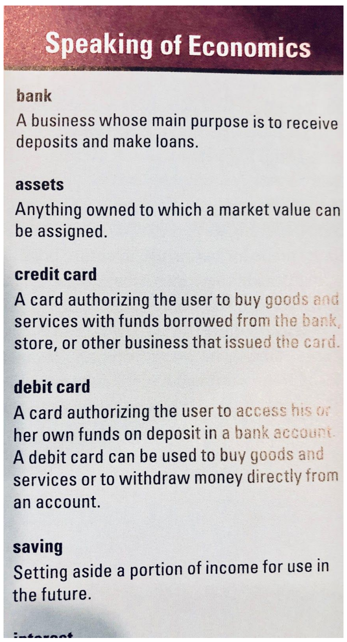
UNIT 0

Chapter 8
Money, Banking, Saving and Investing

8.1 Introduction



Speaking of Economics

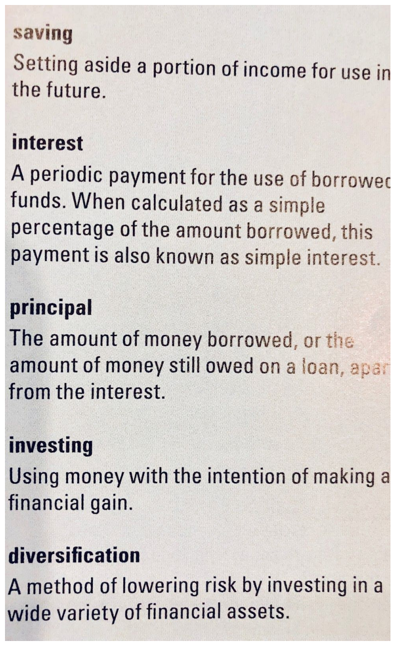
bank
A business whose main purpose is to receive deposits and make loans.

assets
Anything owned to which a market value can be assigned.

credit card
A card authorizing the user to buy goods and services with funds borrowed from the bank, store, or other business that issued the card.

debit card
A card authorizing the user to access his or her own funds on deposit in a bank account. A debit card can be used to buy goods and services or to withdraw money directly from an account.

saving
Setting aside a portion of income for use in the future.



saving
Setting aside a portion of income for use in the future.

interest
A periodic payment for the use of borrowed funds. When calculated as a simple percentage of the amount borrowed, this payment is also known as simple interest.

principal
The amount of money borrowed, or the amount of money still owed on a loan, apart from the interest.

investing
Using money with the intention of making a financial gain.

diversification
A method of lowering risk by investing in a wide variety of financial assets.

The opening is about this guy (red paper clip guy)
https://www.youtube.com/watch?v=8s3bdVxuFBs

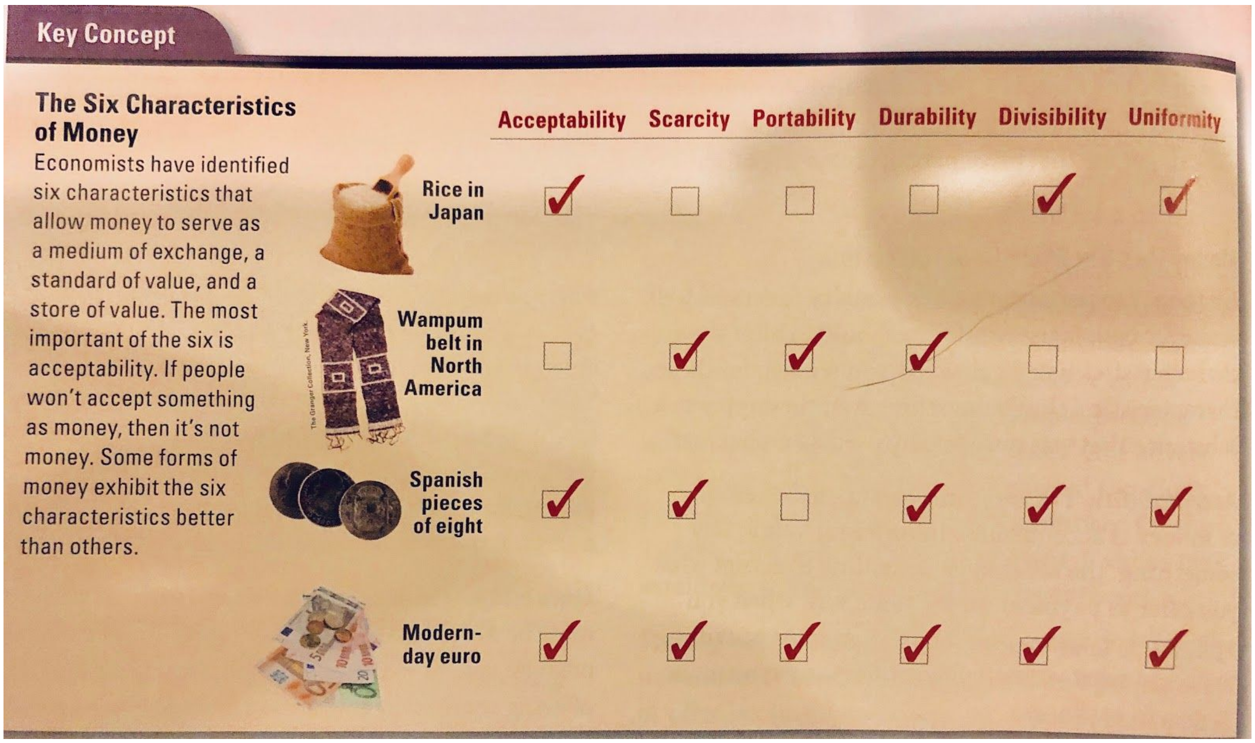
8.2 What Makes Money... Money?

Money has three basic functions
Medium of Exchange: It enables us to easily trade with others.
Standard of Value: Money serves as a standard of value which allows us to measure and compare the value of various goods.
Store of Value: Something is a store of value if it holds its value over time.

*Legal tender; the established medium of trade
**Purchasing power refers to the quantity of goods and services that can be bought with a particular sum of money.

Money has six characteristics
Acceptability: sellers and buyers must agree that the money being used is acceptable.

Scarcity: the money must be scarce, for example, historically items like salt, gold, and silver were used as mediums of trade.
Portability: It must be portable (easy to carry)
Durability: It must be able to withstand physical wear and tear.
Divisibility: Money must be easy to divide.
Uniformity: They must be identical or close to being identical.



Key Concept

The Six Characteristics of Money

Economists have identified six characteristics that allow money to serve as a medium of exchange, a standard of value, and a store of value. The most important of the six is acceptability. If people won't accept something as money, then it's not money. Some forms of money exhibit the six characteristics better than others.

	Acceptability	Scarcity	Portability	Durability	Divisibility	Uniformity
Rice in Japan	✓	☐	☐	☐	✓	✓
Wampum belt in North America	☐	✓	✓	✓	☐	☐
Spanish pieces of eight	✓	✓	☐	✓	✓	✓
Modern-day euro	✓	✓	✓	✓	✓	✓

History of Money
A Commodity - a good that has value in trade.

As trade flourished in Europe during the Renaissance, wealthy merchant and nobles needed a safe place to store their gold and silver, ***banks****, a business that receives deposits and makes loans began to emerge.*

In exchange for gold/silver, the banks would give back ***bank notes****, promising an exchange whenever the holder wanted to have silver or gold back. This was what economists cal* ***commodity backed money or representative money.***

Today, governments print their own money, this is known as ***fiat money.*** *For example, the US government backs the USD, not gold or silver.*

A **credit card** is not regarded as a form of money, this is because credit is borrowed money which is to be returned later on. To the contrary, **debit cards** are not owed money, its taking money out of your bank account to pay for goods.

Skip 8.3 and 8.4

8.5 HOW DO AMERICANS INVEST THEIR SAVINGS?

Skip the first section, and start from page 151:

In general, there is a strong association between risk and reward when it comes to investments. As in,
High risk -> potentially high returns
Low risk -> usually lower returns than high-risk investments

Compounding refers to the ability of an investment to generate earnings that can be reinvested to earn still more earnings. Banks make this happen through interests.

FDIC-Insured Savings and Government Bonds: The Safest Investments
One of the lowest risk investments is government bonds.
A bond is a loan in which the borrower promises to pay the lender a fixed rate of interest over the term of the loan and then repay.

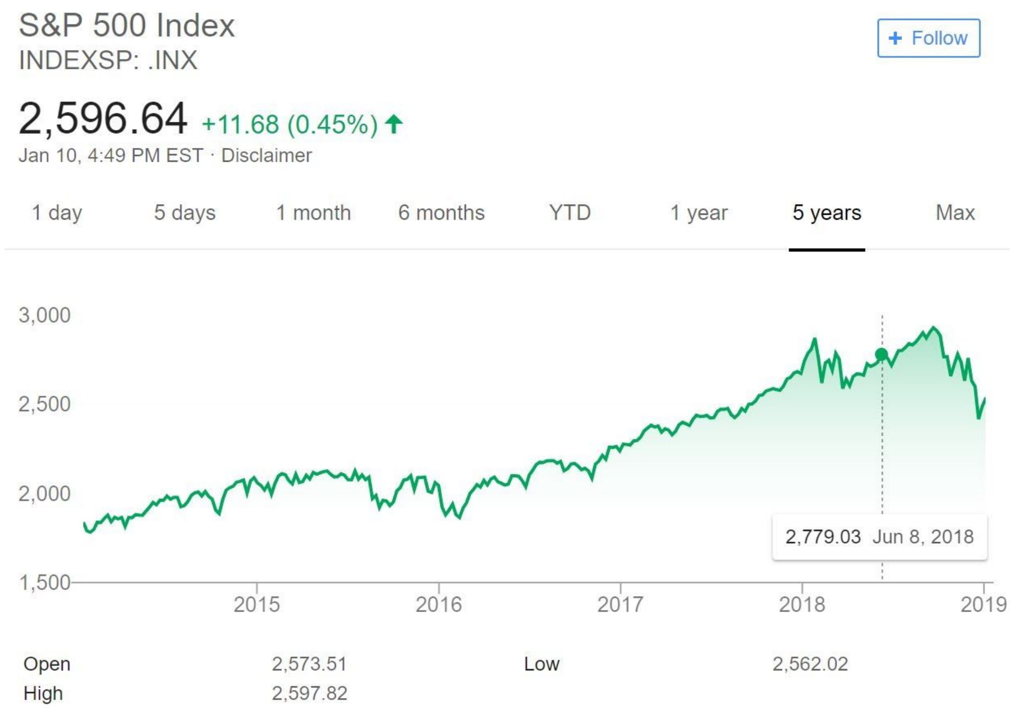
Local state governments also issue bonds in order to gain money to build projects such as schools, buildings, bridges, and highways. This is known as a **municipal bond**.

Corporate Bonds: Moderate Risk for More Return
Like governments, corporations may borrow money. Corporate bonds are riskier, and the amount of risk simply depends on the status of the company you are lending money to. If the company has a strong history and stable business and revenue flow, you have a lower risk in comparison to a newer less stable company.
The higher quality companies are rated as AAA (B is lower), and at the bottom are **junk bonds**, these are bonds which are classified the lowest level with the highest risk.
Stocks:
Stocks are securities that represent ownership in a business.
When a company issues shares of a stock, the investors become shareholders.

As part owners of a company, shareholders have a right to receive a portion of the firm's profits, this is known as dividends.

Investors who buy non-dividend -paying stocks assume that the price of the stock will rise as the company grows in size.

Stocks have offered investors a higher return rate than bonds.



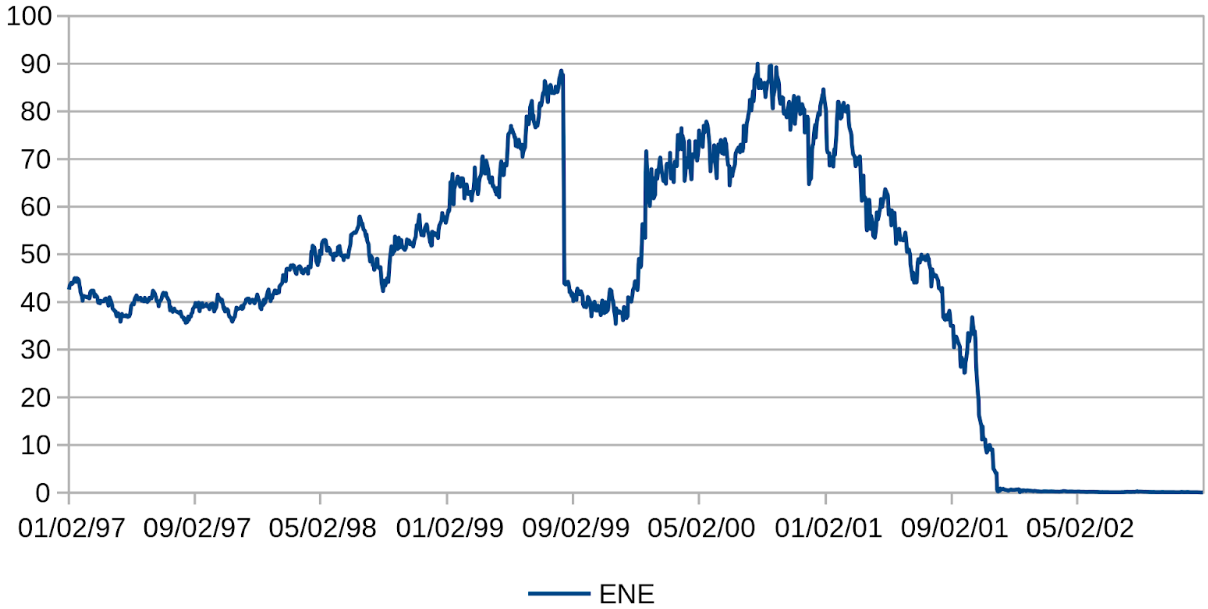
Bull Markets, steady upward growth in the market.
Bear Market, steady downward drop in the market.

*Even well-managed companies can have bad years and see prices plunge. <u>There are no guarantees</u>.

For example,

Enron Stock Price, 1997-2002

Source: Enron Securities Ligitation website



The most common way to invest in stocks is through **brokerage companies** that help buy and sell for investors.

Brokerages employ **stock brokers** to help investors make and carry out with decisions.

The actual buying and selling of stocks and bonds take place at the **stock market**, the most famous being the New York Stock Exchange at Wall Street New York City.

NASDAQ, also handles billions of shares per day of trade.

The Securities and Exchange Commission (The SEC) regulate the stock market and make sure that all investors have access to the same financial information.

Firms provide such information in a legal document known as a **prospectus**.

The SEC has been accused in the past for not doing enough in regards to regulation, especially in regards to the 2008 financial crisis.

Mutual Funds

A **Mutual Fund** is a collection of securities chosen and managed by a group of professional fund managers.

It is a popular way to invest because the firms **diversify** the investments. Meaning that they buy a wide variety of financial assets and as a result mitigate risk.

For example, investing in four companies alone can be risky. One company could go bankrupt or have simply a poor year, and that could seriously hurt returns. Whereas if you are investing in 1,000 companies. Some will do better than others, but overall, the market generally goes upward 5-8%, meaning that you will most likely gain profits (It varies from year to year, but generally speaking, the market goes up beyond the rate of inflation).

Market Index, measures changes in the value of a group of stocks, bonds and other investments.
The most often quoted ones are, The Dow Jones Industrial Average and Standard & Poor's 500.

Chapter 10
Human Capital and the Labor Market

10.1 Introduction SKIP

10.2 What Trends are Shaping Today's Labor Market?

New technology has often been a primary driving force in changing the job market.

5 Ways Digital Technology is Changing your Job

"We are preparing students for jobs that do not even exist yet" (Something I often hear from friends who teach at IB schools).

Labor Force, people over the age of 16 who are working or are actively seeking work. (Who would then not be considered, not actively seeking? For example, a lady who got pregnant left her job and went back to work for a few years, but then decided to be a full-time Mother. She would have the necessary skill sets, and is over the age of 16, **but not part of the labor force**. It also does not include **military members or prisoners**).

The force continues to grow in the millions, although the average age continues to grow older, which is a concern.

Shift from Manufacturing to Service
The number of workers involved in factory jobs has declined. This shift towards service started with the Industrial Revolution.
Economists expect this trend to continue.

+ In productivity meant fewer workers were needed.
+ Some jobs have been outsourced to places like China and India

Knowledge Workers
Are growing in importance. This is a type of person who works with information or who develops or apply information in a workplace.
For example, computer programmers, teachers, lawyers, and scientists.

Increased Outsourcing, Temping, and Telecommuting

1. More jobs are being "**outsourced**" as in business send work to another company to complete for them.
2. The use of **temporary workers** has increased.

3. **Telecommuting** is another growing practice, this is where workers communicate primarily by phone, email and will work from home.

Globalization
Globalization is the process by which people around the world, along with their economic activities, are becoming increasingly interconnected.
One key aspect of globalization is the growing practice of **offshoring** or relocating work and jobs to another country.
-This can happen in two ways, one way is for an American firm to move operations to another country OR contact a company in another country, and outsource the job to them (For example, if I make tshirts. Instead of relocating and creating a tshirt factory in Vietnam, I could contact a tshirt creating company there, and have them work for my company, and pay them. This makes sense as long as it saves my company money).

Fasted Growing Occupations in 2018
1. **Solar Photovoltaic Installer**
2. **Wind Turbine Service Technician**
3. **Home Health and Personal Care Aide**
4. **Physician Assistant**
5. **Statistician and Mathematician**
6. **Nurse Practitioner**
7. **Physical Therapist Assistant and Aide**
8. **Software Developer, Application**
9. **Bicycle Repairer**
10. **Medical Assistant**

(Other +25% growth industries. Forest Fire Inspector, Physical Therapist, Massage Therapist, and Genetic Counselor).

10.3 What Determines How Much Workers Earn?

How do companies decide how much money to pay different workers?
What determines one's “worth” in the marketplace?

Wages Reflect the Value of What Workers Produce
A number of factors influence wage. One has to do with skill.
Unskilled: These jobs require no specialized skill, and earn a low hourly wage (Examples janitor, busboys, farm workers, CU staff).
Skilled: Workers need little or no supervision and require some type of specialized skill, for example, police officers, carpenters, bank tellers and factory workers (Who operate machinery).

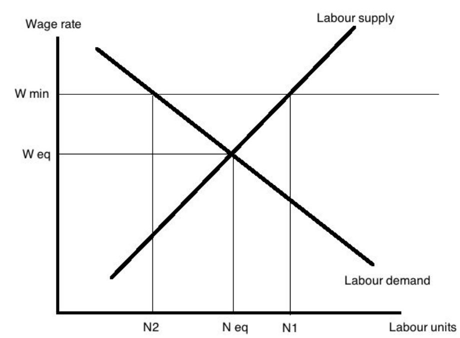
<u>Professional:</u> This is the level considered “White collar”. This job is based on a “salary” and is not hourly pay. Examples include doctors, teachers, dentists, pilots, lawyers, accountants.

