Negotiation and Competitive Decision Making
Before You Leave Class Today!

• Pick Up
  – Confidential Information for
    SALT HARBOR: Brims versus Easterly

• Identify
  – your negotiating partner
Next Class

• **DEBRIEF**
  – Street Streaker & Alpert-Raiffa Experiment

• **NEGOTIATE**
  – Salt Harbor
  – In class matchups
Course Objective

Improve your ability to achieve your negotiating objectives in a responsible fashion.
Today’s Themes

• HOW WE LEARN

• PREPARATION

• SPLIT THE PIE!
  – Distributive Bargaining Principles

• COGNITIVE BIASES
  – Anchoring affects negotiation outcomes
  – A first controlled feedback experiment
Negotiation is a Core Competency!
Avoid Negotiation Sand Traps

Leigh Thompson Ch 1 page 5

• Leaving money on the table
  – “Lose – Lose” Both parties could do better

• Settling for too little or paying too much
  – The “Winner’s Curse”→ You achieve agreement but give up too large a portion of the bargaining pie

• Walking away from the table
  – You reject terms that are demonstrably better than any other option available

• Settling for terms that are worse than the alternative
  – “Agreement bias” or you agree to agree even when other alternatives are better
How We Will Learn

• Practice

• Calibrated Feedback and Results Analysis
  – To avoid self-reinforcing ineffectiveness

• Outcome Based Evaluation

• Seeing how others See You!
Barriers to Effective Negotiation

Thompson Ch. 1 Pages 6-7

• **Egocentrism**
  – Self congratulatory views: In Lake Woebegone, all children are above the town average in intelligence

• **Confirmation Bias**
  – Tendency to see what you want to see when appraising your own performance
Barriers => Self Reinforcing Incompetence

“We tend to be blissfully unaware of our own incompetence!”

Mergers and Acquisitions

– “CEOs develop overconfidence”
– “They overly attribute their influence when deals are successful”
– “This leads to MORE deals that are unsuccessful”
– “The problem persists even when promised significant financial rewards for accurate appraisal of one’s own performance”

Thompson Page 7 cites Billet et al MGT SCIENCE (2008)
Myths

• All negotiations are fixed sum

• Good Negotiators are born

• You need to be either tough or soft

• Experience is a great teacher
• **Good negotiators take risks:** *(translation)*
  – Good negotiators *make threats* in a disciplined and organized fashion
  – Good negotiators know how to balance risks and rewards

• **Good negotiators rely on intuition:**
  – Usually not! Behavior is often influenced by arbitrary and irrelevant aspects of a setting
  – Good negotiators are self-aware
  – They can articulate the rules that guide them and police against being fleeced
• **Our focus** => *skill building and learning by doing*

• **Doing** negotiations in different substantive contexts *sharpens our ability* to recognize untested assumptions, alternative explanations

• **Increases our sensitivity** to what works, what doesn’t work and why.
Negotiation in a Nutshell!

- **PARTIES**
  - Who are the real parties to a negotiation?

- **BATNAS**
  - What will negotiators do if they don’t reach an agreement?

- **INTERESTS**
  - What are the parties basic needs and priorities?

From “Negotiation Analysis: An Introduction” by Michael Wheeler HBS 9-801-156
• **VALUES**
  – How can value be created and who is likely to get it?

• **BARRIERS**
  – What are obstacles to agreement and maximization of value and how can they be overcome?

• **POWER**
  – What levers of power does each negotiator possess and how should they be deployed?

• **ETHICS**
  – What is the right thing to do?

From “Negotiation Analysis: An Introduction” by Michael Wheeler HBS 9-801-156
TOPICS

I. Distributive Bargaining—Split the Pie!
   • Street Streaker
   • Salt Harbor

II. Competitive Gaming
   • Oil Price Negotiation—Iterative Prisoners’ Dilemma

III. Fair Division
   • The Rothman Family Art Collection
   • Calculating the Efficient Frontier

IV. Contingent Contracts
   • Jessie Jumpshot
V. Mixed Motive—Integrative Bargaining

- Nelson Contracting
- Alphexco vs. Betonn (negotiating an IT venture)
- Winemaster.com (sale of an online wine enterprise)
- CP Hong Kong vs. MegaMarket USA (email or text-message negotiation)
VI Balanced Concerns Negotiations

