

# “Practice” Attendance

- ▶ Uses Secure attendance
- ▶ If you can successfully enter code, tophat correctly set up
- ▶ If not, look at links in Canvas, reach out to tophat support as needed

– TH Module 2

Graphical Q 1

– TH open ended  
questions

# What is Economics?

A question with many answers and no “answer”



# Economics is not just math

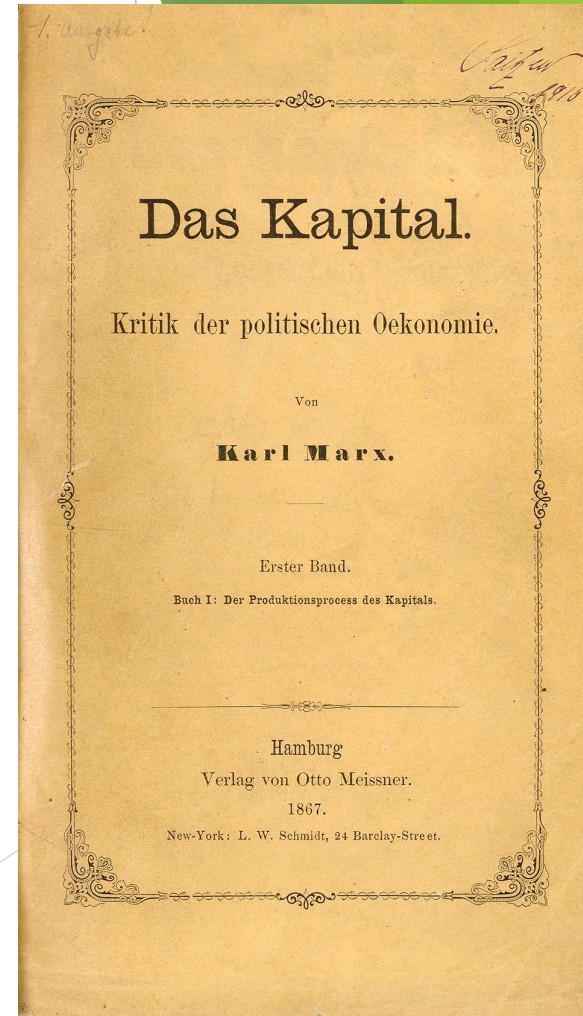
- ▶ We will use a few math skills
  - ▶ Percentage change
  - ▶ Equation of a line
  - ▶ Solving systems of equations
- ▶ Cannot just learn steps for every type of problem
  - ▶ Need intuitions/explanation

# Economics is not just philosophy

- ▶ Many concepts can be reasoned out
  - ▶ Need math to calculate actual values
  - ▶ Can help with missed intuitions
- ▶ Most economic ideas can be:
  - ▶ Explained in words
  - ▶ Explained in equations
  - ▶ Explained on graphs

# Economics is not an endorsement/condemnation

- ▶ Does not prove/disprove any economic system as “best”
- ▶ Does not support/argue against any political party/philosophy
- ▶ Does give us tools to analyze actions





# Study of Scarcity

- ▶ Motivates the need for an “Economy” : System to allocate scarcity
- ▶ Ever present
  - ▶ What goods/services will always be scarce?

Natural resources

- Oil
- Water
- Land

Healthcare

Labor

# Study of Scarcity

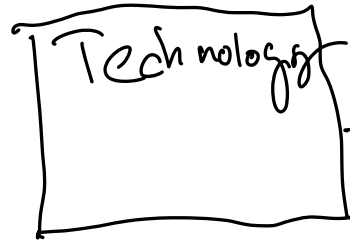
- ▶ Motivates the need for an “Economy”
- ▶ Ever present
  - ▶ What goods/services will always be scarce?
    - ▶ Van-Gogh paintings
    - ▶ Beach-Front Property
    - ▶ Donor Kidneys
    - ▶ The world’s “Best surgeon”
    - ▶ Time



# Study of Scarcity

- ▶ Inputs turned into outputs using “technology”
- ▶ Technology: Ability to turn inputs into outputs (“know how”)
  - ▶ Scarce inputs → Scarce outputs
    - ▶ Land (T) : Natural resources (Endowed / Not Created by humans) Non-tangible
    - ▶ Labor (L) : Human element (quantity [ # workers / hours ] Not quality)
    - ▶ Capital (K) : Anything physical used in production (Not T or L)