As skills increase. So do wage.
More productive workers tend to receive higher wages than less productive workers, although this ranges greatly based on the job. For example, a salesman would most likely get compensated for efficient work, where as an efficient nurse may not see this on her paycheck.

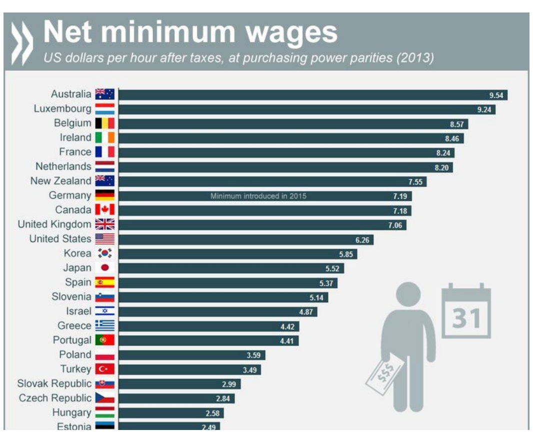
Competitions can also raise or lower pay.
For example, if there are three companies who want the same worker, one may offer $13.00/hr, another $15.00/hr, another $18.00 hr, simply to pay more than the first two.
The reverse can also happen. If there are 3 people who want the same job at one company, one may be willing to work as low as $7.00 /hr, another $5.00 / hr, and another at $4.00. In this scenario, the company may go with the $4.00 option to save money.

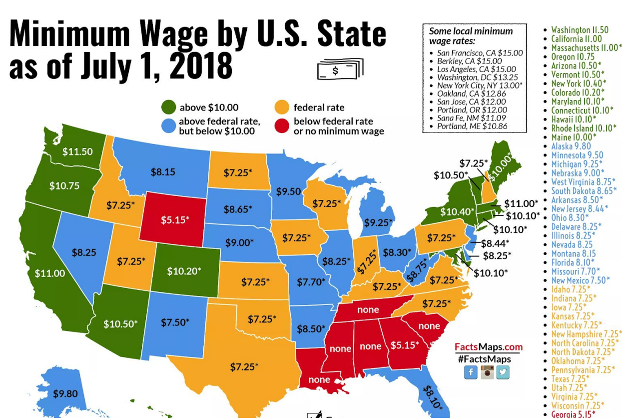
Supply and Demand in the Labor Market

1. Demand for labor comes from businesses and government,
2. Demand changes with the economy, the better the economy, more labor is demanded,
3. Increase in demand tends to boost wages,
4. Wages fall when the supply of labor increases, but demand decreases,
5. Wages are especially low when you have many people willing to work for low pay (and end up dropping each other's wages),
6. Immigration decreases wages for unskilled laborers,
7. **Equilibrium wage** is a wage rate that results in neither a surplus nor a shortage of qualified workers. If the wage for a job is too high, a surplus of workers will apply for the job and employers will lower the wage.



Other Factors
Minimum wage laws:
The government sets minimum wages, which means businesses must pay <u>above</u> or <u>at</u> the minimum wage, but not below.





Working Conditions
Jobs with stressful working conditions pay more. For example, fishing crews in Alaska earn far more than average, because of the stressful and dangerous situation. Similarly, policemen in more dangerous areas, like Oakland, California, earn significantly more than a policeman who works in a safe suburb in Colorado.

OAKLAND, CALIFORNIA:
The average is **$64,410** as of December 28, 2018, but the range typically falls between **$60,150** and **$70,175**.
BOULDER, COLORADO:
The base salary for Police Patrol Officer ranges from **$52,079** to **$60,759** with the average base salary of **$55,768**.

Location and Cost of Living
The cost of living is higher in California than the most of the USA.
Therefore, the same jobs in California in comparison to Alaba will often be higher.
For example, the average teacher salary in California, $62,000.
The average salary for a teacher in Alabama, $50,000.

FRINGE BENEFITS
Fringe benefits, are non wage compensations offered to workers in addition to their pay. These often include health insurance, paid vacation time and retirement plans.

The cost of such benefits has risen in recent years.
In 1980, in the USA, employers spent $60 billion on health insurance for workers.
In 2010, this number skyrocketed to $560 billion.

***Foreign Competition**,* at the global level has also led towards wages dropping. For example, some types of manual labor, can be cheaper overseas, therefore, companies will relocate or ask workers domestically to work for lower wages.

Wage Gap: SKIP

<u>10.4 How Can You Increase Your Human Capital</u>

<u>DEVELOPING YOUR HUMAN CAPITAL IS A LIFELONG PURSUIT!</u>

Becoming Qualified
Education is one of the main routes to developing human capital.
Higher education may also qualify you for certification or licensing to practice a particular profession.

Certification is an official recognition that a person is qualified in his her field.
For example, doctors must be certified to practice medicine.

Education will also help you earn more money. The difference in wage paid between a college graduate and high school graduate has continued to grow, and will continue to grow each year.

Gaining Work Experience
Another way to increase your human capital is through experience. Through work experience, you can increase your job skill and human capital.
However, keep in mind, that it is difficult getting that first job without experience. You will have to apply for an “entry level” position, and build up from there.

Increasing Personal Productivity: Effort and High Standards
The level of energy and enthusiasm a work erbring to work can increase their human capital.
In some jobs, workers are rewarded based on how much they produce.

Building a Personal-Professional Network
People can develop human capital through building a professional network through joining associations, and by joining to groups of people in a similar industry.

<u>10.5 The Role of Unions in the Labor Market SKIP</u>

UNIT 1

Chapter 1
Human Capital and the Labor Market

1.1 Introduction

Adam Smith wrote The Wealth of Nations. Smith observes, that "Every man is rich or poor according to the degree in which he can afford to enjoy the necessaries of conveniences, and amusements of human life".

1.2 What is Economics All About?

Economics does utilize graphs, numbers and equations. However, the core of economics lies in understanding human behavior, and understanding why people do what they do.

Economic enigmas are puzzles or riddles which could be explained through economic analysis.

For example, small questions such as, "Why is popcorn at the theater more expensive than popcorn at the grocery store?" or larger concepts such as "Why do Americans tax so much for car tires and tobacco, but so little for bananas"?

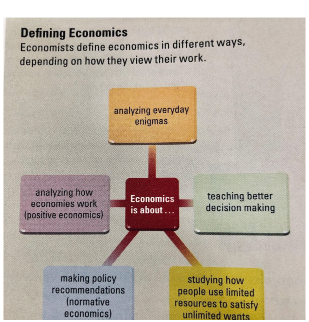
How People Use Limited Resources

A **resource** is anything used to produce an economic good or a service. Resources are **limited** (services and products).
Despite sources being **scarce**, people have unlimited wants.
MICROECONOMICS: How economic decisions are made by individuals, households and businesses.
MACROECONOMICS: focuses on how economics as a whole work.

Science of Decision Making

Economics is the science of decision making.
Why do people pay $70,000 for an expensive BMW? Why would someone who makes the same income choose to buy a $20,000 KIA instead? What type of factors affect their decision making.

Define Economics



Positive Economics & Normative Economics
Example prompt "What impact will increase enrollment, salary increases, and rising maintenance costs have on next years budgets?
*Example prompt **#2**, "What actions should we take now to reduce expenses in order to balance next year's budget?"*

POSITIVE ECONOMICS: Gather facts about the number of new classes needed to cope with rising enrollment, the salaires of the school employees, maintenance costs, and other expenses.
NORMATIVE ECONOMICS: Gather the facts but also, analyze the various choices the school board has for cutting costs. Having laid out the choices, they would then recommend where to cut costs.

1.3 What Seven Principles Guide an Economic Way of Thinking

Principle 1: Scarcity Forces Tradeoffs
Our desires are unlimited, but our resources are scarce.
Since there is scarcity we will always be forced to make **tradeoffs**, giving up one thing to get another.

Economists have another name for this scarcity-forces-tradeoffs principle **no-free-lunch principle**. Even if the lunch was free to you, someone had to pay for the meal and had made the choice to make it free.

We make these decisions of trade offs every day. Some larger than others.

For example, going to line A vs. line B for lunch, going to line A, means you cannot enjoy the food at line B. Or it can be a large decision, such as choosing between going to a University in the United Kingdom or the USA. By choosing the UK over the USA, you are losing many opportunities you may have had by going to the USA, and vice versa.

Principle 2: Costs Versus Benefits
The scarcity-forces-tradeoffs principles forces us to make choices.
The **cost** is what you spend, it does not have to be **money**, it could also be time, effort or other sacrifices.
The **benefits** are what you gain from something in terms of money, time, experience or other improvements in your situation.
To compare these two is known as **costs-versus-benefits principle.**

Like Principle 1, this is part of our everyday life.
Do you buy the popcorn alone for 3,000 KRW or do you get the popcorn + cola set, because it is only +1,000 KRW, even though you are not especially excited about the cola, you figure you might get thirsty and should get the drink now, instead of buying it later for +2,000 KRW.

Principle 3: Thinking at the Margin
This principle tells u that most of the decisions we make each day involve choices about <u>a little more or a little less of something rather than making a wholesale change</u>.

Making decisions at the margin involve comparing <u>marginal costs to marginal benefits</u>.

For example, if you study for 3-hours for an economics test, is studying an extra 30-minutes worth it? The answer to this question would vary depending on the individual. For some, 3-hours is enough to get their goal score, and would love to get that extra 30-minutes of sleep. While for others, they may find that extra 30-minutes crucial to raise their potential test score, and will sacrifice 30-minutes of sleep to improve their chances of doing well on the test the next day.

Principle 4: Incentives Matter
Incentives, something that motivates a person to take a particular course of action.

Incentives come in many forms, positive and negative. Teachers use points and grades as positive incentives, and could use demerits as negative incentives.

Often, finances are closely linked to incentives. For example, if you go over the speed limit by a little bit (Let's say 5-miles an hour) in most states, the fine is often nominal, under $100. If the same driver goes over the speed limit in the same lane, but this time by 20-miles an hour, now the fine could be hundreds of dollars, and the driver may have to take hours of online courses as part of his/her fine.

Principle 5: Trade Makes People Better Off
Why don't we make our own clothes? Grow our own food? The answer is quite simple, through trade, everyone's life becomes better. It makes sense for people to concentrate on what they do best, and then trade. This is known as the **trade-makes-people-better-off principle**, that by focusing on what we do well and trade makes everyone's lives better.

Principle 6: Markets Coordinate Trade
A **market** is any arrangement that brings buyers and sellers together to do business with each other.
Markets are <u>most efficient without government intervention.</u>

Adam Smith would use the metaphor of the **invisible hand** guiding human affairs to explain how the markets regulate themselves with buyers and sellers.

Principle 7: Future Consequences Count
The **future-consequences-count principle** tells us that decision made today have consequences not only for today but also in the future. This is important, because often many decisions are made for the moment, and do not take into account future ramifications.

The **law of unintended consequences** states that actions of states and governments always have effects that are not expected.

1.4 What Tools Do Economists Use?

Economists, like other scientists, rely on the scientific method to study how the world works.

For example, they may utilize **the scientific method**, where they will pose a question, research the question, develop a hypothesis, conduct studies, analyze these studies and evaluate their hypothesis.

Scientists have to rely on a lot of "natural experiments", since unlike many of the hard sciences, there is no hard evidence there, and you cannot monitor human beings the way you would of a test-rat.

Graphs represent the visual information of two sets of data.
A **variable** is a quantity which can vary or change on a chart.

Economic Models: Simplified Representations of Reality
An **economic model** is a simplified representation of reality that often allows economists to focus on the effects of one change at a time.

One widely accepted descriptive model is called *homo economicus*. This in Latin for "economic man," although it applies to all human beings. It also is called the **rational-behavior model.** This model is a tool for understanding the mystery of human behavior.

This model focuses on human self-interest. Smith believes that despite everyone working in their own self-interest, that ultimately this leads towards the advancement of society overall.

However, keep in mind that this sometimes does not take into account matters such as social values and charity, where people are selfless.

[Financial Costs and Benefits of College (Khan Academy)]

[Should Everyone Go to College? (Forbes)]()

Chapter 2
Economic Decision Making

2.1 Introduction

Why do even millionaires have to make choices? Why can no one get *<u>everything</u>* *they want? Even those with various skills, for example, famous artist Mick Jagger had to decide whether or not to finish his bachelor's degree at the London School of Economics or pursue a career in music. Another example would be the Oakland A's owner Billy Beane. In his teens, he had to make the decision to pursue a fully tuition paid degree at Stanford University or pursue a professional baseball career with the New York Mets.*

2.2. Why is What We Want Scarce?

Our Wants Always Exceed Our Resources

Time for example is a limited resource, whether rich or poor financially, we all only have 24-hours a day which we can use.

With Resources Limited, Scarcity is Everywhere

Goods, are physical objects produced for sale.
Services, are activities done for us by others.

Shortages Are Temporary, While Scarcity Is Forever

A **shortage** is a lack of something is desired, a condition that occurs when there is less of a good or service available than people want at a current price.
Shortages are usually temporary and can be caused by external actions such as war and natural disasters, or simply because there is more demand than supply.

2.3 How Do We Satisfy Economic Wants?

Inputs, Outputs and the Production Equation

Inputs are the scarce resources that go into the process. Economists call these productive resources the factors of prodcution and divide them into three basic categories: land, labor and capital.

Factors of Production are three categories; land, labor and capital.

Outputs are the goods and services produced using these resources.

Land + labor + capital = goods and services

Some economists consider **entrepreneurship** the willingness to take the risks involved in starting a business.

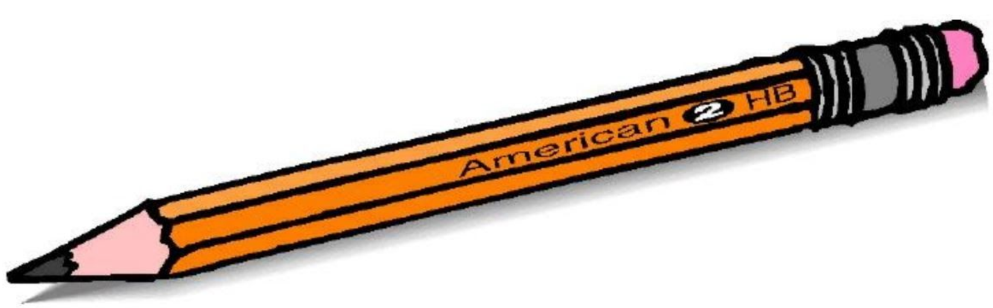
Land is far more than real estate, it means all of the “gift of nature” which include minerals, waters, plants, and animals. Which can be replaced as they are used.

Perpetual Resources, are both used and widely available, and have no danger of running out.

Analyze a pencil

1. Most pencils are made of cedar wood. Cedar can be found by the Great Lakes.
2. Pencil lead is made from a form of carbon called graphite. Graphite cannot be found easily in the U.S. It is mainly imported from Sri Lanka or parts of Canada.
3. This graphite is then mixed with wax and clay. This wax is found mainly in Mexico, while the clay is found in the Southern parts of the U.S.
4. Ferrule, which holds the eraser to the wood, is made up of zinc and copper. Zinc is found mainly in Canada, while copper is found mainly in Chile.
5. The eraser is composed of rubber, which comes from a rubber tree, seed oil, and pumice. Rubber trees are most abundant in the Democratic Republic of Congo in Central Africa. Seed oil is found in Indonesia and pumice is found in Italy.
6. The yellow color comes from a glossy lacquer made up of castor oil. Castor oil comes from seeds of the castor plant. This can be found in India.
7. Finally, the black lettering found on most pencils is made of carbon black. This can be found in Texas.

Given that some of the resources needed to make a pencil is not easily accessed in the U.S., the students should be advised that they have to think about transporting these goods to their pencil factory. They can use land, air, or water transportation methods.



<u>Labor Resources:</u>

Labor, the time and effort people devote to producing goods and services in exchange for wage This includes <u>both</u> physical labor and mental activities.

Human capital is the knowledge and skill that people gain from education, on-the-job training, and other experiences.

There is a **strong correlation** between a country's level of human capital and its standard of living. In contrast, the correlation between a country's natural resources and living standards is weak. This explains why nations like Denmark have on average a high level of human capital in comparison to a poorer nation like Somalia.

Capital Resources: Tools, Machines, and Buildings

Money used for investment such as stocks, bonds, real estates and businesses are often referred to as **financial capital.**

Where as CAPITAL GOODS, refers to what helps produce the capital such as buildings, factories and machines.

Putting It All Together: Entrepreneurship

<u>Entrepreneurs perform four major roles.</u>

1. *Innovator:* Entrepreneurs think of new inventions, technologies and techniques to create more goods and services.
2. *Strategist:* Entrepreneurs supply the vision and make the key decisions that set the course for new business enterprises.
3. *Risk Taker:* Entrepreneurs take on the risk of starting new businesses.
4. *Sparkplug:* Entrepreneurs supply the energy, drive, and enthusiasm needed to turn ideas into realities?

[Famous Entrepreneurs]

(Oprah, Walt Disney, J.K. Rowling, Steve Jobs, Rockefeller for example).

Working Smarter Boosts Productivity

Productivity is the measure of the output of an economy per unit of input.

Productivity = Output / Input

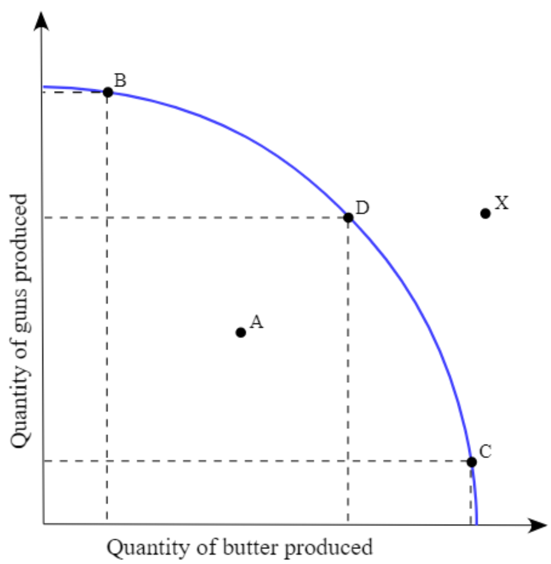
2.4 What Do We Give Up When We Make a Choice

Utility, is the satisfaction or pleasure one gains from consuming a product or service.

