# Economics CONSUMER CHOICES

#### Ch.6 OUTLINE

01

6.1: Consumption Choices

02

6.2: How
Changes in
Income and
Prices Affect
Consumption
Choices

03

6.3: Behavioral Economics: An Alternative Framework for Consumer Choice

## Investment Choices

 Higher education is generally viewed as a good investment, if one can afford it. Is spending on education only considered beneficial during the good times, since incomes decrease during recessions?

(Credit: modification of "Commencement" by roanokecollege/Flickr, CC BY 2.0)

### 6.1 Consumption Choices

Budget constraint - shows the possible combinations of two goods that are affordable given a consumer's limited income.

**Total utility** - satisfaction derived from consumer choices.

#### **Consumption Choices**

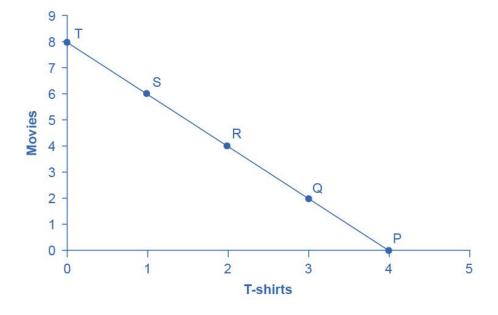
Marginal utility - the additional utility provided by one additional unit of consumption.

 Diminishing marginal utility - the common pattern that each marginal unit of a good consumed provides less of an addition to utility than the previous unit

$$MU = \frac{\text{change in total utility}}{\text{change in quantity}}$$

## A Choice between Consumption Goods

- José has an income of \$56.
- Movies cost \$7 and T-shirts cost \$14.
- The points on the budget constraint line show the combinations of movies and Tshirts that are affordable.



#### A Rule for Maximizing Utility

 Marginal utility per dollar - the additional satisfaction gained from purchasing a good given the price of the product.

$$= \frac{\text{marginal utility}}{\text{price}}$$

• If you always choose the item with the greatest marginal utility per dollar spent, when the budget is exhausted, the <u>utility maximizing choice</u> should occur where the marginal utility per dollar spent is the same for both goods.

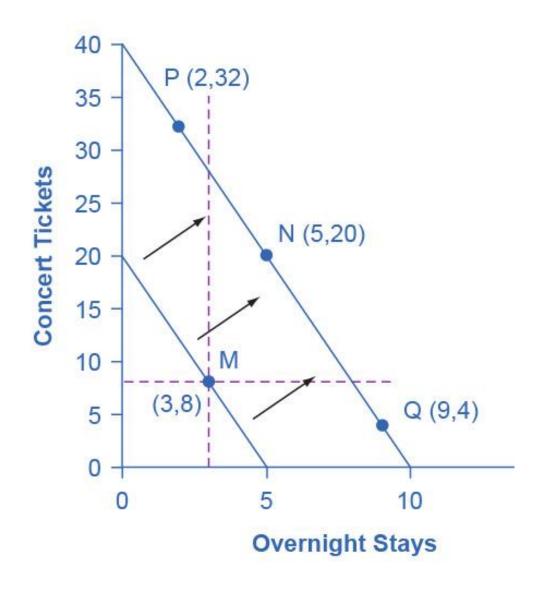
$$\frac{MU_1}{P_1} = \frac{MU_2}{P_2}$$

## 6.2 How Changes in Income and Prices Affect Consumption Choices

- Income, prices, and preferences affect consumer choices.
- Utility and marginal utility can also be used to analyze how consumer choices change when the budget constraint shifts in response to changes in income or price.

