Macroeconomic Regulation

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Goals of Macroeconomics

- <u>**Goals of Macroeconomics**</u>
  - **Stable Prices** – rapidly increasing or decreasing prices reduces predictability and the likelihood of investment.
  - **Low Unemployment** – the more people who are employed, the more people stimulate the economy through spending.
  - **Balanced Economic Growth** – overly rapid economic growth can lead to inflation, and prices of goods will rise faster than the ability of consumers to pay for those goods.
  - **High Living Standards** – the economy exists for people, not vice versa, and should improve the standard of living.
  - **Reduction in Poverty** – the higher the affluence of people in an economy, the more the economy grows.
  - **High Productivity** – the gains in outputs should be maximized and the cost of inputs should be minimized.
  - **Balanced Imports And Exports** – what we sell to other countries should be approximately negated by what we buy from other countries and vice versa.

Macroeconomic Regulation

- **While Adam Smith argued that minimal government interference resulted in maximal economic productivity, most economies today are regulated by a widespread array of regulatory tools.**
  - In the US, this primarily involves federal agencies in the executive branch of government.
  - These agencies focus on a wide array of emphases ranging from regulation and stimulation of banking to the regulation and standardization of business practices to the protection of the consumer from predatory business practices.
  - The most important of these agencies is the Federal Reserve.

Source: www.blacklistednews.com

The Fed

- **The Federal Reserve has the biggest impact on the supply of money in the US.**
  - The Fed uses three major tools to regulate and stimulate economic activity in the United States.
- **These include:**
  - **The Federal Discount Rate** – the interest rate the Fed charges other banks for loans.
  - **Reserve Ratio Requirements** – the percentage of investment that banks are required to keep on hand at any given time.
  - **Open Market Operations** – the large-scale purchase or sale of government securities (bonds, treasury bills, etc.).

How Money is Created

- **The Fed's policies stimulate the production of money from nothing.**
  - For example, imagine a bank receives a $100 deposit.
  - If it is required to keep 20% in reserves, it is free to lend $80.
  - This $80 may be lent to a person who puts it into Bank B, which has to keep $16 on hand.
  - Bank B lends out $64 to Bank C.
- **Between Banks A, B, and C, there is now $244 to fund economic activity just from a $100 deposit.**
  - Although no new money was created physically, more than double was available commercially to fund new business and new economic activity that couldn't have occurred had the money been kept in a pickle jar instead.

Federal Discount Rate

- **The <u>federal discount rate</u> is the interest rate that the Fed charges banks when it lends a bank money.**
  - This is mainly what is referred to when it is said that the Fed determines interest rates.
- **A decreased discount rate makes it cheaper for commercial banks to borrow money by lowering interest rates.**
  - This results in an increase in the supply of money in the economy, which is good if there is a recession.
- **A raised discount rate will make it more expensive for the banks to borrow by raising interest rates.**
  - This would decrease the money supply, which is good if inflation is too high.

Reserve Ratios

- **Reserve ratios are the minimum percentage of deposits a bank must hold as reserves (to avoid runs on the bank like in the Great Depression).**
  - If the Fed needs to reduce the amount of money, they can increase the reserve ratios in order to force banks to hold on to more money.
    - *This reduces the amount of money they would be willing to lend, making it harder to get a loan.*
  - Reducing the reserve ratio would have the opposite effect, making it easier to get a loan.
    - *By making loans, banks create money, increasing the supply of money*

Open Market Operations

- **Open Market Operations (OMOs) are the purchase or sale of government securities, including US Treasury Bills and Bonds, on the open market**
  - A **government security** is a personal loan from a person or agency to the federal government.
    - *When someone purchases a government savings bond, treasury bill, or note, they are loaning their own money to the federal government.*
  - Government securities (or bonds) promise repayment of the original cost of the bond plus interest once the bond matures.
    - *This is considered a very safe investment because it is backed by the taxation power of the US government.*
  - Much of the $17 trillion dollar debt of the US government is actually held by bond-buyers (private, government, and business).
    - *Only about $5-6 trillion is held by foreign governments.*
    - *China, often believed to be holding most of the US debt, actually only holds $1.3 trillion of the debt.*

OMO's

- **Since the end of 2008, the Federal Reserve has greatly expanded its holding of longer-term securities through open market purchases.**
  - This is known as Quantitative Easing, which is the policy in which the Fed purchases government securities (and possibly bad private bank loans) in order to lower interest rates.
  - By buying government securities, the Fed increases the likelihood that private banks will give money to individual people and businesses in the form of loans rather than loan to the government by buying securities.
    - *During bad economic times, QE is a way to increase the willingness of private banks to take the greater risk of lending to individuals rather than the safer risk of lending to the government.*
  - This aims to increase the availability of money for lending by banks to individuals and businesses.

