WELCOME!

Defense Financial Management & Comptroller School

- Please take a bag
- DO NOT OPEN THE BAG, LOOK IN THE BAG, OR LOOK IN ANYONE ELSE’S BAG, ... yet.
Lesson Objective – My Goal

Participants Should:

- Comprehend fundamental economic concepts that affect teams, leadership, relationships, and decision making
- Be motivated to:
  - Consider how incentives affect behavior and outcomes
  - Learn more about leadership and people they lead
Overview

Session 1:
- Economic Concepts for Working in Teams
  - Fundamentals of Cost
  - Gains from Trade
  - Team-Building

Session 2:
- Principles of Leadership
  - Purpose and Principles
Economic Foundations

- Economics = the study of the allocation of resources
- Every decision you make allocates resources
- Your life is defined by the decisions you make
- Economics = the study of how you live your life
What is a Team?

Together Everyone Achieves More
What does TEAM mean to you?

Team attributes:
1. Synergy
2. Collective work products
3. Outputs are a result of all team members’ contributions
4. Members are held accountable for group outcomes
Trade Game

Defense Financial Management & Comptroller School

- Do NOT discuss what you have with those around you...yet.
- Open the bag in front of you and examine its contents.
- On a scale of 1-10, how satisfied are you with the bag you received?
- Round 1:
  - You may now discuss your bag’s contents.
  - Within trading zones, bag for bag trades are permitted.
- Round 2:
  - You may now trade with anyone. Bag-for-bag trades only.
- Round 3:
  - You may now trade with anyone, any mutually beneficial exchanges permitted.
What can we learn from this model?

How is this game like life?
Why did your satisfaction change over subsequent rounds?
Why did you trade?
How did the ability to trade impact your welfare?
How did you feel about the trade restrictions?

Bad Model: Lack of production phase
  - Comparative advantage should drive production decisions
What is a Team?

Together Everyone Achieves More
What does TEAM mean to you?

Team attributes:
1. Synergy
2. Collective work products
3. Outputs are a result of all team members’ contributions
4. Members are held accountable for group outcomes
Trade increases welfare because individuals have different preferences.

- People trade the things they like less for things they like more.
- The basis of trade is mutually beneficial exchange.
- Both parties are made better off.

Incentives are things that influence our decision making

- Incentives include non-monetary costs and benefits.
- Understanding incentives helps us understand decisions.
- Shaping incentives influences decision making.
Economic Foundations

- Costs of production
  - Land, labor, capital, entrepreneurship
  - Fixed, variable (marginal)

\[ FC + VC = TC \]

\[ MC = \Delta TC \] when you produce 1 more unit
Capital investments reduce marginal costs of production and distribution

Types of capital:
- Physical – stuff
- Human – skills and attributes
- Social – relationships
- Information – knowledge/tech
- Organizational – institutions
- Natural resources – recognized...
Economic Foundations

- How do you decide how much to make and how to make it?
  - Land, labor, capital, entrepreneurship?
  - Marginal Cost vs Marginal Benefit/Productivity

\[ MP = \Delta TP \text{ when you use 1 more unit} \]
Costs of Teammates
- Identification
- Communication
- Education
- Organization
- Negotiation
- Conflict resolution

Benefits of Teammates
- Knowledge
- Specialization
- Coordination
- Motivation
- Society
Production Possibility Frontier (PPF)

**Important Concepts:**
- Economic Growth
- Efficiency
- Tradeoffs – Opportunity Cost
- Marginal costs
- Comparative Advantage
- Specialization and Trade

**Other things we could discuss (but won’t):**
- Normal goods
- Inferior goods
- Deriving supply curve
- Utility maximization
- Intertemporal Transfer
- Capital investment and depreciation
PPF – Economic Growth

- Occurs when producers figure out how to produce more goods and services
- Investment in capital...
Economic Growth - Factors

- Protection of Private Property Rights
  - Rule of Law
- Political Stability
- Monetary Stability
- Limited Government Regulation
- Low Tax Rates
- Capital Investment
- Technology Advancement
- International Trade

- Costs of production
  - Land, labor, capital, entrepreneurship

- Costs of distribution
  - Identification
  - Negotiation
  - Transfer of ownership
  - Transportation
  - Enforcement
Economic models usually assume efficiency – and this is generally accurate.

Productivity is determined by existing technology and practices.

This assumption implies tradeoffs.
The only way to move from b to d is to give up some of Good 1.

Opportunity Cost = the value of the best alternative given up to get what you got.

Marginal Cost

THERE IS ALWAYS AN OPPORTUNITY COST!
Comparative Advantage

Absolute Adv – can produce the most
Comparative Adv – lower opp. cost of prod.