- Stakes of Engagement
- Aerospace Investments

VI. Many Party Negotiations

- Teams: Eureka vs Flagship Renegotiate
- Welsh Water Mgt-Union Negotiation
SCORING & GRADING
# Scoring

<table>
<thead>
<tr>
<th>Winemaster</th>
<th>HomeBase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes =&gt; Net Gain</strong>:</td>
<td>$750 K</td>
</tr>
</tbody>
</table>

## Overall Class Statistics

<table>
<thead>
<tr>
<th></th>
<th>Winemaster</th>
<th>HomeBase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Net Gain</strong>:</td>
<td>$650 K</td>
<td>$1,100 K</td>
</tr>
<tr>
<td><strong>Standard Deviation of Net Gain</strong>:</td>
<td>$1,200 K</td>
<td>$1,600 K</td>
</tr>
</tbody>
</table>

## Z-Scores

\[
Z_{\text{Winemaster}} = \frac{($750 - $650)}{$1200} = 0.083
\]

\[
Z_{\text{Homebase}} = \frac{($1,200 - $1,100)}{$1,600} = 0.0625
\]
Preparation Survey

• A “Best Effort” response will receive a +0.25 Z-score increment
Subjective Valuation Survey

- You will be asked to express your opinions about your negotiation counterpart

- You will receive +0.25 Z-score points for completing the survey

- We will summarize responses and feed the summary back to each of you at the course end
## How Well Do You Think You Did?

### COUNTS OF ANNOUNCED VS ACTUAL

<table>
<thead>
<tr>
<th>Announced Percentile</th>
<th>0-25th</th>
<th>26-50th</th>
<th>51-75th</th>
<th>76-100th</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>26-50</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>51-75</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>10</td>
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<tr>
<td>75-100</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>9</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>7</strong></td>
<td><strong>7</strong></td>
<td><strong>7</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>
Negotiation Dance Records

• Record the sequence of offers made by you and counter-offers made by your counterpart:
  ▪ Amstore versus Nelson
  ▪ Stakes of Engagement
  ▪ Aerospace Investment

▪ Enter record using the online survey
▪ You will receive +0.25 Z-score points for entry
The Fog of Negotiation

- Your negotiation dance records will help us decipher why multiple issue negotiation trajectories vary wildly....even when negotiator role information is held fixed
Distributive Bargaining

Principles and Key Ideas
Outcome

• Who received which tangible goods?

• Net Gains
  – Yours
  – Your Negotiating Counterpart’s

• “See-Saw” or “Tug of War” outcome
Key Power Source

• BATNA =
  Best Alternative to No Agreement
Other Sources of Power in Negotiation

• **Authority**
  – Chain of Command
  – Moral

• **Relational**
  – Friends, Family, Tribe

• **Ability to Reward**

• **Ability to Punish**

• **Knowledge**
Distributive Bargaining Principles

• Target Point=>What do I want?

  – Your preferred settlement, taking into account limits imposed by the interests of your counterpart
BEST ALTERNATIVE to NO AGREEMENT = BATNA

→ NOT a wish-> Objective Reality determines it!

→ Real World DYNAMIC-> a function of market forces, changing environment.

→ Changes as available alternatives change
• **Bargaining Zone**—the region between parties’ reservation points

  – **Positive** when parties’ reservation points overlap

  – **Doesn’t exist** when there is no overlap
• **Bargaining Surplus**

  – Amount of overlap produced by reservation points
  – Measures the *size* of the bargaining zone
Bargaining Zone = Zone of Possible Agreement or ZOPA
The Zirconia ZT Sale

• Marcia walks in with no plan:
  – No counter offer to the Zirconia sticker price
  – No thought about trade-in value of her car
  – No thought about max she will pay for a given bundle of options
  – No thought about extras, prep, insurance fee, etc.
  – No thought about financing options and trade-offs
Prepare, Prepare, Prepare!

• Determine your BATNA

• Improve your BATNA if possible

• Think through tactics in advance
Understand the interests of your negotiating counterpart(s)

- Self-evident in formal zero-sum and non-zero sum games

- **NOT** self-evident in multiple issue negotiations where each party possesses private information

- Information about BATNA’s usually arrives through the dynamics of negotiation
ANCHORING

- People make estimates by starting from an initial value and adjusting to provide a final answer.