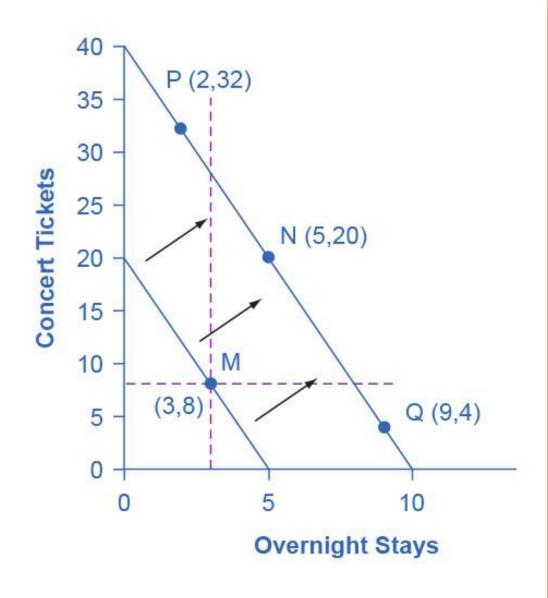
### Example - Concert Tickets vs. Overnight Getaway when Income Increases

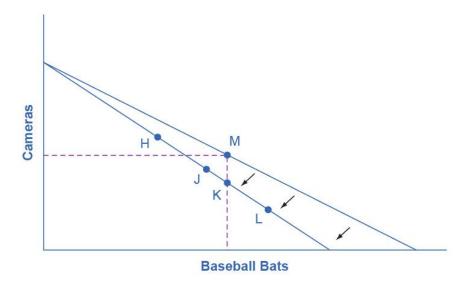
- The utility-maximizing choice on the original budget constraint is M.
- The dashed horizontal and vertical lines extending through point M allow you to see whether the quantity consumed of goods on the new budget constraint is higher or lower than on the original budget constraint.



#### Example - Concert Tickets vs. Overnight Getaway when Income Increases, Cont.

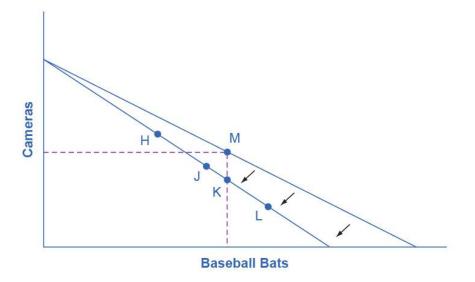
- On the new budget constraint, a choice like N will be made if <u>both</u> goods are <u>normal</u> goods.
- If <u>overnight stays</u> is an inferior good, a choice like P will be made.
- If <u>concert tickets</u> are an inferior good, a choice like Q will be made.





## Example - How a Change in Price Affects Consumption Choices

- The original utility-maximizing choice is M.
- When the price of bats rises, the budget constraint rotates inward.
- The dashed lines make it possible to see whether the new consumption choice involves less of both goods, or less of one good and more of the other.



# Example - How a Change in Price Affects Consumption Choices, Continued

- The new possible choices would be <u>fewer</u> baseball bats and <u>more</u> cameras, like point H, or less of both goods, as at point J.
- Choice K would mean that the higher price of bats led to exactly the <u>same</u> <u>quantity</u> of bat consumption, but <u>fewer</u> cameras.
- Possibly, but unlikely, would be choice L since it would mean a higher price for bats lead to a greater consumption of bats.

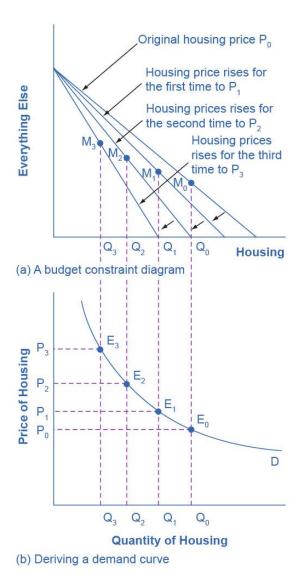
### Response to Higher Prices

- The typical <u>response to higher prices</u> is that a person chooses to <u>consume less of the product with the higher price</u>.
- This occurs for two reasons:
  - Substitution effect when a price changes, consumers have an incentive to consume less of the good with a relatively higher price and more of the good with a relatively lower price; always happens simultaneously with an income effect
  - Income effect a higher price means that the buying power of income has been reduced, even though actual income has not changed; always happens simultaneously with a substitution effect

# The Foundations of Demand Curves

- Changes in the price of a good lead the budget constraint to rotate.
- A <u>rotation</u> in the budget constraint means that when individuals are seeking their <u>highest utility</u>, the quantity that is demanded of that good will change.
- In this way, the logical foundations of demand curves (a connection between prices and quantity demanded) are based on the underlying idea of individuals seeking utility.