Utility is not limited to fun activities, for example, getting a vaccination increases the chances of your well-being, meaning you will have a greater opportunity to engage in activities you want to. It increases your utility.

Trade Offs: What We Give Up When We Choose

Like individuals, business face tradeoffs as they try to maximize the utility of their land, labor, and capital.
Societies also face tradeoffs, for example, the classic term of "guns-versus-butter".



Opportunities Cost: The Best Thing We Give Up to Get What We Want

Opportunity cost, of any action is the value of the next best alternative that you could have chosen instead.

Figure 2.4

Identifying Tradeoffs and Opportunity Costs

This decision matrix shows the tradeoffs associated with each of three purchase alternatives.

- Buying at a big box store is cheapest. Choose this if you are happy to trade off your time for money.
- Downloading online is fastest. If you choose this, your opportunity cost will be the money you could have saved had you chosen the next best option.

Video-Game-Purchase Decision Matrix

	Price	Delivery Cost	Transaction Time	Delivery Time
Online download	$44.95	$0	5 minutes	7 minutes for download
Online store	$39.95	$3.00 (shipping)	10 minutes	1 week for shipping
Big box store	$35.95	$4.00 (gas money)	1 hour or more	none

Marginal utility, is the extra satisfaction or pleasure you will get from an increase of one additional unit of a good or service. One alternative in the scenario left you with more time compared to the others. Another left you with more money.

Law of diminishing marginal utility
According to this law, as the quantity of a good consumed increases, the marginal utility of each additional unit deceases.

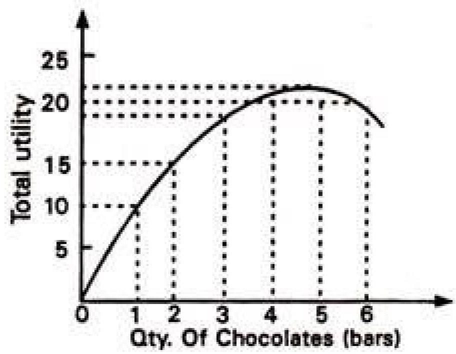


Fig. 4.1. Total Utility

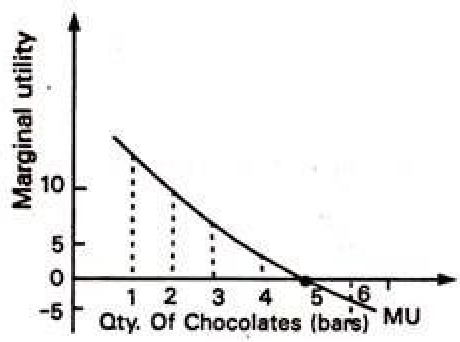


Fig. 4.2. Marginal Utility

<u>2.5 How Can We Measure What We Gain and Lose When Making Choices</u>

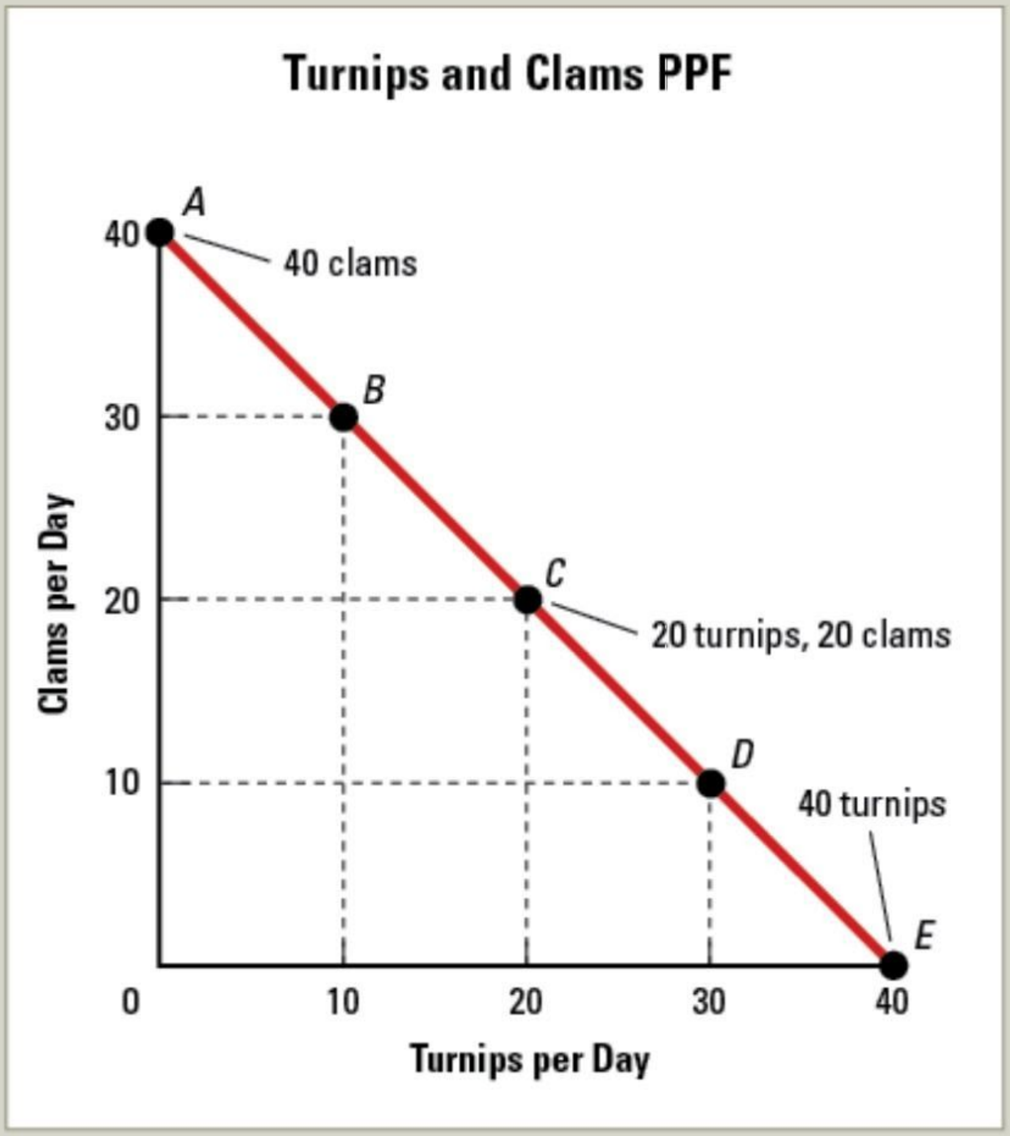
Production Possibilities Frontier (PPF)
Is an economic model, in the form of a line graph, that shows how an economy might use its resources to produce two goods. The graph shows all possible combinations of those goods that can be produced using the available resources and technology fully.

The **sloping line** shows what is known as the **production possibilities curve**.

Analyzing PPFs and Tradeoffs

Selkirk's production possibilities frontier shows all the combinations of turnips and clams that his one-person economy can produce.

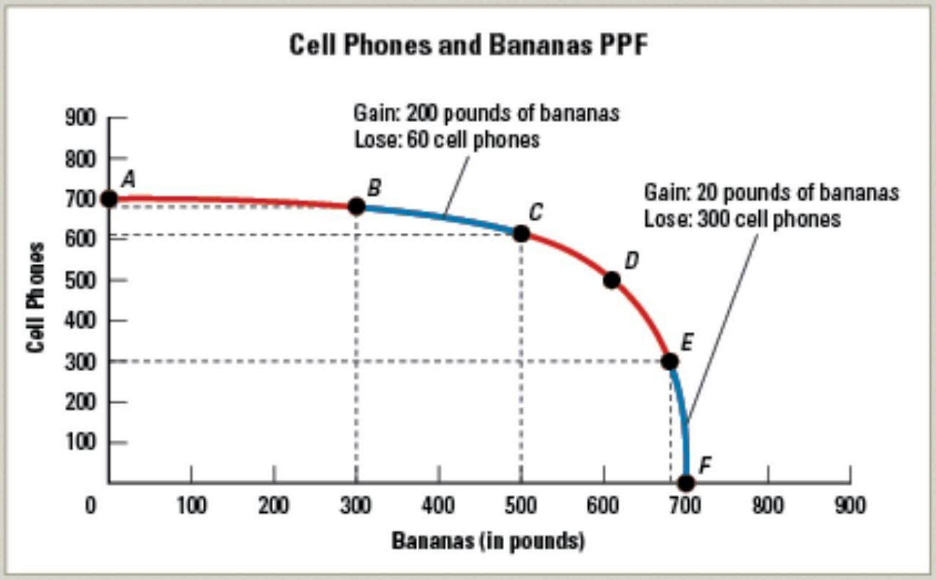
- At Points *A* and *E*, Selkirk devotes his time to producing just one food, either 40 clams or 40 turnips.
- At Point *C*, he divides his time evenly between turnips and clams. His tradeoff compared to Point *A* is a loss of 20 clams in exchange for a gain of 20 turnips.



Analyzing PPFs and Opportunity Costs

The shape of this PPF indicates that the opportunity cost of producing more of one product is greater at some points along the curve than at others.

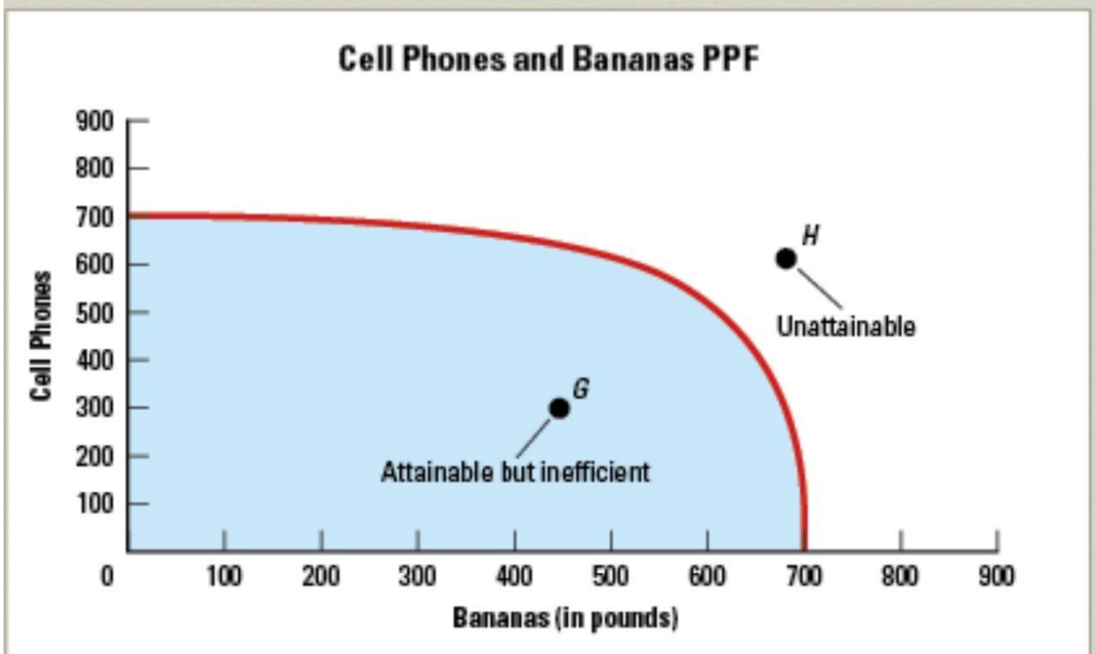
- Moving from Point *B* to Point *C* increases banana production by 200 pounds at the modest opportunity cost of 60 cell phones.
- Moving from Point *E* to Point *F* increases banana production by only 20 pounds at the much larger opportunity cost of 300 cell phones.



Analyzing PPFs and Efficiency

A PPF shows what an economy can produce using its resources as efficiently as possible.

- At Point *G*, the economy is not producing as many cell phones or bananas as it could.
- Point *H* represents a level of production that is not possible for this economy.



Economic efficiencies, shows how productions can be efficient or inefficient.

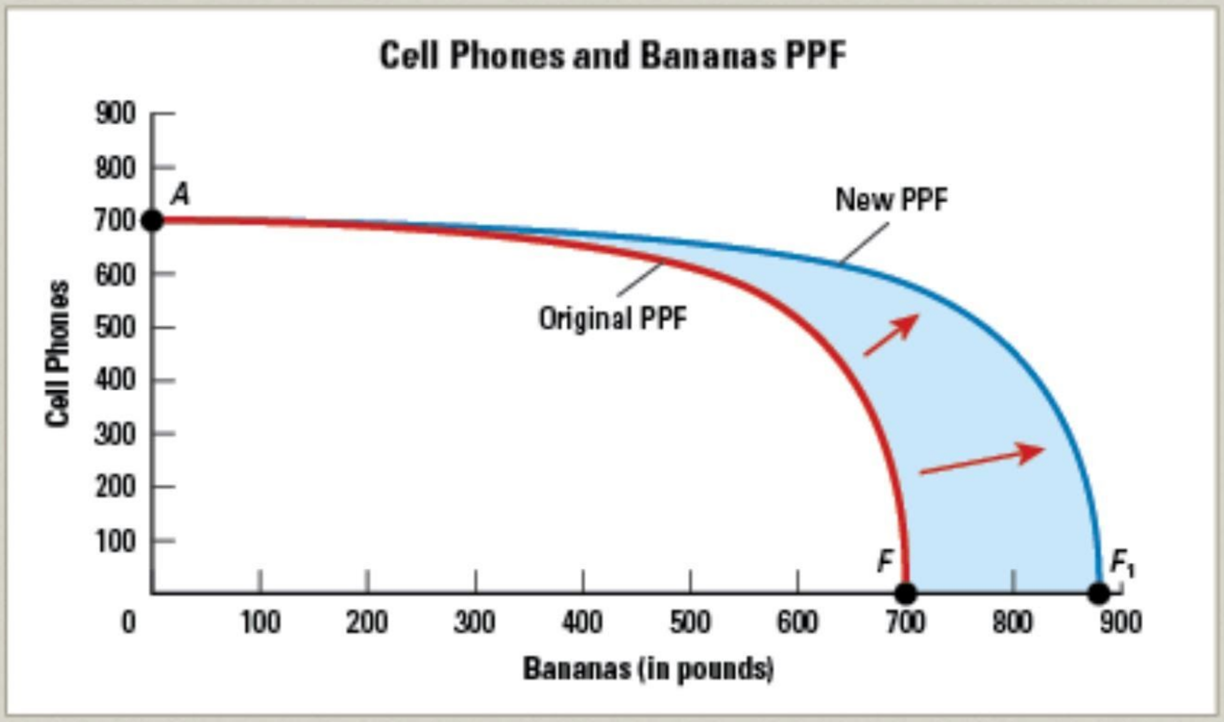
PPFs can also be used to see how productivity can look like with <u>increased or decreased amount of productivity</u>.

For example, with the bananas and cell phones, the PPF will shift to <u>**the right**</u> if the economy grows and/or productivity increases.

Analyzing PPFs and Changes in Productivity

Changes in productivity can shift part of a PPF to the right or left. In this graph, the productivity of banana plantations has been improved by the introduction of trees that bear more fruit. There is no change in the productivity of cell phone factories.

- Note that the PPF remains fixed at Point *A* while increasing between Points *F* and F_1.
- The productivity gains of banana growers can be measured anywhere along the curve by calculating the difference between the original PPF and the new PPF.

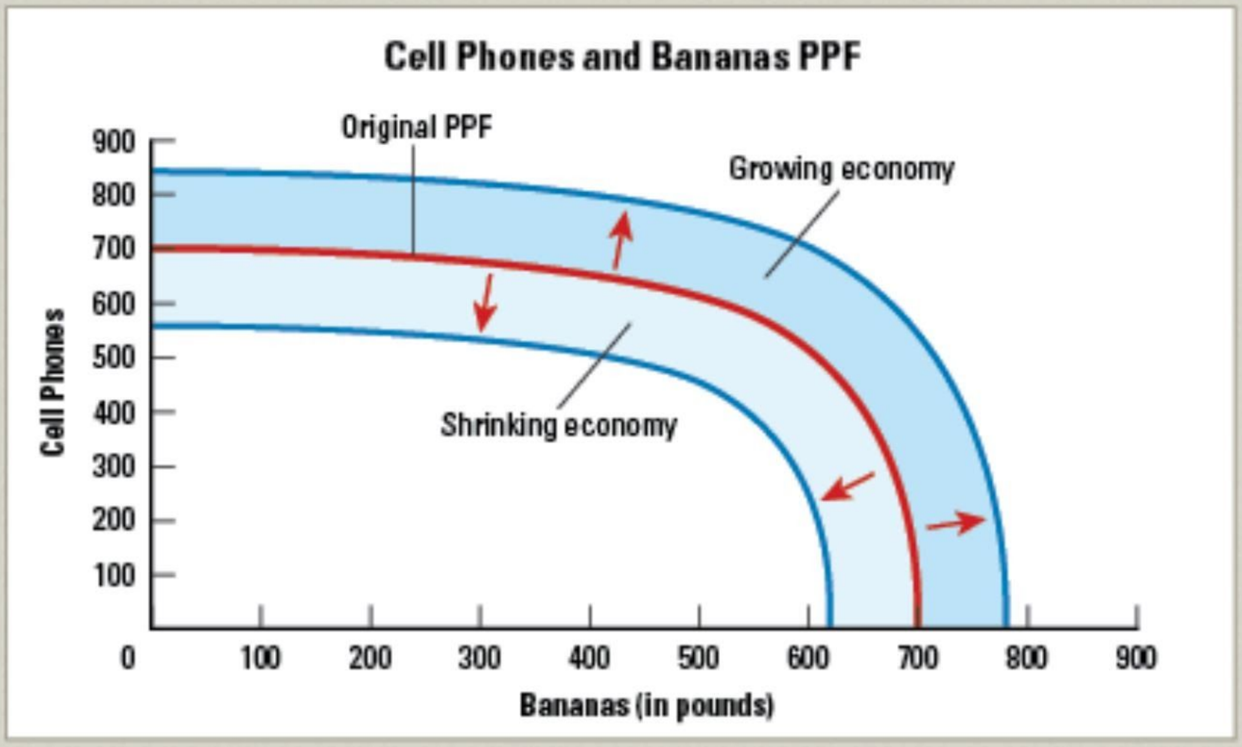


Note, what is interesting is <u>better production of bananas not only leads towards more production of bananas, but can potentially lead towards greater production of cellphones too given the increased overall efficiencies.</u>

Analyzing PPFs and Changes in the Economy

Changes in a country's economy can shift an entire PPF to the right or left.

- A shift to the right is good news. It means that output is expanding and the economy is growing.
- A shift to the left is bad news. It means that output is shrinking and the economy is heading into harder times.



