents per share.

During the simulation, you will be given private information from your analysts. This information is accessible in the "News" window. A sample news sequence is:

Private Information #1 – Company A will not be bidding, the value of GTT will not be $20.
Private Information #2 – Company C will not be bidding, the value of GTT will not be $24.
Private Information #3 – Company D will not be bidding, the value of GTT will not be $26.

In the above sequence, you now know with certainty, that the final value of GTT will either be $22 or $28 (either company B or company E will make the offer).

Discussion Questions and Follow Up:

1. Prior to receiving information from your analysts, at what price can you buy GTT for and guarantee yourself a profit? At what price can you short-sell GTT for and guarantee yourself a profit? Will these values change as you receive information?

2. At the start of the case, each offer has an equal probability of occurring so the expected value of the GTT is $24. After receiving information that GTT will not be $20, what is your new expected value of GTT?

3. If your information allows you to exclude Companies B, C and D (leaving $20 and $28 as possible outcomes), should you be purchasing or short-selling shares of GTT if the market price is $27.00?

4. Every trader in this case receives correct information, but each trader's information is different. The implication is that at the end of the case, each trader will be left with the same correct payout amount plus one incorrect value. For example, Trader 1 has "20 or 24" and Trader 2 has "24 or 26" are possible final news announcements for those two traders. How do you think this will affect trading?

