UNITED STATES MILITARY ACADEMY
WEST POINT

SS201: Principles of Economics

Lesson 3: Consumer Choice Theory I

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Agenda

- Admin (5 min)

- In-Class Survey (10 min)

- Consumer Choice Theory

    - Application (20 min)

    - Intuition (15 min)

    - Science (20 min)

Admin

- Issue Analysis Essay

  - Topic due 27SEP

- PS1

  - Cengage due NLT 07 2359 SEP
  - Handout due in class 08SEP

- Questions from last night's reading / pre-class assignment?

Consumer Choice Theory - Application

More is always better?

- 1 x volunteer
- 3 x groups
  - Group Leaders: 5, 3, 2, 1, 6

Number corresponds to alphabetic order of last name in class

Consumer Choice Theory - Application
Conclusions

1. More is <u>ALWAYS</u> better. Assuming ...

2. More is <u>ALWAYS</u> better, **but not as good.**

                        Diminishing Marginal Utility??

Consumer Choice Theory - Intuition

My happiness boils down to two things...

- **Scarcity:** What I can afford...AKA...Budget Constraint

- **Preferences:** What I want...AKA...Utility Function / Indifference Curves

Consumer Choice Theory - Intuition

My Budget as a 2LT working Summer Training...

What can I afford? (Scarcity)

Income

Base Pay = $3,477.30

USMA BAH = $2,118.00

Deductions

Taxes/SGLI (15%) = $839.30

Take Home Pay

$4,756

Monthly Budget

Item	Amount
Cow Loan	$756
Rent	$1,250
Utilities	$300
Savings (20%)	$1,000
Food	$750
Gas	$200
Entertainment	$500
TOTAL	**$4,756**

Consumer Choice Theory - Intuition

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Dinner Decisions

Two choices, assume you value both the same...

1. Carne Asada Burrito

2. Chicken, Bacon Sensation

How does your spending change if...

- the price of beef doubles?

- your income doubles?

- income and both goods increase by 10%?

Consumer Choice Theory - Science

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TOTAL	**$4,756**

Budget Constraint

$$I = p_1 x_1 + p_2 x_2$$

Dinner Decisions

Burrito vs. Sandwich

Utility Function

$$U(x_1, x_2) = x_1^{\frac{1}{2}} x_2^{\frac{1}{2}}$$

Consumer Choice Theory - Science
Deriving the Demand Curve

Assumptions

Preferences are <u>Complete</u>

- An agent can compare any two things within a set

Preferences are <u>Transitive</u>

- If $A > B$ and $B > C$, then $A > C$

Budget Constraint

$$I = p_1 x_1 + p_2 x_2$$

Utility Function

$$U(x_1, x_2) = x_1^{\frac{1}{2}} x_2^{\frac{1}{2}}$$

Let's maximize $U(x_1, x_2) \ s.t. \ I = p_1 x_1 + p_2 x_2$

Next time...

We'll derive the supply curve

Talk through different types of goods