Chapter 4
Gains From Trade

4.1 Introduction

SKIP

4.2 How Does Specialization Lead to Economic Interdependence

Specialization Improves Productivity

It is more efficient for individual workers to become highly skilled at specific tasks. This can be done through the **division of labor**, where workers are divided to complete individual tasks, and then trade.

City Densities Matter

Be mindful that this type of specialization does not work. If there are not enough people living together in one area. For example, in a rural area of Nepal, where you have a limited number of people, some may be expected to be able to both cook, hunt and build furniture.

Specialization Encourages Trades

In theory we could do many things ourselves. For example, we could raise our own livestock, and make our own meat and milk, but instead, we go to the supermarket to shop for these items.

The $1500 / Sandwich

A Further Analysis by Wendover Productions

Trade is a **voluntary exchange** in which both parties give up something in order to get something else they want.

The foundation of trade is mutual gain

In traditional economies, trade often takes the form of **barter**, the direct exchange of one good or service for another.

Money, is the a medium of exchange that can be traded for goods or services or used to pay debts. Money is useful only when its value is generally accepted throughout society.

Trade Creates Economic Interdependence

Trade leads to **economic interdependence**, when we specialize and trade, and we depend on one another for goods. This can be at the domestic or international level.

For example, the American Breakfast

(place image here)

States erect **trade barriers** between each other, which include tariffs and other measures to limit inter-state trade.

Example pros and cons

Higher tariffs

Winners	Losers
• Domestic industries - uncompetitive on world markets • Workers in these domestic industries. • Government tax revenue increases by small amount.	• Foreign exporters • Domestic consumers who pay higher prices. • Some domestic industries who see lower demand due to more spent on imports • Domestic exporters who experience retaliatory tariffs.

www.economicshelp.org

But is "free-trade" the answer?
"Sort of"

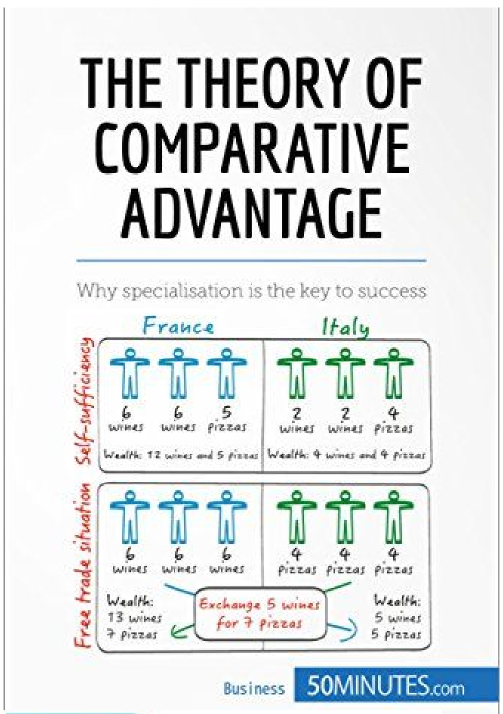
4.3 How Do People and Nations Gain from Specialization and Trade

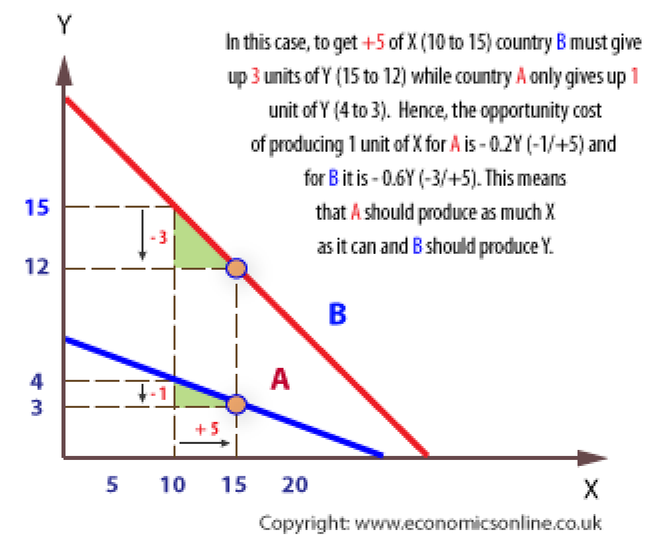
The Castaways Dilemma: Self-sufficiency or Interdependence

In the scenario where one is better at producing both (or multiple items) better than the other this is known as an **absolute advantage**. In this specific scenario working alone is better. This is the case for countries in some cases. For example, if the USA and Mexico are considering items for trade. It may be in the best interest for the USA when it comes to cars and computers, to produce those two items domestically since the USA has superior output in comparison to Mexico in both items, **an absolute advantage.**

Comparative advantage

the ability of an individual or group to carry out a particular economic activity (such as making a specific product) more efficiently than another activity.





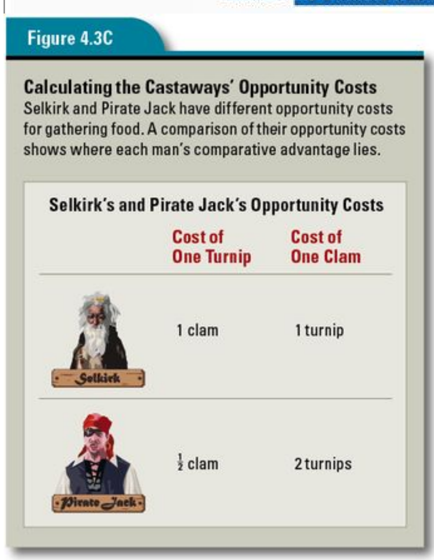


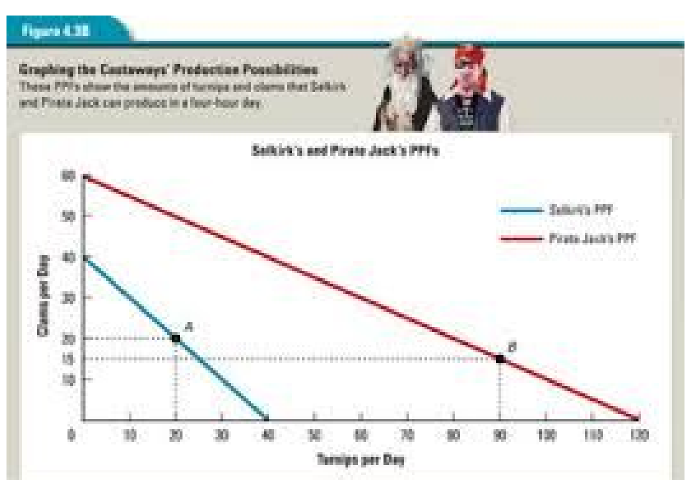
Figure 4.3C

Calculating the Castaways' Opportunity Costs

Selkirk and Pirate Jack have different opportunity costs for gathering food. A comparison of their opportunity costs shows where each man's comparative advantage lies.

Selkirk's and Pirate Jack's Opportunity Costs

	Cost of One Turnip	Cost of One Clam
Selkirk	1 clam	1 turnip
Pirate Jack	½ clam	2 turnips



This concept of absolute and comparative advantages apply to both
Individual-to-individual (micro-economics) and
Country-to-country (macroeconomics)

4.4 How Does Trade Make Us Wealthier?

Trade makes us wealthier in three ways.

1. It puts good in the hands of those who value them,
2. It increases the quantity and variety of goods,
3. It lowers the cost of goods.

1. It puts good in the hands of those who value them

Trade makes items more valuable. For example, at a micro-level, let's say you have a nice pair of new nike shoes that are size 9, but you wear size 11. Your friend wears a size 9, so he offers to trade it with a soccer jersey of a team that you like that he received as a gift from a friend who did not realize it was a team he did not like. Now, after the trade. You have a soccer jersey that you like and enjoy and can wear, and your friend now has a nice pair of new Nikes, which he can wear. Both items have increased in value.

2. It increases the quantity and variety of goods,

Through trade and specialization the range of goods you can get is increased. For example, the United states has many more options when it comes to cheese, because there are many more companies and options to trade cheese from in comparison to Nepal.

3. It lowers the cost of goods.

a. Comparative advantage helps everyone produce more,
b. A larger market means a greater chance for “mass production”, or the large scale manufacturing of goods.

Trade Creates More Winners and Losers

Overall, nations benefit across borders, however, it's good to keep in mind that not everyone gains from expanding global trade.
It can take away businesses for some, for some it may mean working for lower salaries, for wealthier countries it could mean factories closing and moving to cheaper areas for operations. Not everyone wins at an individual level.

<u>UNIT 2</u>

Chapter 3
Economic Systems

<u>3.1 Introduction</u>

SKIP

<u>3.2 Who Gets What? How Do Societies Decide?</u>

The larger and more advanced a society is the more numerous and complex these choices may be.

The Three Fundamental Economic Questions: What to Produce, How, and for Whom?
What to Produce?
What goods and services are most needed?
How should products be produced? Is it more efficient to import them from other countries? If they are made domestically, who will be in charge of these jobs? How much should they be getting paid?
Who are the services for? Distribution of products are never even. In this case, what factors do we have to take into consideration in regards to important goods like water and food, and whether or not everyone will have access to these items?

The Answers to These Questions <u>Depends on a Society's ECONOMIC GOALS</u>
Economic Freedom-Ability to make our own economic decisions without interference from the government.
Economic Efficiency-An economy which makes the most of the resources where consumers get what they want, employment is close to a 100%.
Economic Equity-fair and just distribution of society's wealth.
Economic Growth-desire to improve standard of living.
Economic Security-provide its less fortunate members with support in terms of food, shelter and health care to live decently.
Economic Stability-are jobs are stable and products.
<u>Most countries want a combination of these goals, but the primary goals could differ from country to country.</u>

For example, if we look at the concept of economic equity and stability;
Nordic countries such as Finland, Sweden and Norway are well known for policies which redistribute wealth to avoid anyone being homeless or poor in their countries.
While countries like China and the USA have massive inequality (But on the flip side, have enormous economic growth in comparison to nordic nations).

<u>3.3 Who Decides What in Different Economic Systems?</u>

An **economic system** is the way a society coordinates the production and consumption of goods and services.

Traditional Economies: Decision Making by Custom

Traditional economy, customs and traditions dictate what to produce, how to produce it, and for whom.

The only surviving ones today belong to indigenous people, for example the Maasai of East Africa, who live a semi-nomadic herding life, live off primarily cattle, and have a social and economic system based purely on tradition. Labor is divided by gender and often the social ranks of individuals are based on age and gender.

The goal of a traditional economy is <u>stability and security</u>.

They have been unable to adjust to the changing economy and changing way we trade in the world, and are shrinking or disappearing.

Command Economies: Decision Making by Powerful Rulers

In a **command economy**, decisions about what, how and for whom to produce are made by a <u>powerful ruler or some other authority.</u>

In ancient civilizations, examples would include places which had powerful kings, pharaohs, emperors who would command who gets what in their society.

The goal of a command economy is <u>to accumulate wealth and goods for the ruling class while preserving economic stability.</u>

Market Economies: Decision Making by Individuals

In a **free market economy**, the workings of the market are not planned or directed. No one-no single person, business or government agency tells producers or consumers what to do. All transactions are done voluntarily.

The goals of a market economy are <u>freedom and efficiency</u>.

The flow of money in a market economy is based on a **circular flow model**,

FACTOR PAYMENT: A wage, interest, rent, and profit **payment** for the services of scarce resources, or the **factors** of production (labor, capital, land, and entrepreneurship), in return for productive services.

These types of “market economies” arose in the 1700-1800s following the industrial revolution.

Individual investors called **capitalists,** grew wealthy by accumulating capital. The term **capitalism** came to be synonymous with the free market economic system.

But not everyone became wealthy. Many workers were forced to work in harsh conditions, for long hours, and made very little money in wages.

In 1848, economist Karl Marx published the *Communist Manifesto*, in which they advocated getting rid of capitalism and in place, use **socialism**. In socialism, the property is owned by society and everyone receives equal benefits.

The final phase of socialism, for Marx was communism, a political/economic system where all members of society are equal.

Modern Command Economies: Decision Making by the State
The first successful communist revolution took place in 1917, Russia. But it did not result in the equal society that Marx had envisioned, instead, the revolunaries formed an authoritarian government that pursued socialist goals with brutal force.
Economic planning was done by the government which decided the exact prices and goods that were to be produced, along with wages.
This, in theory, was meant to ensure economic **equity and security**, however, in reality they were not able to keep track of the millions of people. Wages were not determined by ability, so workers now had no incentives. Lazy workers did not work, and high level workers were refusing to work extra.

A Review of Three Economic Systems

Traditional	~~Equity~~	~~Efficiency~~	~~Freedom~~	~~Growth~~	Security	Stability
Command	Equity	~~Efficiency~~	~~Freedom~~	~~Growth~~	Security	~~Stability~~
Market	~~Equity~~	Efficiency	Freedom	~~Growth~~	~~Security~~	~~Stability~~

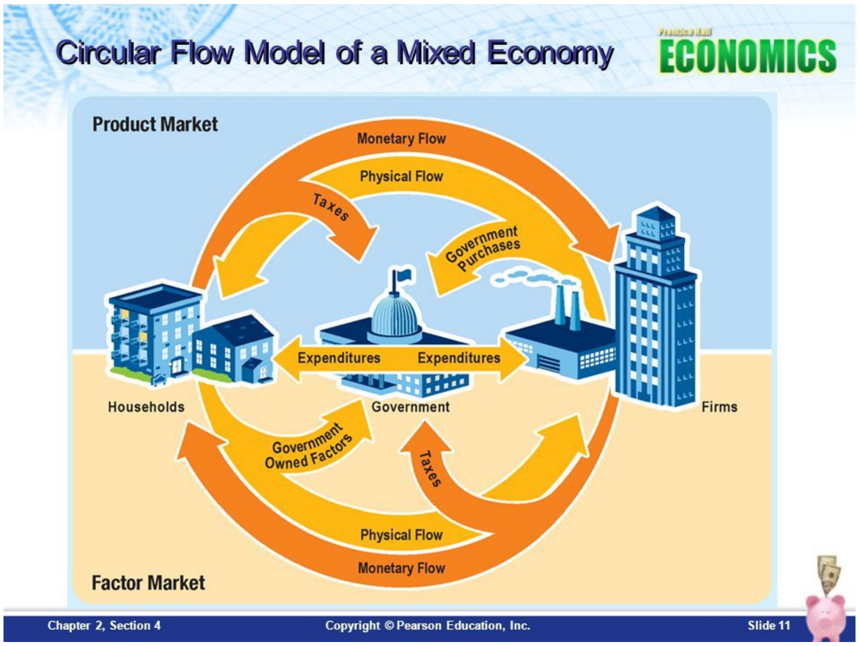
3.4 How Do Mixed Economies Divide the Decision Making?

Every country today has a **mixed economy,** a combination of government and individuals when it comes to deciding consumption and production.

Government's Role in a Mixed Economy: Protection, Regulation, and Public Benefits
Governments often provide legal measures to ensure that certain commonly agreed upon rules are enforced. For example, *child labor*, in most advanced nations is considered illegal.

Another key role by the government is to provide goods and services which are not provided by the private market. For example, dams, highways, sewers, payroll for police, these types of payments are made by the government.

The Flow of Goods and Money in a Mixed Economy



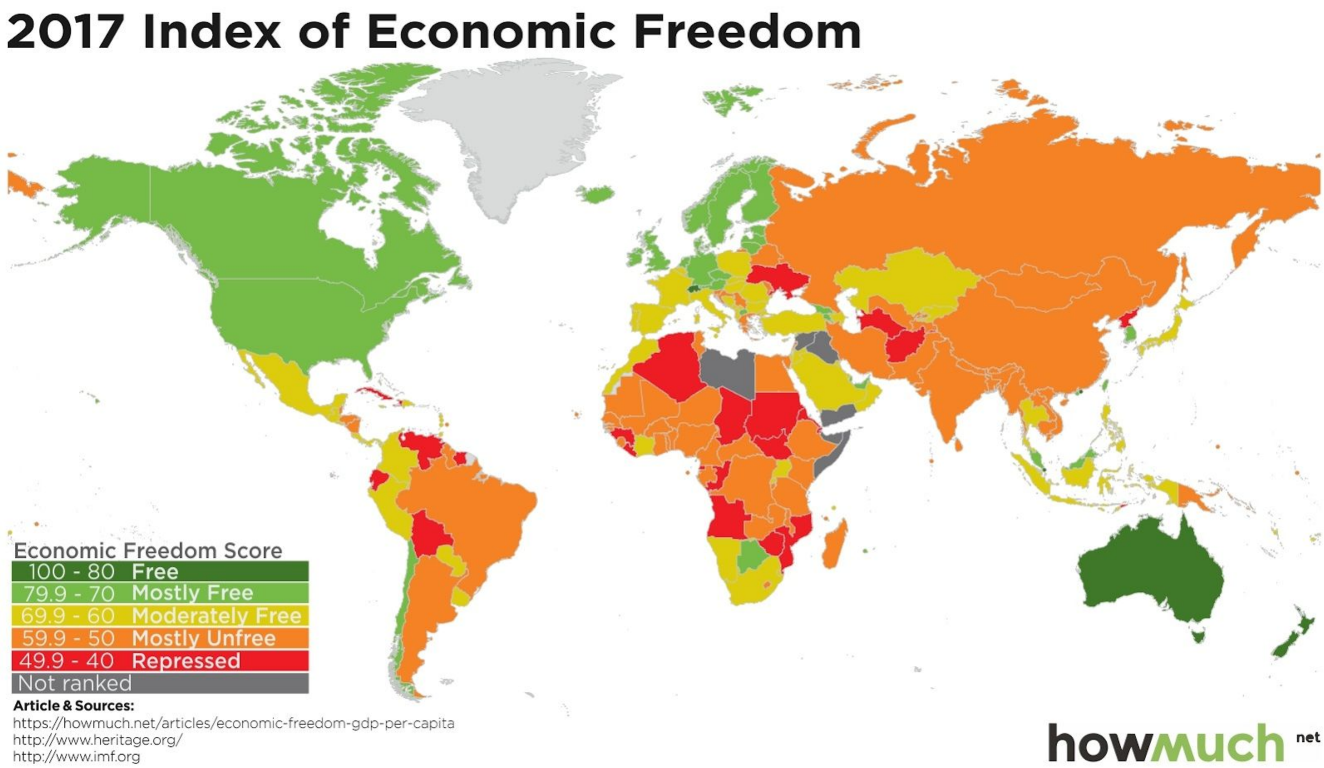
The government plays a role in numerous ways in a mixed economy. For example, in the United States the federal government employs almost 2 million people. The government also is the largest customer for private businesses purchasing hundreds of billions of dollars on goods and services (For example, if the US military purchases a fighter plane. They are buying it from a **private** firm, such as Lockheed Martin).