- Adjustments are typically insufficient
Calibration

- Prior to each of 84 days the U.S. Weather Bureau announced a 0.60 probability of rain, snow or both

- It rained or snowed (or both) on 49 of these 84 days

- $\frac{49}{84} = 0.58$, close to 0.60

The Bureau is well calibrated for announced probabilities of 0.60.
• An initial value is a *psychological anchor*

• Large and systematic departures from accuracy can occur

• **Facts:**
  – *Unless carefully trained, individuals tend to be poorly calibrated.*
  – *Adjustment is almost always insufficient.*
• “Despite all dangers and temptations, it is better to know about psychological biases than to not know. Otherwise we will walk directly into the whirling helicopter blades of life.”

• “But be very careful not to have too much fun accusing others of biases. That is the road that leads to becoming a sophisticated arguer - someone who, faced with any discomforting argument, finds at once a bias in it. The one whom you must watch above all is yourself.”
Alpert-Raiffa Experiment

A learn by doing controlled feedback exercise
1. Greater New York City’s Metro Area is more populous than LA’s. What is the New York CMSA in $10^6$ people?

2. What fraction of the Earth’s surface lies above latitude 66° known as the Circum-Arctic?

3. 100 avid basketball fans were asked, “Does a player have a better chance of making a shot after having just made his last two or three shots than he does after missing his last two or three shots? What fraction answered YES?”
Alpert-Raiffa Experiment

• Individuals are asked to specify 50-50 probability intervals [*inter-quartile ranges*] for a large number of uncertain quantities such as:
  – NYC Metro Area population in millions
  – Circum Arctic as a fraction of Earth’s surface
  – Fraction of basketball fans who believe in the “Hot Hand”
Fractiles

• **0.25 Fractile:**
  – The value \( x_{0.25} \) of an uncertain quantity such that you believe there is a \( \frac{1}{4} \) chance that it is less than or equal to \( x_{0.25} \) and a \( \frac{3}{4} \) chance that it is greater than \( x_{0.25} \)

• **0.75 Fractile:**
  – The value \( x_{0.75} \) of an uncertain quantity such that you believe there is a \( \frac{3}{4} \) chance that it is less than or equal to \( x_{0.75} \) and a \( \frac{1}{4} \) chance that it is greater than \( x_{0.75} \)
Announced 50-50 Interval

True Value

Announced 50-50 Interval

True Value

COUNT

1

0

1
Outcomes

• Much *narrower* ranges than 50-50 appear
  – Such interval estimates reflect more certainty than is warranted by available knowledge

• 36% is a pseudo semi-constant!
• Irrelevant numbers can serve as *anchors* and influence perception of the bargaining zone:

  – Reader Example: 81% of residential real estate agents in the survey said they did not use list price to estimate sales price

  – Nevertheless, a “list price” manipulated by 12% and shown to agents resulted in significant differences in their estimates of the property’s sales price

  – The average price with a low list price was 15% lower than that for the high list price
First Offers as Anchors

• Does making the first offer lead to a better outcome for you?

• *Translation*: “Does anchoring work?”

*Hint*: Think interactively!
Subjective Values In Negotiation

• **Affective** = Feelings and opinions about:
  – The Objective Outcome
  – The Process
  – “Myself”
  – My Negotiating Counterpart
    • Fairness
    • Empathy
    • Her outcome
Negotiating Sale of the Street Streaker

Some Big Questions!
• **Reveal your reservation price?**
  – No! Unless it is very, very good. Seldom the case

• **Lie about your reservation price?**
  – No! You can back yourself into a corner and fail to reach agreement

• **Try to convince your counterpart that her BATNA is no good?**
  – Probably Not. Only if you have supportable evidence that it is *really* no good
  – Beware of a Boomerang effect: people often do the opposite of what you want them to do
• **Tough or Soft?**

• **You should be *neither*:**
  – Too tough may blow the deal
  – Too soft, you give away your bargaining surplus

• **Ideal:**
  – Try to make an offer in the bargaining zone, not outside
  – IF you are certain of your counterpart’s BATNA, offer just slightly better
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