For illustration purposes:
- Assume linear PPFs for two individuals
- Calculate the opportunity costs of production

Boats

Theo

Andria

Boats

Apples

Apples

10

100

100

250

50
### Specialization and Trade

**Defense Financial Management & Comptroller School**

- Without specialization and trade:
  - Theo can consume 50 apples and 5 boats
  - Andria can consume 50 apples and 40 boats

- If Theo specializes in apples and trades with Andria (~7 apples/boat):
  - Theo can consume 50 apples and 7 boats
  - Andria can consume 50 apples and 43 boats

- Both are made better off.
Designing Effective Teams

Defense Financial Management & Comptroller School

- Get the right people first (Collins)

- Consider comparative advantage and specialization and trade

- Pay attention to opportunity costs
  - Should we have a chairman? What about a scribe?
Successful Teaming

**Defense Financial Management & Comptroller School**

- Consider which teams you have been a part of that you feel have been successful.
  - Why do you feel they were successful?
  - What led to their success?

- Can you think of any teams you believe have failed?
  - Why do you think they failed?
  - What led to their failure?
Review – Key Principles

- Any time we allocate resources we are making economic decisions.
- To efficiently allocate resources, we must learn to deliberately consider costs and benefits of alternatives.
- Teams provide opportunities to capitalize on diverse knowledge, skills, and preferences.
- Effective teaming requires understanding both the science of teams and the people in them.
- This doesn’t happen by accident.
Questions?

End of Session 1
Is “Follow the Leader” Child’s Play?

Part 2 - Leadership

Lt Col David Ratliff, PhD
436th Comptroller Squadron
Dover AFB, DE

31 May 2019
A Different Game

Defense Financial Management & Comptroller School

- First person to 450 points wins. High score wins.
- Game concludes in three rounds if nobody gets 450 points.
- You decide to play yellow or green.
- If you play yellow, everyone in the game gets a point.
- If you play green, you (and only you) get 10 points.
A Different Game (cont’d)

So what happened?
What is the social optimum from this game?
Did we get the social optimum?
Why/Why not?

What were the incentives of this game?
How is this like life?
This demonstrates a lot of different market failures:

- Externalities
- Public Goods
- Common Resources
- Coordination

Classic Case: Environmental Pollution
Externalities

- Externalities can be costly (negative) or beneficial (positive)
  - Costly: Pollution
  - Beneficial: Exercise

- Problems created by externalities:
  - Over/Under-production
  - Market valuation
  - Payment enforcement
Economic Theory Behind the Problems

Defense Financial Management & Comptroller School

\[ D = MR \]
\[ S = MPC \]
\[ S = MSC \]
Economic Theory Behind the Problems

Defense Financial Management & Comptroller School

- How should we resolve these failures?
- Pigou: Intervention can fix the market failure.
  - Adjust the incentives...

![Graph showing market supply and demand with adjustments for failure resolution]
Counter-Intuitive Incentives

Defense Financial Management & Comptroller School

• Daycare in Israel- A Fine is a Price – Gneezy, Rustichini 2000
• Dan Pink – direct incentives can stifle creativity –
  • Harry Potter and the Sorceror’s Stone
  • The Mirror of Erised
• External incentive plus removal results in less intrinsic motivation – Deci, 1971; Lepper, Greene and Nisbett, 1973; Harackiewicz, 1979

FM Education...Ready and Relevant
Defining Leadership

If adjusting behavior means adjusting incentives, why don’t we consider armed robbery leadership?

What makes leadership different from manipulation?

I believe that the best leaders understand incentives, understand behavior, and construct systems that reward desirable behavior. Why is this not just masterful manipulation?

What did your favorite leaders do for you?
Leading begins when someone decides to follow.

We choose to follow when:

- The leader provides something we wouldn’t have otherwise.
- The benefit of following exceeds the cost

Leader/Follower relationships require: trust, respect, purpose
Leader/Follower Relationships

Leaders provide:
- Information (vision, uncertainty, experience, knowledge, coordination)
- Motivation (accountability, incentive, desire)
- Resources (physical, social, emotional, energy)

If we want to lead, we must provide something followers need.
- Consider marginal productivity?
- It is the followers choice to be led.
If they’ll listen, sing them a song.

1. **BE THERE**
   a. Be present
   b. Be concerned
   c. Be humble

2. **BE READY**
   a. Be motivated
   b. Be competent
   c. Be generous

- Nan Wharton
- Bradley Bush
- Supervisor
- SPO CC
- Paula Munro
My Leadership Pledge

Defense Financial Management & Comptroller School

- I will be present. I will be concerned. I will be humble. I will be motivated. I will be competent. I will be generous.
- I will be there. And I will be ready.
My Leadership Challenge

Defense Financial Management & Comptroller School

- What does leadership mean to you?
- Why do you believe what you do about leadership?
- Who have you learned about leadership from?
- What kind of leader will you be?