Governments also combine land, labor and capital to produce and distribute goods and services.

Finally, one of the most controversial role of government is **transfer payments**.
The government receives payments in the form of taxes, most commonly in the form of income tax, property tax, capital gains tax, and sales tax.

After receiving these taxes, the government will go on to redistribute money to where they find its most needed. For example, if someone is unemployed, they receive unemployment benefits. This redistribution of money is decided by the government.

The Mixed Economy Continuum: From Free to Repressed
Although most countries are **mixed** in regards to their economic style. There is a great range when it comes to countries that are free and repressed.
For example, if we look at the Index of Economic Freedom, a map which shows the level of freedom in economy nations created by The Heritage Foundation and Wall Street Journal.



Some notes from this map:

1. Only six countries made it to the FREE status, Hong Kong, Singapore, Ireland, New Zealand, Switzerland and Australia (I think in the textbook it says four, because the textbook map is from 2013, the map above is from 2017).
2. The next four countries to make the top 10, include in order; the UK, Canada, U.A.E. and Taiwan.
3. The USA comes in 12th. A rise in comparison to recent rankings. Overall, pretty strong in all areas, with a continually growing economy. Its recent tariff war with China has dropped some of its "freedom" component of the ranking.
4. South Korea comes in 29th. The basic institutions are running fine, however, the public's trust in the government has been low since recent scandals, and has never fully recovered.
5. 22 countries are designated as **repressed**, these countries include places like Liberia, Ecuador, Cuba, North Korea, Sudan and the Congo.
6. Not ranked means there was not enough information and/or countries refused to provide data for the survey.

Most updated list here: https://www.heritage.org/index/ranking

3.5 SKIP

Chapter 5
Demand and Supply

5.1 Introduction

SKIP

5.2 How do Demand and Price Interact?

What are willing and able to buy at various prices?

Anyone who has ever one shopping knows that making a purchase depends on two things. You have to be willing to buy the item in question, and you have to be able to pay for it.

Two key factors, willingness and ability

Quantity Demanded is the amount of a good or service that consumers are willing and able to buy at a specific price.

Demand is the amount of a good or service that consumers are willing and able to buy at all prices in a given period.

Comparison Chart

BASIS FOR COMPARISON	DEMAND	QUANTITY DEMANDED
Meaning	Demand is defined as the willingness of buyer and his affordability to pay the price for the economic good or service.	Quantity Demanded represents exact quantity (how much) of a good or service is demanded by consumers at a particular price.
What is it?	It lists out quantities that would be purchased at various prices.	It is the actual amount of goods desired at a certain price.
Change	Increase or decrease in demand	Expansion or contraction in demand.
Reasons	Factors other than price	Price
Measurement of change	Shift in demand curve	Movement along demand curve
Consequences of change in actual price	No change in demand.	Change in quantity demanded.

Using a Demand Schedule to Determine One Consumers Willingness and Ability to Buy
Demand Schedule refers to an individual's schedule list of quantities of a good that one person will buy at various prices.

Smith Family's Individual Demand Schedule for Babysitting Hours	
Price per Hour	**Hours of Babysitting per Month**
$4.00	55
$5.00	45
$6.00	38
$7.00	32
$8.00	27
$9.00	23
$10.00	20
$11.00	18
$12.00	17

Price Increases = Quantity Demanded Decreases

Market Demand is the sum of all the individual quantities demanded in the market. When economists refer to demand, they are usually talking about market demand.

Law of diminishing marginal utility
As one consumes more utility decreases.

The income effect
The more money one has the more they are able to buy a specific good.

The substitute effect
If two products can satisfy the same want, they are substitutes. For example, coca-cola and pepsi. Keep in mind that some are clear substitutes, while others are not. For example, some studies may show BMWs and substitutes to KIAs, because they are both cars. While other studies may portray them as being non-substitutes because of the great price difference on average of the two products.

<u>CHANGE ON THE CURVE IS KNOWN AS CHANGE IN QUANTITY DEMANDED</u>

5.3 What Can Cause Demand to Change?

A change in demand occurs when quantity demanded increases or decreases at all prices.

What shifts overall demand?

Changes in income *When people earn more income the demand for many goods and services increase at all prices.*

Changes in the number of consumers *the more consumers the greater the demand. For example more people would stay at a hotel near a beach in the summer than the winter.*

Changes in consumer tastes and preferences *For example, fifty years ago, there was not much demand in America for sushi.*

Changes in consumer expectations *prices don't actually have to rise or fall to cause consumers to change their behavior. For example, if Apple has a scheduled release for a new Iphone in October, the demand for Iphones newest model in September will be very low, because most people will prefer to wait one month to get the new release.*

Changes in the price of substitute goods *if the price of a rival car company is discounted than the price of the other company will go down.*

Changes in the price of a complementary good *for example if tennis rackets go on sale, people will buy more rackets and therefore, more tennis balls*

5.4 How do supply and price interact

Producers supply the goods and services that consumers demand.

Supply: What producers are willing and able to sell at various prices

Quantity supplied is the amount of a good or service that producers are willing and able to offer for sale at a specific price.

Using a supply schedule to determine one producers willingness and ability to sell

A supply schedule is a table that shows the quantities supplied at different prices in a market. The expensive someone can sell their product, they are motivated to sell more.

Market Supply is the sum of all the individual quantities supplied.

Revenue firms earn profits based on revenue, the amount of money they make minus the expenses.

Market entries and exits when the price of a good or service increases, new firms may enter a market because of the potential for a profit.

We see this when new homes are built in an area, and people move into a new area, businesses will begin to emerge in that neighborhood (Like the GEC).

A CHANGE OF MOVEMENT ALONG THE CURVE IS CALLED A CHANGE IN QUANTITY SUPPLIED

5.5 What can cause supply to change?

Change in Supply

Changes in the cost of inputs

Any change in the cost of factors of production - land, labor or capital - result in a change in the market supply of product.
Profit is the key to this process.

Changes in the numbers of producers

Producers will enter the market if there is a belief that the market is profitable.
For example, when the tablet was introduced in 2010 by Apple, many competitors would join soon after seeing the market opportunity to make money off tablets.

Changes in condition due to natural disasters international events

Wars, poor weather, revolutions can all cause major changes to supply.

Changes in technology

Technological advances can reduce the amount of labor needed to produce a good, thereby lowering costs and increasing productivity.

Changes in producer expectations

The supply curve would shift left if higher prices are expected in the future and vice versa.

Changes in government policies

Governments can directly affect supply in two ways.

a. **Subsidy** - a cash payment aimed at helping a producer to continue to operate. For example, the US government pays the oil companies large subsidies, therefore, instead of paying $6.00 a gallon,
b. The US government can also set an **excise tax** on a good, which will cause supply to decrease. For example, tobacco, alcohol and airlines are taxed.

5.6 What is demand elasticity? What factors influence it?

Elasticity, the degree to which a quantity demanded or a quantity supplied changes in response to a change in price.

Elasticity of Demand: A measure of Consumer Sensitivity to Price Changes

Inelastic, not sensitive to changes. For example, toothpaste. Regardless of the market, generally, people will be buying toothpaste.

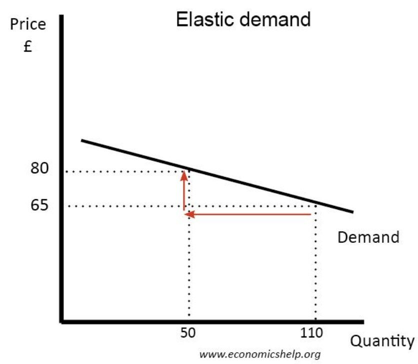
Elastic, sensitive to changes.

CALCULATING

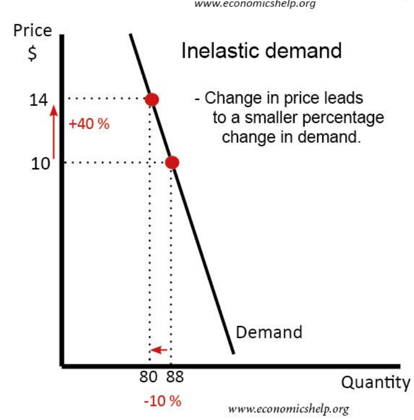
$$\text{Demand elasticity} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$

Unitary elastic demand - occurs when the percentage change in price exactly equals the percentage change in quantity demanded. The result of the elasticity calculations in such instances is exactly 1.

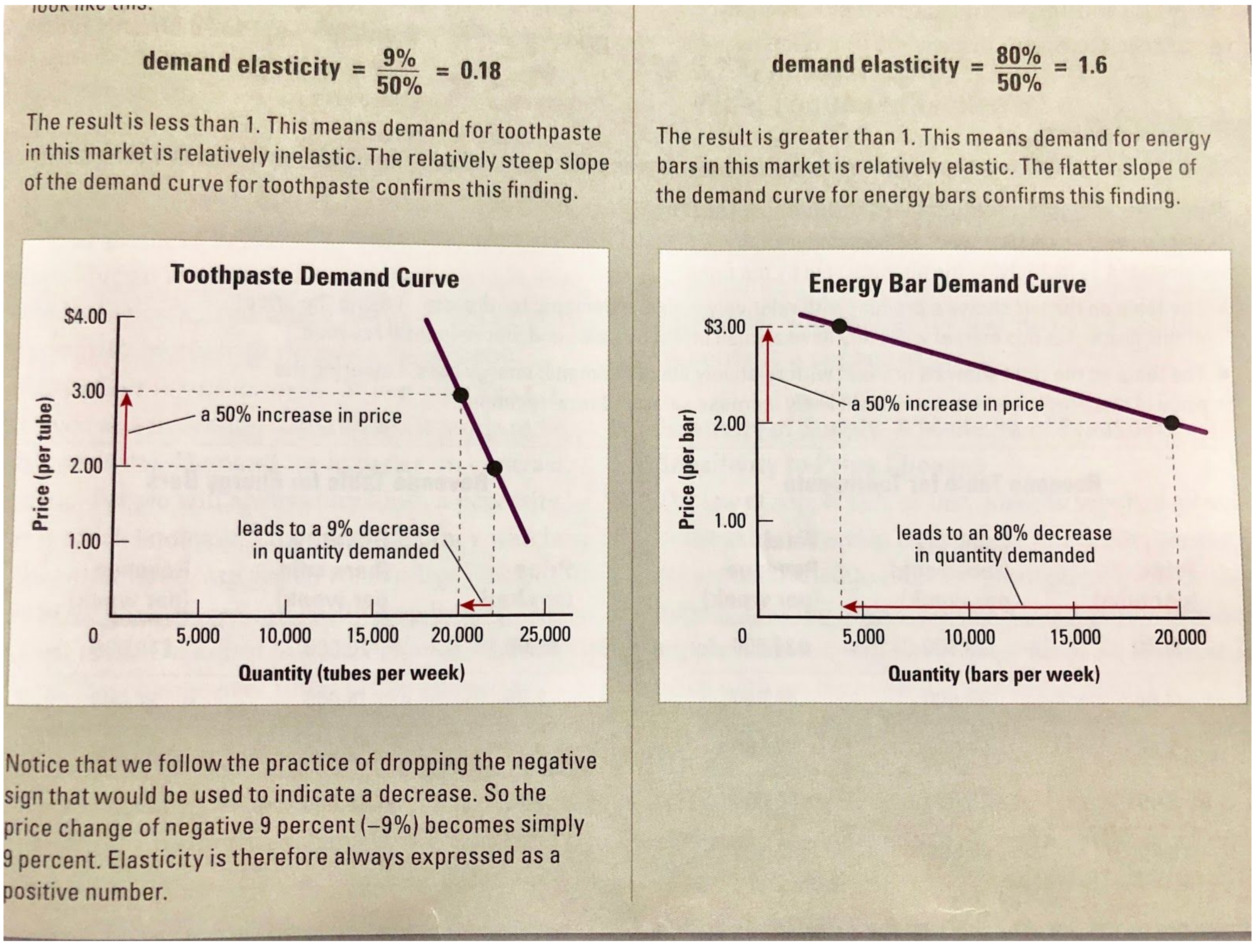
The flatter the curve the more likely it is that the demand is elastic, the steeper the curve, the more likely it is that demand is inelastic.



As you can see here.
The price people are willing to pay does not change too much regardless of quantity.
Examples: coca cola



To the contrary. Highly elastic products will change greatly in demand based on price.
Examples: gasoline



$$\text{demand elasticity} = \frac{9\%}{50\%} = 0.18$$

The result is less than 1. This means demand for toothpaste in this market is relatively inelastic. The relatively steep slope of the demand curve for toothpaste confirms this finding.

Notice that we follow the practice of dropping the negative sign that would be used to indicate a decrease. So the price change of negative 9 percent (–9%) becomes simply 9 percent. Elasticity is therefore always expressed as a positive number.

$$\text{demand elasticity} = \frac{80\%}{50\%} = 1.6$$

The result is greater than 1. This means demand for energy bars in this market is relatively elastic. The flatter slope of the demand curve for energy bars confirms this finding.

Total revenue test
To gauge the impact of prices on their revenue, producers use a business tool known as the total revenue test.
Revenue table
Lists the possible prices for a given product and the market demand at each price.
Total revenue is calculated by multiplying the quantity of a good sold by the price of the good.

FACTORS THAT INFLUENCE ELASTICITY

Availability of substitutes demand for products that have close substitutes tends to be elastic. For example, if coca cola prices go up, people can buy pepsi instead.
Price relative to income big items are often elastic, for example, a 20% increase on a car, a laptop, this will deter many people from buying the product.
Necessities versus Luxuries the more necessary the product the inelastic. For example, food is a necessity while a fancy watch is not.

Time needed to adjust to a price change for example gas prices. Surged in 2011, and at first people found it difficult and did not want to pay for more, however, along with time, people adjusted to the change in price because gasoline was needed.

5.7 What is supply elasticity? What Factors Influence it?

Elasticity of supply is a measure of the snesity of produce to change in price.

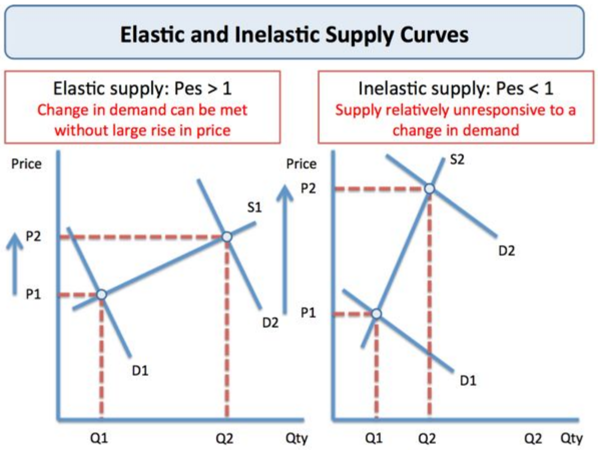
Elasticity of supply a measure of producers sensitive to price changes
Reasons for inelastic supply can be different depending on the product. For example, antiques could be inelastic, because the supply is limited. At the same time, you could have a product like bananas being inelastic.

Calculating and Graphing Elasticity of Supply

$$\text{Supply elasticity} = \frac{\text{Percentage change in quantity supplied}}{\text{Percentage change in price}}$$

Supply chain, the network of people, organizations and activities involved in supplying a good or a service to a consumer.

Factors that influence elasticity of supply
Availability of inputs are the inputs needed at the beginning of the supply chain readily available? If yes, then it would be easy to provide more or less of a good/service without much trouble. For example, doctors are not easy to find, it takes time for people to go to medical school and graduate, in this case their inputs in regards to supply is difficult to adjust.
Mobility of inputs The ease with which inputs and products move through the supply chain also affects elasticity.
Storage capacity how *easy it is to store a product. For example, toothpastes lasts for a long time, while avocados will go bad quickly.*
Time needed to adjust to a price change the supply of many products is inelastic when the price actually changes, but it may become more elastic with the passage of time.



Chapter 6
Markets, Equilibrium and Prices

6.1 Introduction

SKIP

6.2 What happens when demand meets supply?

Market Equilibrium:The Point Where Buyers and Sellers Agree
The quantity of a good or service that consumers are willing and able to buy equals the quantity that producers are willing and able to sell.

Market-clearing price - where the price, supply and demand are in balance.
(This is because the market is cleared of surplus and shortages)

Equilibrium quantity - at this quantity the amount of a good or service supplied by producers balances the quantity demand by consumers.

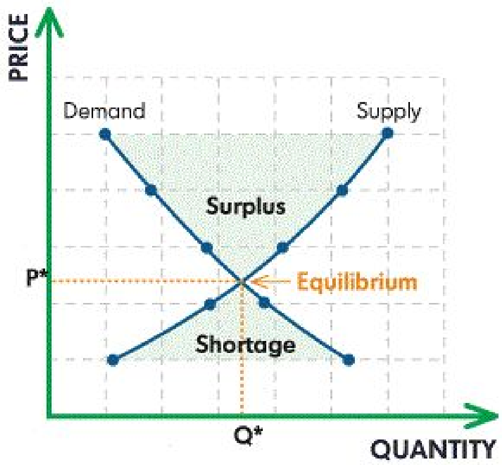
Prices move to bring markets in balance
The interactions between consumers and producers automatically pushes the market price of a good or service to the equilibrium (in theory).

6.3 What happens when the price isn't right?

Sometimes producers set a market price that is above or below the price, economists call this as being in **disequilibrium**. When disequilibrium occurs in a market, the quantity demanded is no longer equal to the quantity supplied resulting in a shortage or a surplus.

When the price is too low, shortages result
Excess Demand too much demand due to low prices, and not enough is left **(shortage)**.

When the Price is too high, a surpluses result
<u>Excess Supply:</u> Too much supply is left due to high prices people are not buying enough, as a result you have left overs, also known as **surpluses**.



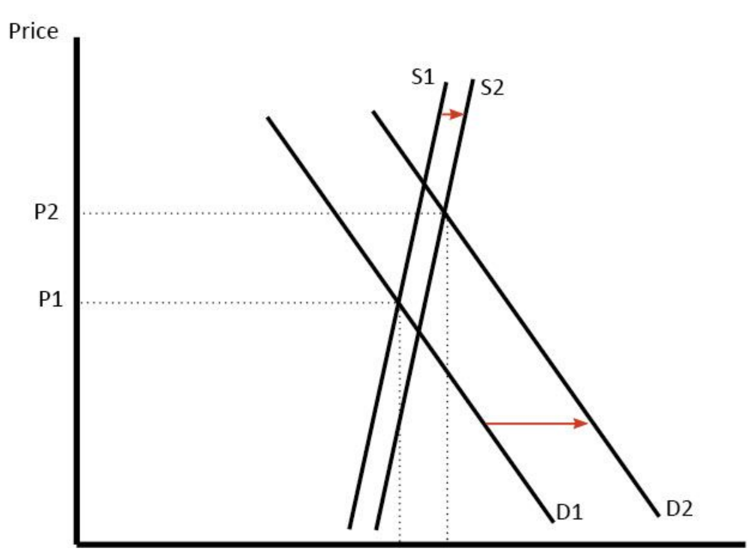
<u>6.4 How do shifts in demand or supply affect markets</u>

<u>Three questions to ask about demand and supply shifts</u>
Anything that brings about a shift in the demand curve is a **demand shifter**. For example, a new fad and a change in income. Likewise, **a supply shifter**, occurs when anything shifts the supply.