Oven  
Eggs  
Sugar  
Flour  
Baker



Cookies

Recipe



# Study of Scarcity

- ▶ Motivates the need for an “Economy”
- ▶ Ever present
  - ▶ Scarce inputs → Scarce outputs
    - ▶ Land (T)
    - ▶ Labor (L)
    - ▶ Capital (K)

# Study of Scarcity

- ▶ Opportunity cost: what I give up to take an action  
Value of your next best option
  - ▶ Does not go on a ledger
  - ▶ Does influence behavior
- ▶ "There is no such thing as a free lunch"

# Study of Scarcity

- ▶ "There is no such thing as a free lunch"

- ▶ What people think it means:

Salespeople trying to  
sell you something

- ▶ What economists "mean":

O. C. matter

# Economics is not purely monetary

- ▶ Barter systems ; Economics w/o currency
- ▶ Kidney Market [Alvin Roth](#)
- ▶ Behavioral economics
  - ▶ [Freakonomics](#)
  - ▶ [Minimum wage and drunk driving](#)
- ▶ “Psychic benefits”
  - ▶ Altruism
  - ▶ Bequests

# Study of “Unintended Consequences”

- ▶ People respond to incentives

- ▶ Self-interest: Doing what is preferable for the individual

- ▶ Societal Interest: Doing what is preferable for the group

# Study of “Unintended Consequences”

Lost “Practice”  
Attendance

- ▶ People respond to incentives

- ▶ Cobra effect
- ▶ Boars
- ▶ Driving limitations
- ▶ Cheese



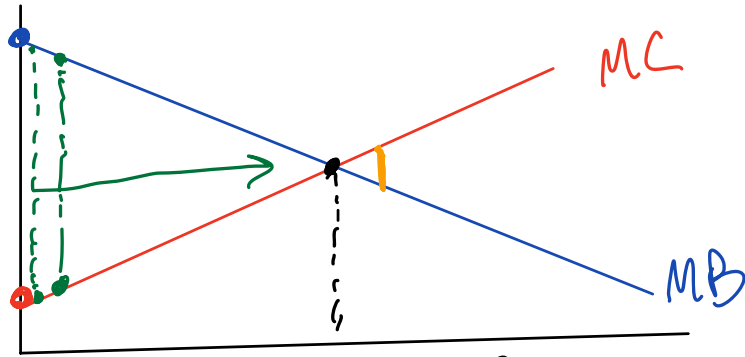
# Study of “Marginality”

- ▶ Marginal: **Additional** (to the smallest possible degree)
  - ▶ Marginal Cost:  
The cost of an additional action
  - ▶ Marginal Benefit: The benefit of an additional action



# Study of “Marginality”

- ▶ Economic thinking -> People act “on the margin”
  - ▶ Pistachio Room



$P^{\text{Pistachio}^*}$   
 $MC = MB$

$Q$  of Pistachios





# Study of “Marginality”

- ▶ Economic thinking -> People act “on the margin”
  - ▶ Who here decided to go to college for four years?

# What economists do

- ▶ Model Building
  - ▶ Model qualities
    - ▶ Tractable
      - ▶ Simple enough to use/understand
      - ▶ “Perfect model”
    - ▶ Predictive
      - ▶ Tells something non-trivial
      - ▶ Forecasting the next recession



# What economists do

- ▶ Model Building
  - ▶ Model qualities
    - ▶ Tractable
      - ▶ Simple enough to use/understand
      - ▶ “Perfect model”
    - ▶ Predictive
      - ▶ Tells something non-trivial
      - ▶ Forecasting the next recession
  - ▶ “Kit Bashing”



# Notes about Economics

- ▶ Assumptions for the sake of tractability
  - ▶ Start with the simplest model
  - ▶ -Ceteris Paribus
    - ▶ “all other things equal”
    - ▶ Pretend we had experiments
  - ▶ Theory Gas Price $\uparrow$  will cause Amount of gas bought $\downarrow$ 
    - ▶ Datapoint: Memorial day weekend
      - ▶ Observed Price $\uparrow$  will cause Amount of gas bought  $\uparrow$
      - ▶ Theory wrong?

