

# 1 Basics

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ECO202 Spring 2019

January 29, 2019

# Outline

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1. What is Microeconomics?
2. Prices
3. Theory and Models

# **What is Microeconomics?**

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# Micro means small units

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Small units:

- Individual consumers
- Workers
- Firms
- Firms in single markets

All these units need to make **decisions**

# Decisions involve trade-offs

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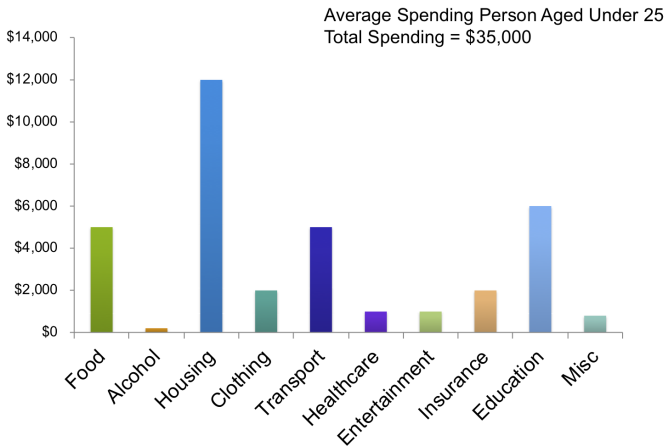
Trade-offs:

- Individual consumers: buy pizza, not pasta
- Workers: pull extra shift, not sleep-in
- Firms: hire labor, not robots
- Firms in single markets: compete, not collude

Constrained by income, time, budget, other firms

Every decision is a **constrained optimization**

# Your spending patterns



# Prices

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# Prices are determined in markets

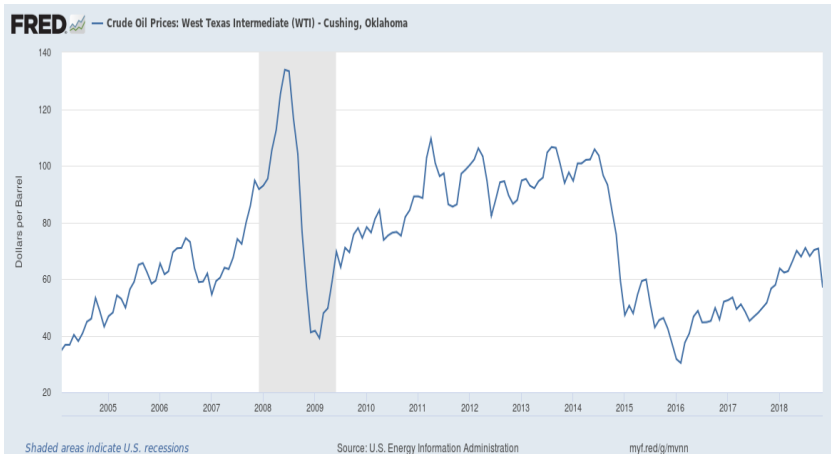
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- **Supply function:** decisions of firms about how much to produce given expected market price
- **Demand function:** decisions of consumers about how much to buy given expected market price

Equilibrium of  $S=D$  determines market price  $P$

Need to understand how firms and consumers decide

# Crude oil prices fluctuate a lot



# Prices are signals

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Price of oil tells:

- Consumers what they have to give up to get oil
- Producers how much profit they will make if they sell oil
- Producers of substitute energy sources how much profit they might make

# Higher prices = bigger effect?

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If you want better quality, should you just pay more?

Factors influencing effort to do task (=quality):

- Money \$
- Enjoyment E
- Image I

If \$ or E or I go up, effort should go up

# Paying more may not yield higher quality

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Increasing \$ may reduce E or I

Offering extra \$ may signal negatively to worker:

- Job is terrible or not valued (E falls)
- They are not trusted (I falls)
- They are 'just in it for money' (I falls)

If you want a high quality date:

- Buy them flowers? (their E and I rise)
- Pay them? ( $\Delta E < 0$ ,  $\Delta I < 0$ )

# How to increase quality=effort

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Avoid paying extra when \$ reduces (or only weakly increases) quality

Understand the importance of image  $I$ :

- Home energy saving ( $I=0$ )
- Buying a hybrid car ( $I=?$ )
- Paying too little ( $\Delta I < 0$ )

# Should schools pay students to study?

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Studies show that big enough incentives for school students:

- Can increase attendance
- Do not boost effort or grades
- Have negative effects when removed (\$ gone, E and I do not go back up)

Why does \$ work for attendance?

# Why does \$ work for school attendance?

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- **Opportunity cost:** Many poor students would otherwise have to work
- **Contract success:** Attendance is a verifiable task students know how to do
- **Risk aversion:** Students might be uncertain what the grade-\$ relationship is

# Are prices important?

In most situations: **Pay! \$! Price matters!**

Money payments can be:

- Big
- Varied a lot
- Flexible

But:

- Discontinuity: 'Pay enough or don't pay at all'
- \$ can offset E and I

# Theory and Models

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# Theories are stories

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- They are ways of explaining and predicting observed phenomena
- They are based on assumptions and rules

Good theories accurately **explain** and **predict** important economic outcomes

# Models are theories in math

- They are deliberately simple
- Models are combinations of functions

$$S_x = f(P_x, w_{skilled}, w_{unskilled}, r_{robot})$$

$$D_x = f(P_x, P_{subx}, P_{comp_x}, M)$$

- Put correct arguments in each function
- Arguments need accurate parameter values

# Theories and models are amoral

- They are not evaluated based on niceness
- Theories and models are evaluated based on how well they predict and explain
- **Positivism:** what the world actually looks like; how it actually works
- Normative economics: how the world should be (Are prices *just*? Is *usury* allowable?)

**Any Questions?**

What is Microeconomics?

Prices

Theory and Models