1. *Does the event affect demand, supply or both?*
2. *Does the event shift the demand or supply curve to the right or to the left?*
3. *What are the new equilibrium price and quantity, and how have they changed as a result of the event?*

Analyzing the effect of a change in demand on equilibrium price
Does the event affect demand, supply, or both?

Does the event shift the demand or supply curve to the right or to the left?



Analyzing the effect of a change in supply on equilibrium prices

In the example above, Supply shifts right and demand also shifts right, shifting the overall equilibrium from P1 to P2.

6.5 What roles do prices play in a modern mixed economy

Prices Convey information to consumers and producers
A primary role of price is to convey information.
To consumers, price signals the opportunity cost of a purchase.
When the opportunity cost is high (like buying a car), people tend to think carefully before parting with their money.
Producers also use prices to appeal to the consumers they hope will buy their products.
Consumers for their part are used to interpret these messages.

Prices create incentives to work and produce
In a market-based economy, prices function as an incentive because they represent potential for profit.
Just as changing prices motivate producers prices in the form of wages and salaries motivate workers. On the other hand, low wages can act as disincentives for people to seek work.

Prices allow markets to respond to changing conditions
Prices allow markets to adjust quickly when major events such as wars and natural disasters interfere with the production or movement of goods, wreaking havoc on supply.

<u>OVERVIEW FOR PRICES</u>

For Consumers
-Conveys information about products,
-Signals the opportunity cost of a purchase,
-Allocate products in short supply to those who value them most.

For Producers
-Signal what consumers want most in a product,
-Are used to target different markets,
-Indicate when to increase or decrease production

For Workers
-Create incentives to enter the labor force,
-Signal the level of demand for their skills and work experience,
-Inspire search for higher-paying jobs.

Prices allocate scarce resources efficiently
Perhaps the most important role of price in a market-based economy is to guide resources to their most efficient use.

6.6 How does government intervention affect markets

Why do governments intervene? A minimum price consumers are required to pay for a god or service.

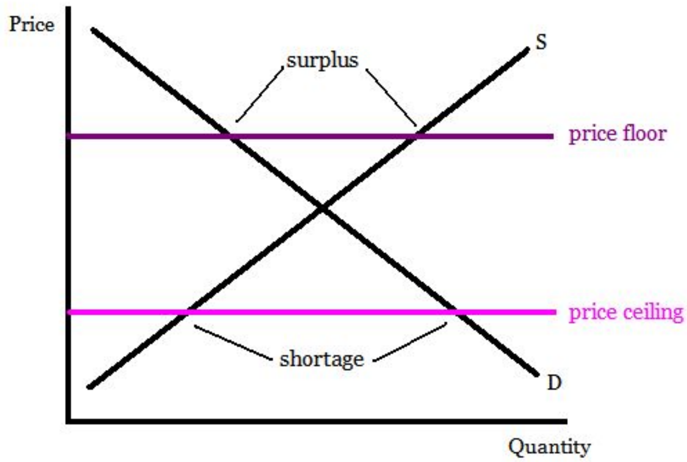
Price floor
For example, the government may set a price floor on agricultural goods to ensure farmers stay in business.

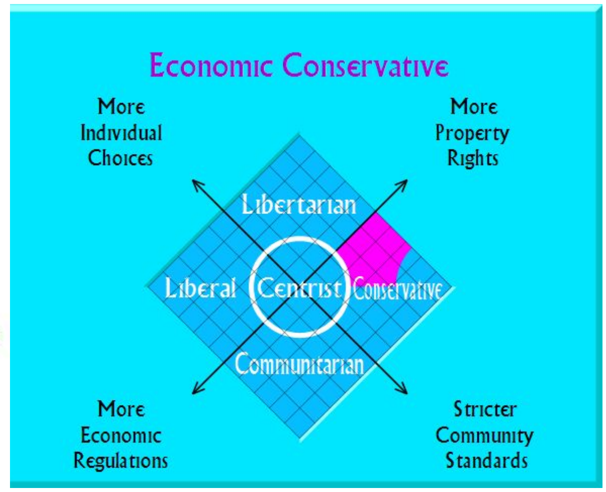
Minimum wage is where government's mandate that companies pay their workers a minimum amount of money per hour.

Price floors lead towards an excess of supply (a surplus).

Price ceilings
The opposite of a price floor is the price ceiling. Fo example,
Rent control is where the government will make it illegal to charge more than a specified monthly rent. This happens in places like New York, where rent control was introduced in order to protect poora families.

Price ceilings lead towards a shortage.





Rationing and the Black Market
When shortages occur, governments will sometimes impose rationing. Where there is controlled distribution of limited goods.

Shortages can also give a rise to black markets, where goods and services are traded illegally

<u>Why ending price control is difficult</u>
The political pressure on elected officials to intervene can be intense. It is difficult to stop these pressures.

Chapter 7
Market Structures and Market Failures

7.1 Introduction

SKIP

7.2 What is perfect competition, and why do economists like it so much

Market structure refers to the organization of a market.

Number of producers The number of producers in a market helps determine the level of competition.

Similarity of products The degree to which products in a market are similar. The more similar the products, the more competitive.

Ease of entry the ease of entry (the easier it is to enter, the more competitive the market).

Control over prices The ability to influence prices is known as **market power**. The more competitive the market, the less market power any one producer will have.

Perfect Competition

The most competitive market structure. Where there are many producers and goods are sold at the equilibrium price, usually, this type of structure is very rare.

1. *Many producers and consumers,*
2. *Identical products,*
3. *Easy entry into the market,*
4. *No control over prices.*

+Easy access to information, so people can shop around. This time spent, to "shop around" is known as a **transaction cost**. Today, this cost has significantly dropped due to the internet.

A case study, the milk business

51,000 dairy farms.
Very similar commodity.
Relatively easy to enter the industry.
No control over prices.
The milk industry is **highly competitive**.

Barriers to entry can limit competition

Start up costs, the cost to launch your business could stop someone from joining. For example, the airline industry is very expensive to break into. You need to buy planes, which can cost over $100 million USD.

Benefits?

1. Producers must be as efficient as possible,
2. The price reflects the value on the market,
3. The consumer is "King" as in the consumer decides the allocation of the resources.

7.3 What is a monopoly, and why are some monopolies legal?

When a market is not competitive it is an **imperfect competition.**

What makes a monopoly?

One producer

There is no competition and only a single producer.

Unique product

A monopoly provides the only product of its kind, no substitutes (and usually no products that are similar as well).

High barriers to entry

The main factor which allows monopolies to exist is the high barriers to entry, making it difficult for new business to break into the industry.

Substantial control over prices

Monopolies are "price setters" not price takers.
In the 1800s, what was known as "**trusts**" emerged where companies were working together to keep prices high up and not be competitive. This was considered illegal by the US government and eliminated by creating **anti-trusts laws.**
Another word for a group of companies creating a monopoly is an oligopoly.

Three Types of Legal Monopolies

Resource monopolies

These types of monopolies exist when other firms cannot enter the market, because they do not have access to the resource.

Government-created monopolies

Government can create grants to a single firm or individual exclusive to a specific good or services. For example, patents and copyrights give people the legal grants.
Public franchise is a contract issued by a government entity that gives a firm the sole right to provide a good or service (Like school lunches for a public school)
License is a legal permit to operate a business or enter a market. For example, a city may provide a specific license for a company to buy and sell a certain brand of flowers.

Natural monopolies
This happens when one company takes advantage of the *economics of scale* and pushes prices so low that no one can compete against them.

[Economies of scale video]

A case study: Microsoft Corporation
In the 1980s, Microsoft received a copyright for its computer operating system known as Windows.
In this way, Microsoft gained control of about 90% of the market for operating systems.
In 1998, the US Department of Justice accused Microsoft of trying to stifle competition by expanding its monopoly power into the internet market.
In 1999, a trial judge found that Microsoft had violated antitrust laws, he ordered the company to be broken into two separate businesses. One that sold Windows operating system and another that sold applications software.

Consequences of a monopoly for consumers
The government's case against Microsoft focused mainly on the company's aggressive efforts to drive other firms from the market. Because a monopolistic firm has considerable market power, it can set prices without fear, forcing consumers to pay more.

7.4 What is an oligopoly, and how does it limit competition?

The third market structure is an oligopoly, similar to a monopoly, an imperfect competition, but with several companies.

Oligopoly: Few producers, similar products
An **oligopoly** is a market or an industry dominated by just a few firms that produce similar or identical products. Like monopolies, they often arise because of economies of scale.

The modern American (and many nations) economy has many oligopolies. Airlines, automobiles and soft drinks are examples.

Few producers, a small number of firms control the whole industry. The proportion of the total market controlled by a set of companies is called **concentration ratio**. For example, the four-firm concentration in the light bulb industry is 75%.

Similar products Producers in oligopolies offer essentially the same product, with only minor variations.

High barriers to entry It is hard for new firms to break in due to high start-up costs (Such as the airlines industry).

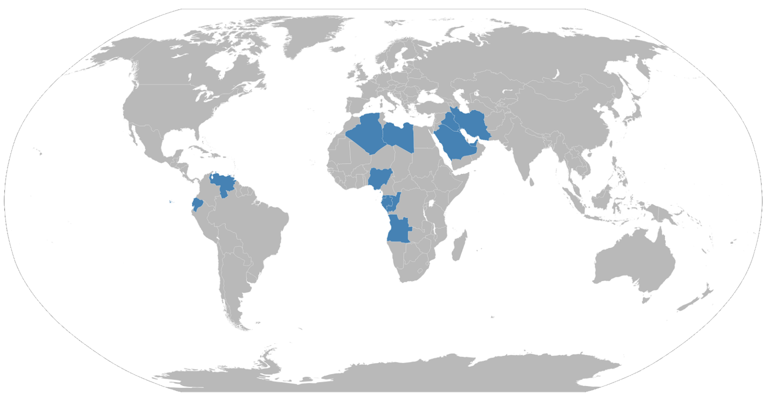
Some control over prices. *They* may try to control prices since there are only so many companies they can be <u>interdependent</u> and keep prices high.

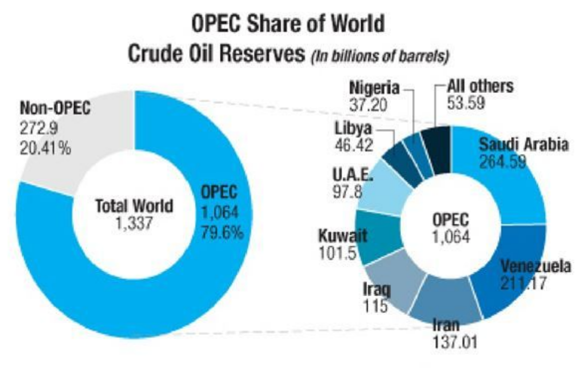
<u>Cooperative Pricing: When an oligopoly acts like a monopoly</u>

Price leadership in an oligopoly, a firm may try to control prices through price leadership. The dominant firms ets a price, and the other smaller firms follow suit. However, at times the dominant firm may try to drive business out of the market through lowering prices, this is known as a **price war**.

Collusion Firms in an oligopoly may also try to control the market through collusion. **Collusion** occurs when producers get together and make agreements on production levels and pricing.

Cartel formation is an organization of producers which establish a set production and price rate for products. The Organization of producers established to set production and price levels for a product. Cartels are illegal in the United States , but they do sometimes operate on a global scale, most often in the commodities market (Sugar, coffee, tin).
OPEC is an example of a modern cartel.





7.5 What is monopolistic competition and how does it affect markets?

Monopolistic competition: many producers, similar but varied products

In a **monopolistic competition**, large numbers of producers provide goods that are similar but varied.

The shoe industry is a good example. Each company has marked its shoes with it's own **brand**, or trade name. Each has worked to make their shoes distinct.

Many producers
There are many producers or sellers.
Differentiated products
Products and services are differentiated by firm.
Few barriers to entry
Start-up costs are relatively low in monopolistically competitive markets. For example, it does not cost much to get into the custom t-shirt business.
Some control over prices
Because products from different producers are close substitutes, this market power is limited. If the price rises too much, customers may shift to another brand.

Increasing market share through non price competition
To compete with rival firms, producers in monopolistically competitive markets have to take price into consideration. But they also engage in nonprice competitions, using product differentiation and advertising to attract customers. Hoping to increase their **market share**, their proportional total sales in a market.

Physical characteristics
There are many kinds of products that consumers will pay more for because of physical characteristics whether this be design, color or materials.

Service
Some producers offer better services than others. For example, Emirates airlines has a better reputation in regards to service in comparison to China airlines.

Location
Gas stations, dry cleaners, motel and other businesses may compete with each other based on location. For example, if a school is built in South Korea, there is a competition in regards to how close a *hagwon* can be built in proximity to the school.

Status and Image
Sometimes companies compete on the basis of perceived status.

7.6

Skip

Chapter 11
Government and the Economy

11.1 Introduction

SKIP

11.2 How Does the Government Protect Property Rights?

Skip

11.3 What Regulatory Role Does Government Play in Our Economy

The federal government helps enforce standards for various industries, these regulations seek to protect the interest of all participants in the economy.

Government's Role in Maintaining Competition

Competition is essential if markets are going to work. The government will make sure that competition exists through the FTC, **regulatory agency**-a unit government that makes and enforces standards for an industry or area of economic activity.

Illegal activities they may bust include;
Price fixing, when competitors agree on a price for a goods or service.
Bid rigging, Purchasers-including federal, state, and local governments-often acquire goods and services by seeking bids from competing firms.

Bid riggings occur when competitors agree in advance who will submit the winning bid.

Market Division is when competitors agree to divide a market among themselves. For example, one company says they will take only the West, while the other company says they will only take the East side of a specific area.

Mergers- are legal, however, the government does make sure to see if it does not break any rules. For example, if a merger will significantly lessen competition, for example there are six companies which control 25%, 20%, 20%, 15%, 15%, 10% of a specific industry. If the two companies that control 25% and 20% merge, they will control 45% of the industry as one company. Although, not a monopoly, this would give them too much power, and the government may not allow this merger to occur. However, keep in mind that certain “natural monopolies” have emerged. For example, telephone companies. AT & T was a natural, and allowed monopoly for a long time, since it controlled most of the telephone services and telephone lines. However, as time progressed in the 1970s, the government decided to break up the AT&T monopoly.

AT&T broke up into many different companies. However, throughout time, more mergers would occur, and today in the 2000s, now there are only two companies which control most of the market.
AT&T and Verizon.

Government's Role in Protecting
Cavet Emptor this long standing rule of the market place is Latin for “Let the buyer beware”. It serves as a warning to buyers that they purchase goods and services at their own risk. However, in today's complex market, consumers <u>may not have all the information they need</u>.

Protecting consumers
Regulations to protect consumers began in the early 1900s. One of the first targets of the government regulators was the meat packing industry. The congress passed both the Meat Inspection Act and the Pure Food and Drug Act in 1906.

Another wave of consumer regulation started in 1965, led by Ralph Nader, who helped set laws requiring companies to provide seat belts.

New protections continue to be added each decade, for example, during President Obama's time in office he was part of the government which helped pass the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

Protecting savers and investors
The Securities and Exchange Commission protects investors by making sure they have the information they need to judge whether to buy, sell or hold a particular security. The SEC establishes and enforces rules to ensure that companies provide that information in a timely and accurate manner.

Government's Role in Protecting Workers
The Department of Labor is there to protect workers' economic rights. It does this by making sure workers get the wages due to them, fostering workplaces that are free of discrimination and providing unemployment insurance.

They are also there to protect workers' physical well-being and secure safe work spaces.

It was established in 1971, and insc ethen, workplace fatalities have decreased by more than 60% and injuries by 40%.

Regulatory Capture
This occurs when regulatory agencies are dominated or “captured” by an industry they are regulating. The problem with this is, it creates a “revolving door”, those who are regulating the industry **end up getting a job in that job they were regulating**. This is a conflict of interest, since they may not properly regulate or be too easy on a company, because they know they can secure a job there in the future.

One of the ways to address the problem created by regulations causing revolving doors, is simply **deregulation** to remove the government from the restriction. Since the 1970s, industries such as banking, airlines, cable television and trucking have been deregulated by the government.

The results of **deregulation** are mixed.

The positives are that it allows more competition and for the free market to dictate decisions.

On the other hand, no regulation means that businesses could be abusing workers, not being accountable for negative externalities and/or creating schemes which could undermine competition and production overall (Such as an oligopoly without proper checks and balances).

11.5 What Does the Government Do to Promote Economic Well-Being?

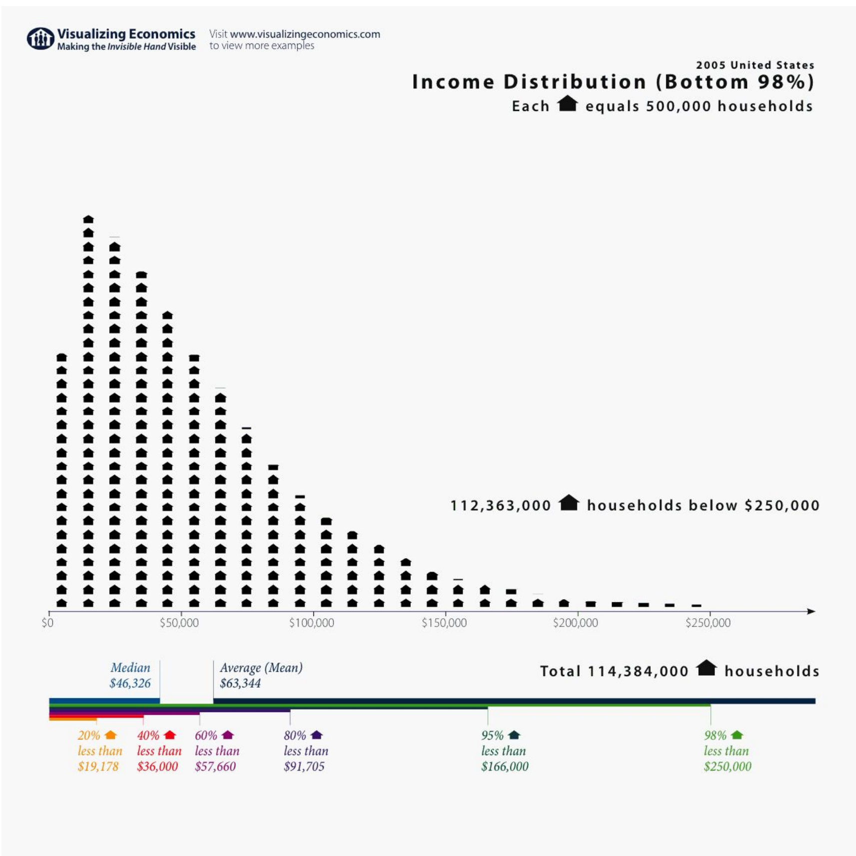
How the Great Depression and WWII Changed US Economic Policy
The 1929 stock market crash triggered a financial crisis, at first the US government did very little. However, as the crisis worsened, in 1932 FDR won the presidency and promised a *New Deal*. The New Deal was an idea where the government would greatly expand its influence in the economy and help by creating new agencies and programs to help people get jobs.