#### The Foundations of a Demand Curve: An Example of Housing



- In (a) as the price increases from  $P_0$  to  $P_1$  to  $P_2$  to  $P_3$ , the budget constraint on the upper part of the diagram rotates inward.
- The utility-maximizing choice changes from  $M_0$  to  $M_1$  to  $M_2$  to  $M_3$ .
- As a result, the quantity demanded of housing shifts from  $Q_0$  to  $Q_1$  to  $Q_2$  to  $Q_3$ , ceteris paribus.
- The demand curve (b) graphs each combination of the price of housing and the quantity of housing demanded, ceteris paribus.
- The quantities of housing are the same at the points on both (a) and (b).
- Thus, the original price of housing  $(P_0)$  and the original quantity of housing  $(Q_0)$  appear on the demand curve as point  $E_0$ .
- The higher price of housing (P<sub>1</sub>) and the corresponding lower quantity demanded of housing (Q<sub>1</sub>) appear on the demand curve as point E<sub>1</sub>.

### 6.3 Behavioral Economics: An Alternative Framework for Consumer Choice

- The <u>traditional economic</u> models assume rationality.
- People take all available information and make <u>consistent</u> and <u>informed</u> decisions that are in their best interest.
- Assumes human beings have complete self control.
- Fungible units of a good are capable of mutual substitution with each other and carry equal value to the individual.

### **Behavioral Economics**

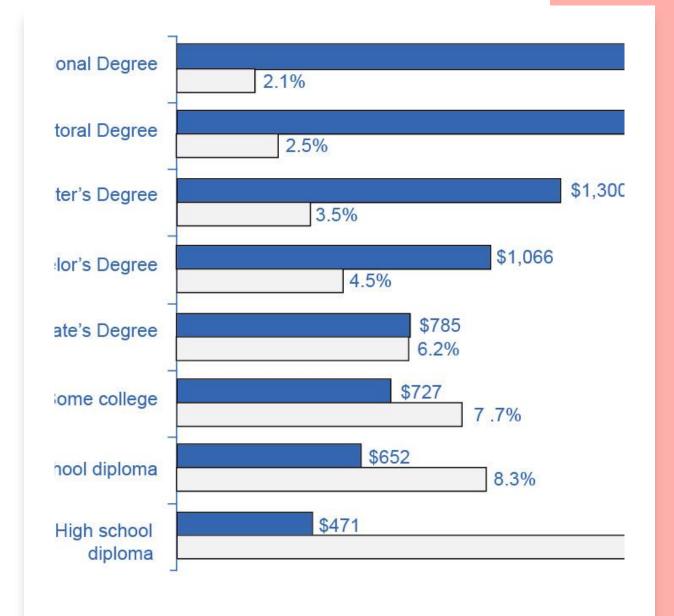
- Behavioral economics takes into account people's state of mind.
- Seeks to enrich our understanding of decision-making by integrating the insights of psychology into economics.
- Investigates how given dollar amounts can mean different things to individuals depending on the situation.
- This can lead to decisions that appear outwardly inconsistent, or irrational, to the outside observer.

### Is Education Worth It?

- Discussion Question: Why spend the money to go to college during a recession?
- If you are unemployed (or underemployed, working fewer hours than you would like), the opportunity cost of your time is low.
- If you are unemployed, you don't have to give up work hours and income by going to college.
- Do you think the data supports the idea that more education means less unemployment?

## The Impact of Education on Earnings and Unemployment Rates, 2012

- There is a positive correlation between earnings and education.
- Those with the <u>highest degrees</u> in 2012 had substantially <u>lower</u> <u>unemployment</u> rates
- Those with the <u>least formal</u> <u>education</u> had the <u>highest</u> <u>unemployment</u> rates.
- The national median average weekly income was \$815, and the nation unemployment average in 2012 was 6.8%. (Source: Bureau of Labor Statistics, May 22, 2013)



Credits: Greenlaw, S. A., Shapiro, D., & MacDonald, D. (2022). *Principles of economics* (3rd ed.). OpenStax. <a href="https://openstax.org/books/principles-economics-3e">https://openstax.org/books/principles-economics-3e</a>