# Notes about Economics

- ▶ Assumptions for the sake of tractability

- ▶ Start with the simplest model

- ▶ People act “rationally”

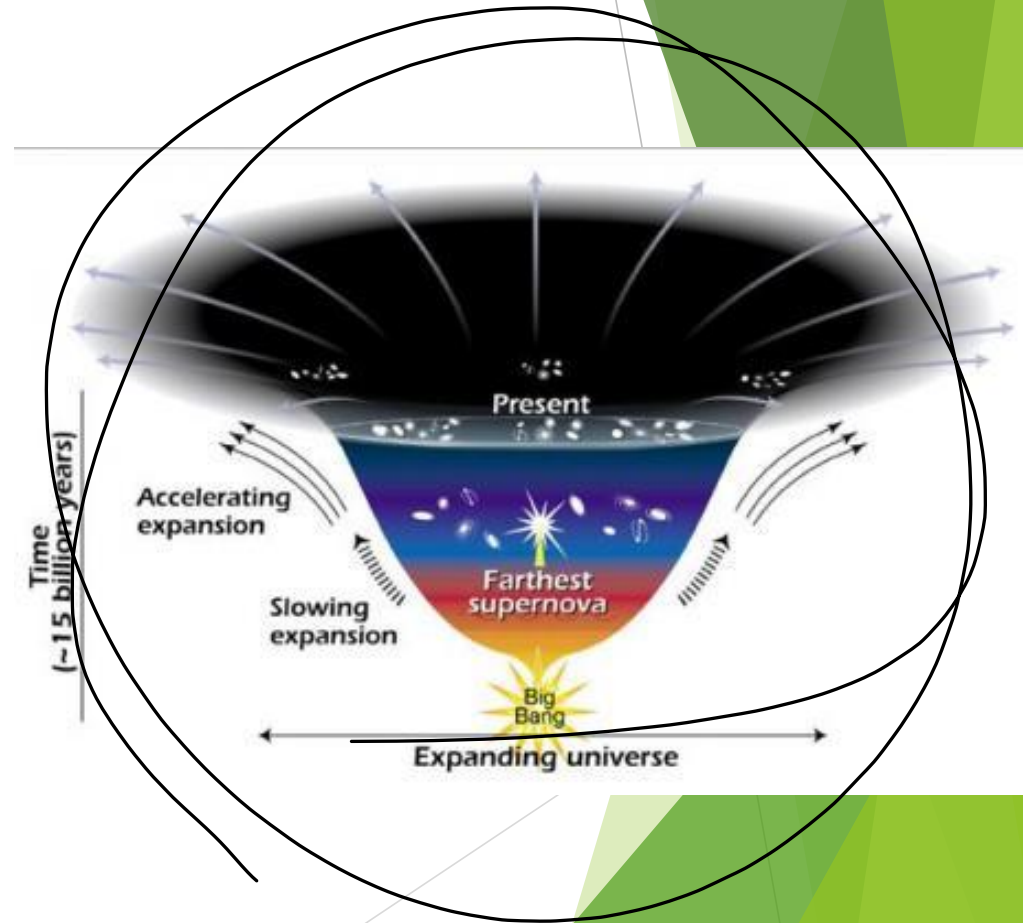
People do what they “know” is  
“best” for themselves

- ▶ People act “purposefully”

People do what they guess  
will satisfy them

# What economists do

- ▶ Empirical analysis
  - ▶ Story Telling
  - ▶ Correlation vs causation
    - ▶ Spurious correlation



# What economists do

- ▶ 2 general “fields”
  - ▶ Microeconomics
    - ▶ Interactions between “individuals”
      - ▶ Markets
      - ▶ Sectors
      - ▶ Industries
    - ▶ Labor
    - ▶ Health
    - ▶ Industrial Organization

# What economists do

- ▶ 2 general “fields”
  - ▶ Macroeconomics
    - ▶ Study Whole economies or systems
      - ▶ Dynamic Effects of many “individuals”
    - ▶ Monetary
    - ▶ Financial
    - ▶ Growth and Development