Despite the depression ending when WWII began, the government continued to oversea many industries, changing many of them to military production. In 1946, the government passed the Employment Act, which clearly stated that the government had an important role in **stabilizing the economy.**

Government's Role in Promoting Economic Stability
In a stable economy, jobs are secure, goods and services are readily available, and prices are predictable. Producers, consumers, and investors can plan for the future without having to worry about sudden changes in the economy.
-governments create stable currencies,
-they stabilize struggling businesses,
-they use tax incentives,

-encourages to invest in new capital equipment
For example in 2008, the government passed a **economic stimulus package** where the legislation specifically designed a law to stimulate business activity by providing 130 million households with a check of $600 to more than 130 million households.

Income Distribution and Poverty in the United States
Smith said that the markets allocate resources **efficiently**, but he did not conclude that they did so **fairly**.

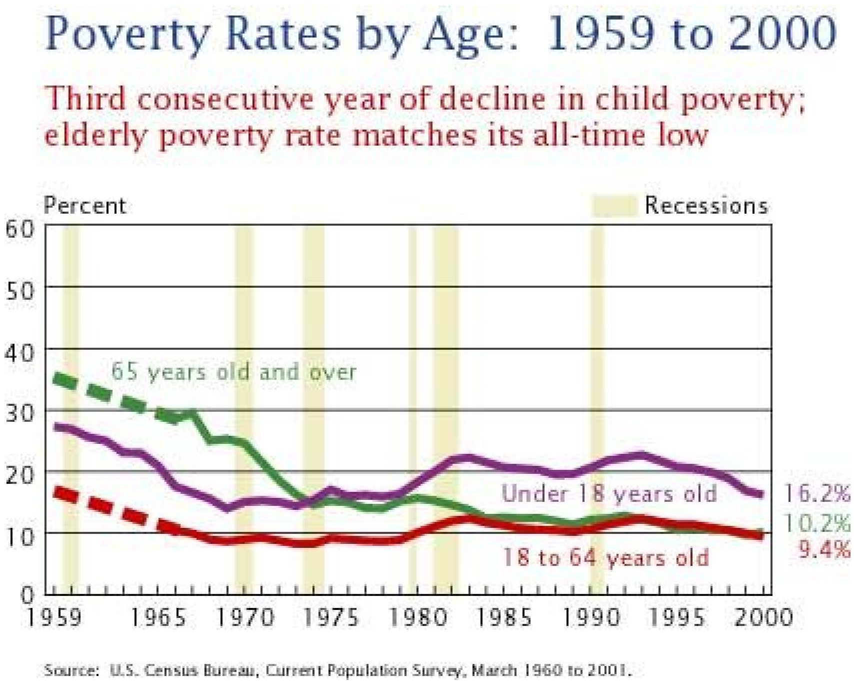


Each year, the US Census Bureau charts distribution of income in the United states shows the various incomes different households make.

The average GDP per household is about $61,000 in the USA.

In 2012, research showed that the bottom 20% of the USA receives about 3% of the nation's income while the top 20% receives around 51%. Income distribution in the USA is very unequal.

Poverty rate



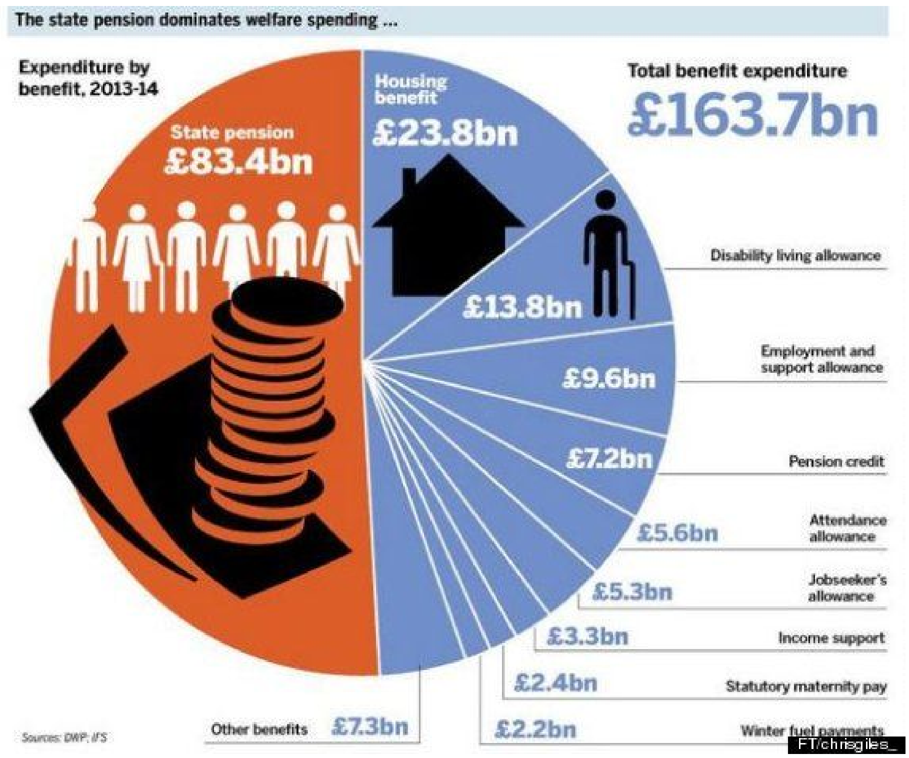
Whether or not you are in poverty depends on your household size. For example, a family of five, a father, mother and three children, living off $28,000 may be in poverty. However, a single man in his 20s living off $28,000 is not in poverty.

Economic mobility - is looking at how easy (or difficult) it is for one to go up the economic ladder in society. The United States for many years has had a history of relatively good social mobility, with people who may have been born to a middle-lower class family, rising to status to "upper class when they are adults.

Government's Role in Redistributing Income
Since the 1960s, most anti poverty programs have involved some form of **income redistribution**, a policy designed to minimize the gap of the rich and the poor. This policy works by taxing the rich greater income, and redistributing it in various forms.

Welfare- is often referring to the Temporary Assistance for Needy Families (TANF), this program is largely supported by the federal government, and often gives direct payments of cash to individuals. They also give people **in-kind**

transfers which include things like food stamps, public housing, school lunches and Medicaid.



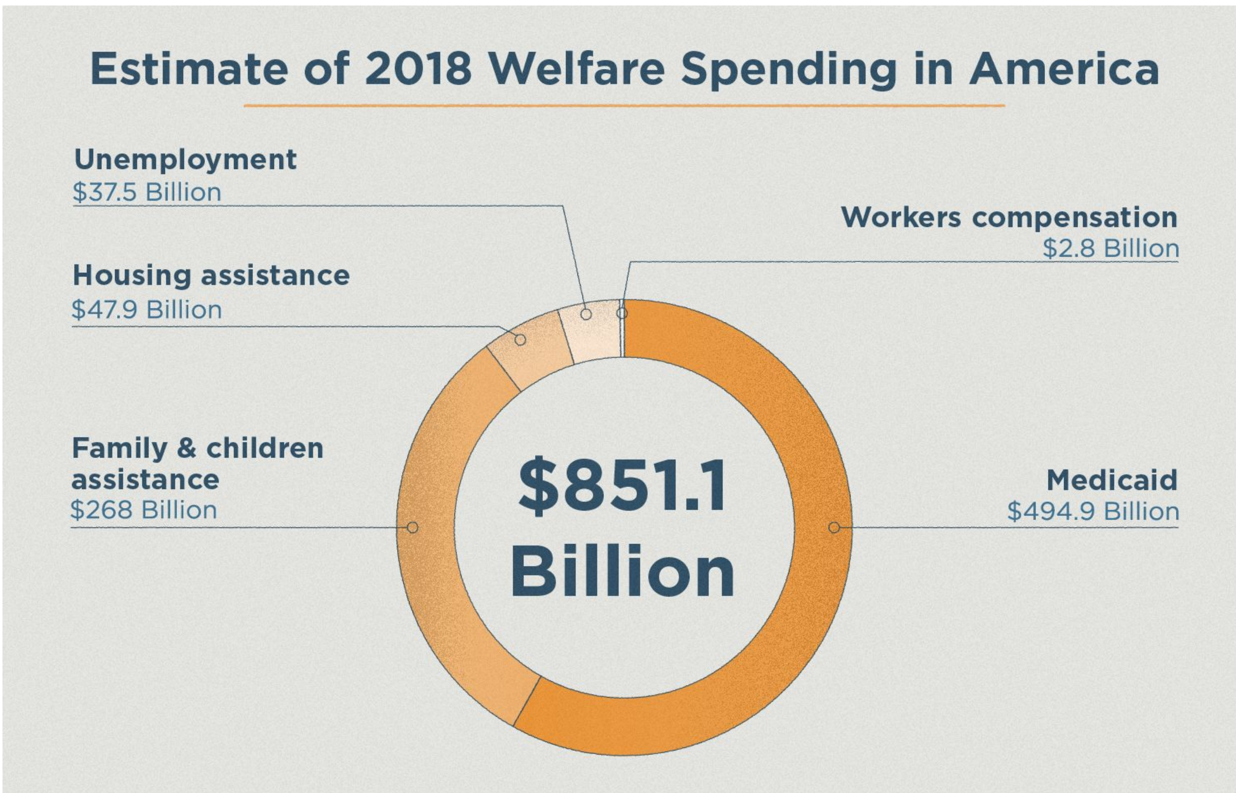
Earned income tax credit
The government can give the working poor tax credit, where a low-wage worker can claim this credit when they file for their federal income.

Unemployment insurance
If workers are laid off from their jobs, the state sends them payments, for a certain period of time or until they find another job. Each state administers its own unemployment insurance program, based on federal standards.

The Unintended Consequences of Anti Poverty Policies

The government redistributes income in a way that is intended to help the poor. Yet, critics charge that these policies have had unintended negative consequences for the very people they meant to help.

The critics worry that antipoverty programs can create **dependence**, that people will rely on government handouts. The worry is that the **incentive** to work will go down. Policy makers have developed a variety of ways to address such problems, one is to provide job training and education for welfare recipients. Another is to raise the cap on certain means-tested programs, so that benefits are gradually reduced as income rises. Another is public service employment. Where, instead of simply handing people money, you hire them to work for the public sector. This was a heavily utilized strategy during the *New Deal*.



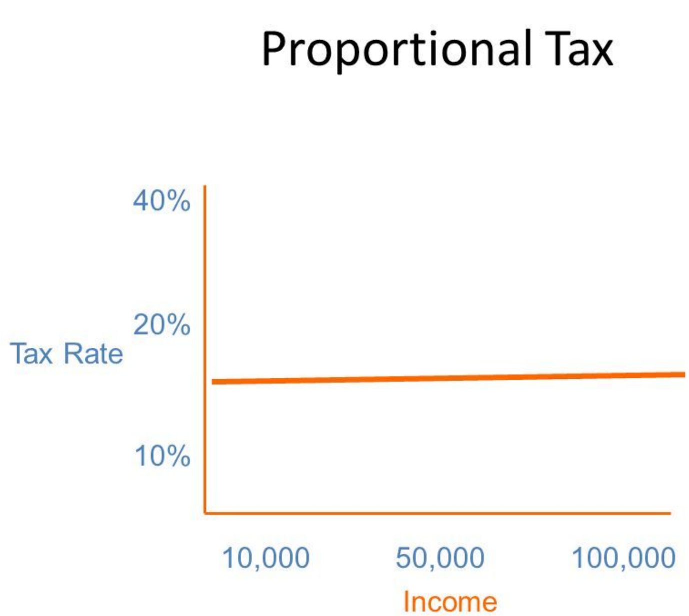
12.3 (this is chapter 12!)

What Kinds of Taxes Will You Pay in Your Lifetime?

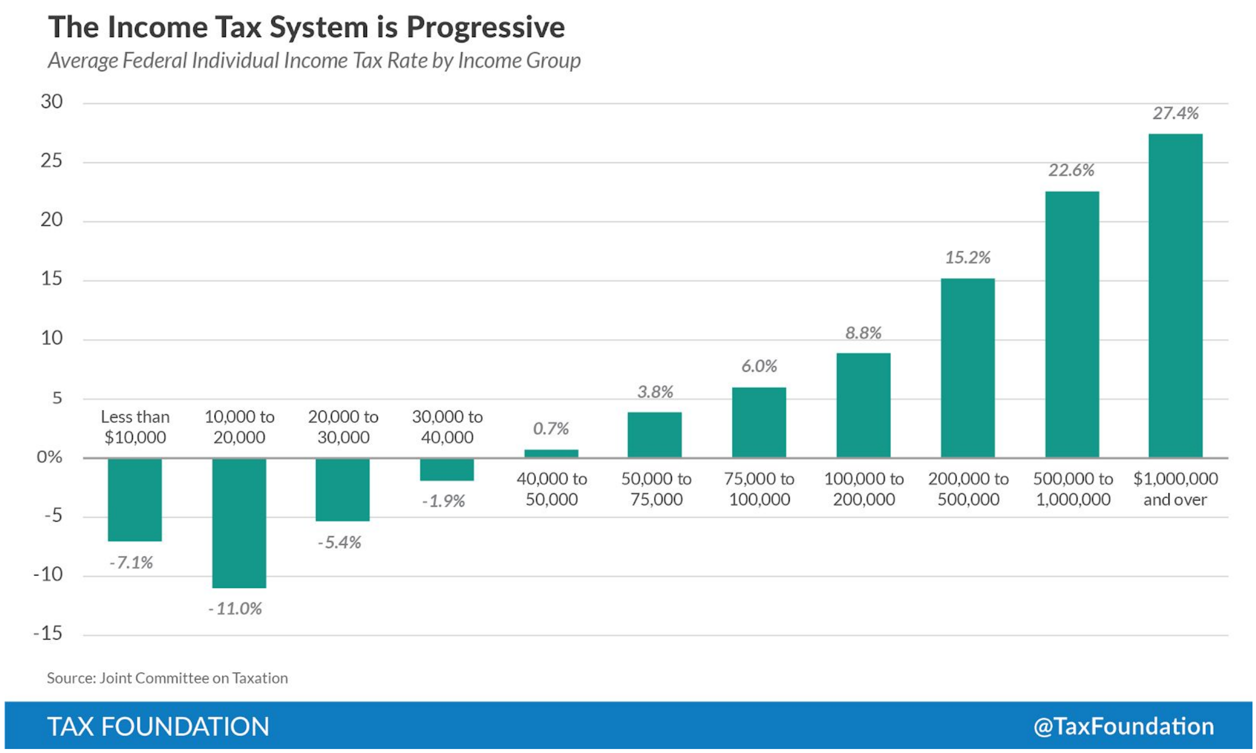
Every year on April 15th, Americans file their taxes to the IRS.

Taxation Basics: Tax Base and Tax Rates
The **tax base** is the thing that is taxed, such as personal income, goods sold at a store, a piece of property, and so on.
The **tax-rate** is the percentage of income or the value of the good that is taxed.

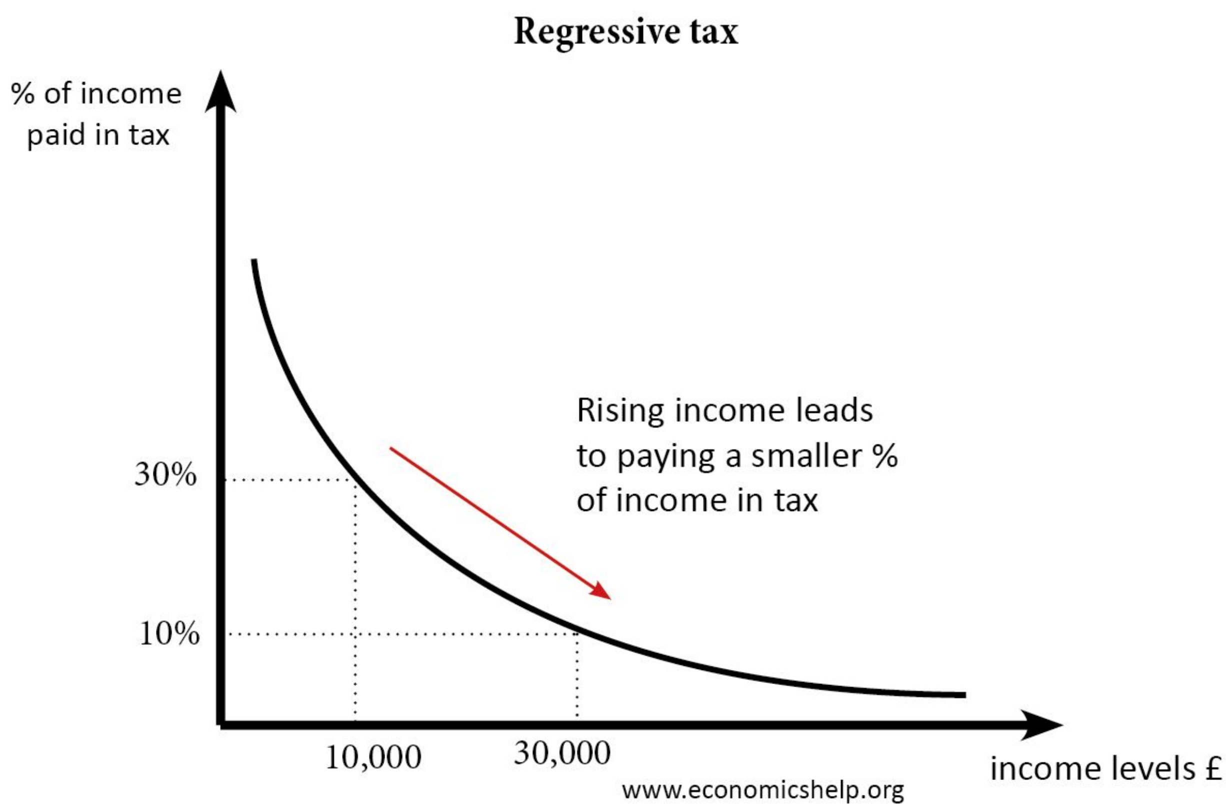
Tax Structures: Proportional, Progressive and Regressive
Proportional (flat) Tax is a take that takes the same share of income at all income levels. Critics of proportional taxes argue that it fails in regards to "fairness" since 20% of one's income, for example at $30,000 ($6,000) is very different in regards to *sacrifice* in comparison to 20% of one's income when making $3,000,000 ($600,000). Even though the rich individual is paying more in total, that individual is still left with 2.4 million to spend, whereas the person making $30,000 may have to begin sacrificing items such as essential foods, children's education, healthcare costs, to make sure that they can pay for their income taxes. Supporters will say that it's simplicity can lead to less tax evasion and is easy to calculate.



Progressive tax is a system where people who make more income are taxed a higher rate. The argument for this system is that the burden to pay becomes easier the more wealth you have. Critics of this system say that it is unequal and fundamentally unfair that the wealthy pay so the smaller share of income much more than the poor (For example if it is 45% for someone with a $1,000,000 income, they are paying $450,000. While someone making $50,000 a year who is paying 25% is paying roughly $12,500 or about only 3% in comparison to the person who makes $1,000,000.



Regressive tax is a system where the tax that takes a smaller share of income as income increases. Governments do not set out to impose higher tax rates as income falls. But a tax that is proportional to a single rate to everyone.
Sales tax for example is regressive.
Critics of taxes that tend to be regressive argue that it does not consider the the ability-to-pay principle for individuals.



Individual Income Taxes
The IRS in the United States, comes up with a **tax code**, a set of laws that govern federal taxes. The IRS collects taxes from workers using a "pay as you earn" system, where employees are taxed per paycheck.

Tax payers are also required to submit their tax return forms between January 1st to April 15th each year. If the IRS questions the accuracy of a taxpayer's return, it may order an **audit** or a formal review of the returns.

USA Tax rate as of 2018

2018 tax brackets

The tax law passed in December led to the marginal tax rates being lowered and the income ranges being altered.

Tax bracket	Single	Married Filing Jointly	Head of Household
10%	0–$9,525	0–$19,050	0–$13,600
12%	$9,525–$38,700	$19,050–$77,400	$13,600–$51,800
22%	$38,700–$82,500	$77,400–$165,000	$51,800–$82,500
24%	$82,500–$157,500	$165,000–$315,000	$82,500–$157,500
32%	$157,500–$200,000	$315,000–$400,000	$157,500–$200,000
35%	$200,000–$500,000	$400,000–$600,000	$200,000–$500,000
37%	$500,000 and up	$600,000 and up	$500,000 and up

SOURCE: U.S. CONGRESS

YAHOO! FINANCE

Payroll Taxes
The second largest share of federal tax revenue comes from payroll taxes.
Payroll taxes is a tax on the wages a company pays its employees.
The two most important types are Social Security Tax and Medicare Tax.

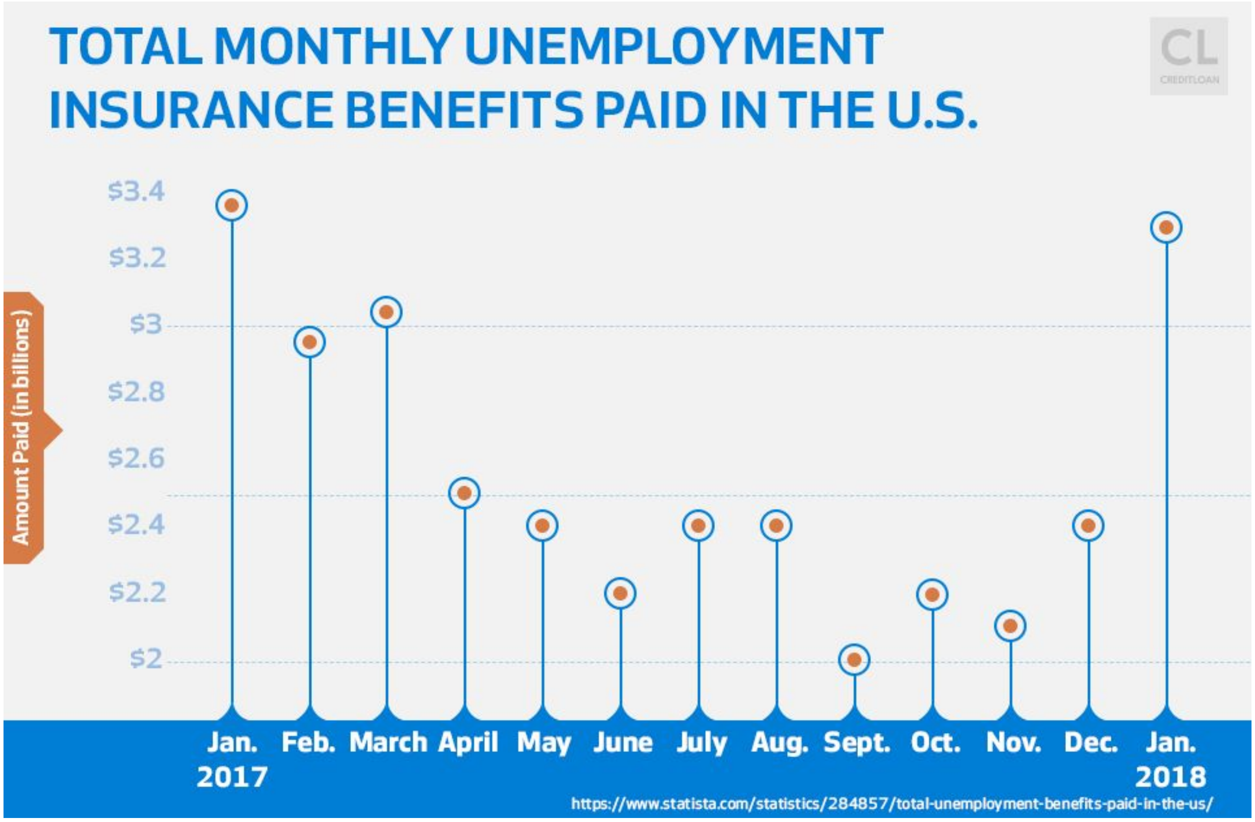
Social Security Tax - is set at a fixed rate, and is paid by half the employer and half the employee (unless they are self-employed, then they pay 100% of it).
It is a regressive tax which applies only to wages, salaries and self-employment income, and **does not apply** towards investments.

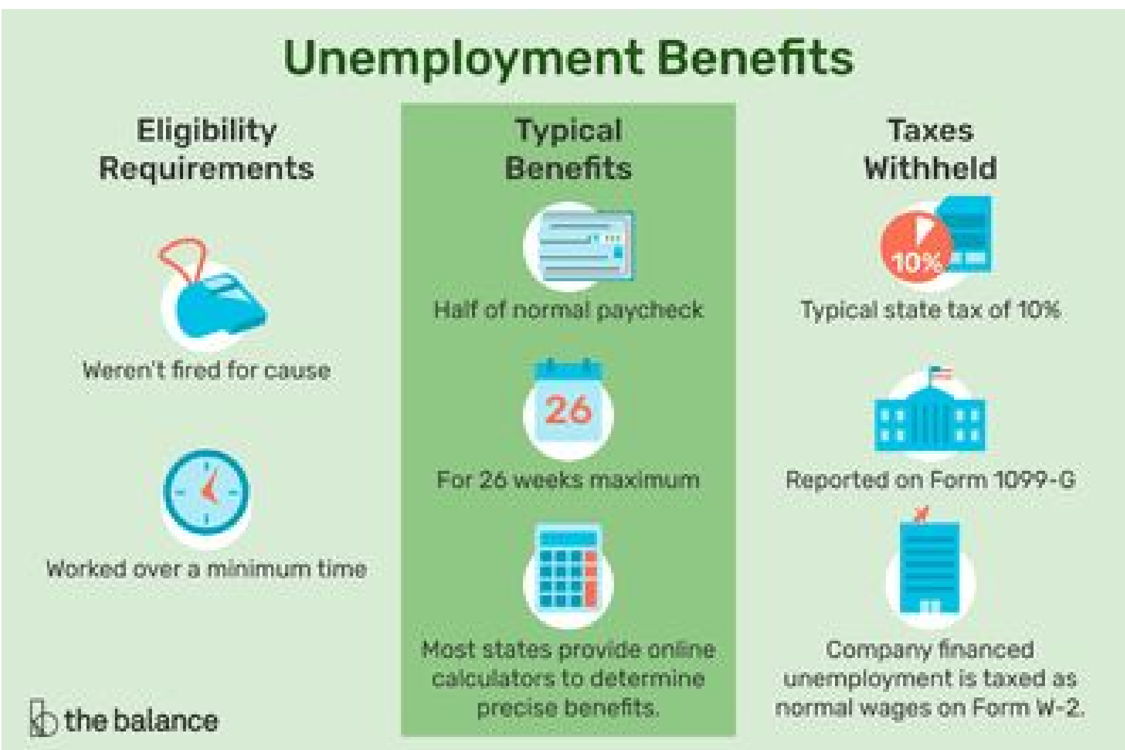
Only earnings up to a specific amount are taxed. The cap in 2013 was $113,700, meaning anything greater than that was <u>not taxed</u>.

The Medicare tax is also split evenly between the employee and employer (unless self employed).

Many states also levy payroll taxes.

Unemployment tax is state payroll tax that is used to assist workers who lost their jobs. In the same way, **state disability tax is** used to help workers who are injured on the job.


TOTAL MONTHLY UNEMPLOYMENT INSURANCE BENEFITS PAID IN THE U.S.
CL
CREDITLOAN
Amount Paid (in billions)
$3.4
$3.2
$3
$2.8
$2.6
$2.4
$2.2
$2
Jan. 2017
Feb.
March
April
May
June
July
Aug.
Sept.
Oct.
Nov.
Dec.
Jan. 2018
https://www.statista.com/statistics/284857/total-unemployment-benefits-paid-in-the-us/


Unemployment Benefits
Eligibility Requirements
Weren't fired for cause
Worked over a minimum time
Typical Benefits
Half of normal paycheck
26
For 26 weeks maximum
Most states provide online calculators to determine precise benefits.
Taxes Withheld
10%
Typical state tax of 10%
Reported on Form 1099-G
Company financed unemployment is taxed as normal wages on Form W-2.
the balance

Property Taxes

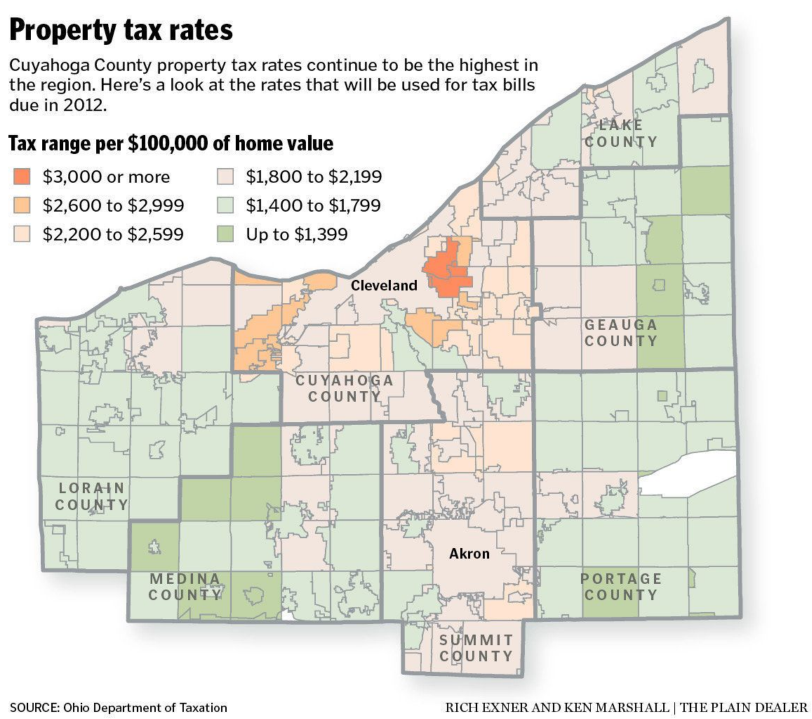
Any type of tax on property is considered **property tax**. Property taxes are proportional taxes that charge a fixed percentage of the value of the property. That value is calculated by an assessor. The assessed value can change, which means the tax rate changes.

School Funding Controversy

In the USA, many areas fund their local schools by property taxes. This is controversial, because it means wealthier neighborhoods (for example, Palo Alto) the houses average $3,000,000, meaning high taxes and more funding for schools. Whereas a place that is poorer (for example, Detroit, where the houses on average cost $60,000) the funding for schools will be much less.

The Curious Case of California

Proposition 13 Tax Reform Under Proposition 13 tax reform, property tax value was rolled back and frozen at the 1976 assessed value level. Property tax increases on any given property were limited to no more than 2% per year as long as the property was not sold. Once sold, the property was reassessed at 1% of the sale price, and the 2% yearly cap became applicable to future years. This allowed property owners to finally be able to estimate the amount of future property taxes, and determine the maximum amount taxes could increase as long as he or she owned the property.



Example of how property tax for schools can create unequal districts

Sales Tax

Taxes levied on a variety of goods and services. These are easy to collect and provide for funding for the state and local government.

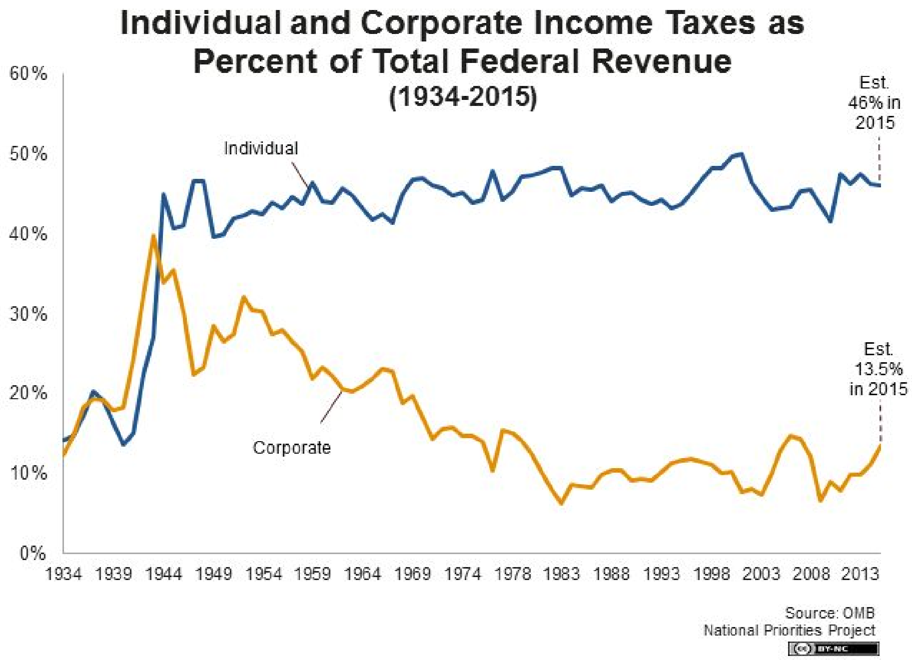
Singapore	
Thailand	
Bahrain	
Canada	
Eritrea	
Micronesia	
Myanmar	
Nigeria	
Saudi Arabia	
Taiwan	
United Arab Emirates	

Hungary	27.00
Croatia	25.00
Denmark	25.00
Norway	25.00
Sweden	25.00
Finland	24.00
Greece	24.00
Iceland	24.00
Ireland	23.00
Poland	23.00
Portugal	23.00
Italy	22.00

China	13.00
Costa Rica	13.00
El Salvador	13.00
Nepal	13.00
Belize	12.50
St Lucia	12.50
Trinidad And Tobago	12.50
Bahamas	12.00
Botswana	12.00
Ecuador	12.00
Ghana	12.00
Guatemala	12.00
Kazakhstan	12.00
Kyrgyzstan	12.00
Philippines	12.00

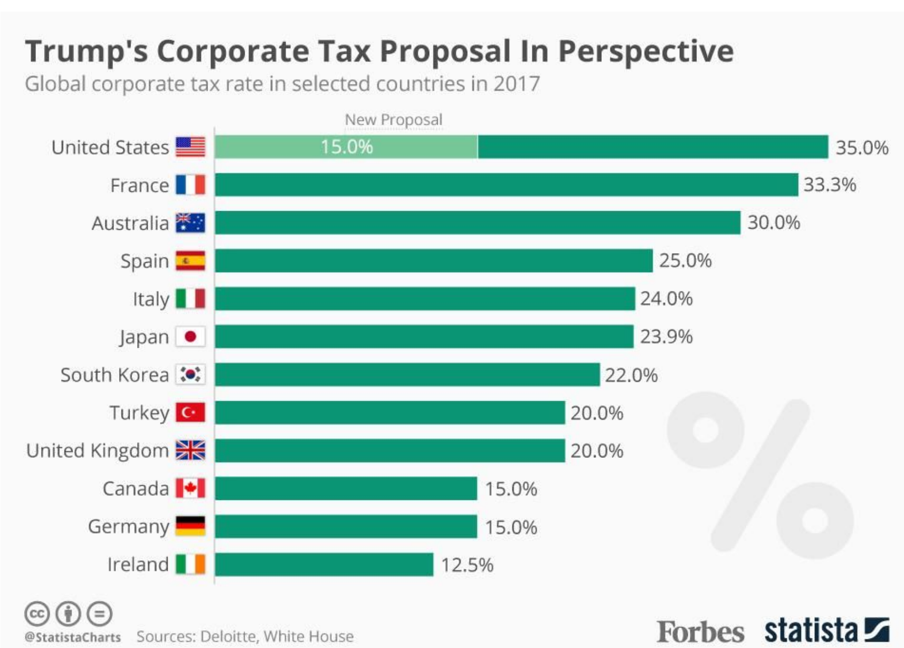
Corporate Income Taxes

Is applied to the profits of a corporation. Like individual income taxes, corporate taxes are progressive, the wealthier the company, the more they pay in taxes (in principle, in reality, companies try to find loopholes and many of the largest companies end up paying very little to no taxes).



Historically, this number continues to drop.

Higher taxes: more money generated for the federal government to use, but a risk of companies leaving the country (or not wanting to migrate to the USA).



Lower taxes: less money generated for the federal government to use, but could encourage companies to stay in the country (and potentially attract new companies and investors, like the nation of Ireland).