Quantitative Easing

- **The government is using Quantitative Easing because interest rates (also determined by the Fed) are already almost at 0.**
  - Because interest rates are as low as they can go, QE was used in to further lower private interest rates even more by increasing the willingness of banks to lend to people instead of the government.
  - This forces banks to keep their interest rates lower in order to attract individuals and businesses who are seeking a loan (which will provide income to the bank in the form of interest).
  - The easier it is to get a loan the more likely a person is to start a business, go to college, or seek other ways to advance themselves personally (which also helps to stimulate economic activity).
  - However, if QE is applied too quickly and/or too much, it will cause rapid inflation due to an increase in the money supply.

Federal Funds Rate

- **Besides the federal government, private banks can also greatly affect the supply of money in the economy by lending to each other.**
  - The federal funds rate is the interest rate that banks charge other banks when lending money to them.
  - This is not directly controlled by the government.
    - *Rather, this is the rate the government shoots for by changing the discount rate, the open market operations, and the reserve requirement.*
    - *Most monetary policy protocols are related to adjusting the federal funds rate as a way to adjust most of the money supply in the US economy.*
- **The government wants to ensure the federal funds rate is lower than the federal discount rate to ensure that banks can easily loan to each other.**
  - If the Federal Discount Rate becomes greater than the Federal Funds Rate, the Fed has to take action to stimulate activity that will encourage banks to lower their interest rates and lend to each other.

Taxes

- **Besides The Fed, the federal government can affect the economy in other ways as well.**
  - A primary macroeconomic tool of the federal government is taxes.

- **There are three kinds of taxes a government can levy. These include…**
  - Proportional (or flat) Tax
  - Progressive Tax
  - Regressive Tax

Proportional Tax

- **A <u>Proportional Tax</u> is where the tax is fixed at a certain percent (such as 10% of income). This is also known as a flat tax.**
  - Regardless of how large or a small a person's income may be, their tax is one flat percentage.

- **The advantages of this is that it is easy to understand, difficult to evade, and is easy to administer.**
  - The disadvantage is that a flat tax is often seen as unfair to low-income tax payers.
    - *This is because you still have to pay the same amount for a Big Mac regardless of if you are rich or poor.*
    - *If you are rich, you have more money leftover after taxes than someone who is poor because your expenses are a lower proportion of your income.*

- **A common example of a flat tax is sales tax; everyone pays the same sales tax for the same product regardless of who buys it.**
  - The US (and India and Australia) do not use a proportional system for income taxes, but it does do so for sales taxes.

Progressive Tax

- **A <u>progressive tax</u> is one that increases as the thing being taxes increases in value.**
  - A progressive tax takes a larger percentage of income in taxes from the high-income group than it does from the low-income group.
  - Income tax in the US is progressive and people with lower ability-to-pay, actually pay less taxes (as a percent of their income) than more affluent people.
    - *In the US, groups of people are broken into tax brackets based on their income.*
    - *Individuals who earned up to $8,375 fell into the 10% tax bracket while on the other end of the spectrum, individuals earning $373,650 or more fell into the 35% tax bracket.*

- **Progressive tax systems are based on the logic that people with an ability to pay more should pay more.**
  - The advantage is that those who benefited from society by becoming rich should have to support the society that made their success possible.
  - The alternative view of this is that successful people are being 'punished' for their success with a higher tax burden. Some argue that this is tantamount to income redistribution and reduces the incentive to work hard.

Regressive Tax

- **A <u>regressive tax</u> is one that gets higher proportionally as income or value gets lower.**
  - The tax rate decreases as income increases and low incomes are hit higher than high incomes.
  - A regressive tax shifts the taxation burden more onto those with a reduced ability to pay the tax.

- **The US has multiple examples of regressive taxes.**
  - For example, taxes on gasoline are the same for all people.
  - Because of this, gasoline tax is a higher proportion for low-income people than for high-income people.
  - Similarly, the payroll tax in the US has a cap; the higher you are above the cap, the less tax you pay than those nearer the cutoff.

Beyond Taxes

- **In addition to banking and taxes, the federal government can regulate the economy through…**
  - Minimum wage laws.
  - Regulatory Agencies
  - Antitrust Regulation
  - Patent Law
  - International Trade
  - Labor Unions

Minimum Wage

- **Minimum Wage – after campaigning on the issue and winning reelection in 1936, President Roosevelt signed into law the Fair Labor Standards Act in 1938.**
  - The FLSA introduced sweeping regulations to protect American workers from being exploited.
    - *The Fair Labor Standards Act introduced many worker's protection laws still in effect today, including banning child labor and establishing workplace safety statutes.*
  - It also created a mandatory **federal minimum wage** of 25 cents an hour in order to maintain a "minimum standard of living necessary for health, efficiency and general well-being, without substantially curtailing employment".

That's Debatable!

- **Minimum wage has always been a contentious issue even before its enactment in 1938.**
  - Advocates for a higher wage floor argue that it is right to ensure that workers to earn enough to live on.
    - *An employee working a 40-hour week at the current federal minimum wage would earn $15,080 per year.*
    - *This income would leave a two-person household -- say, a single parent with one child -- just below the federal poverty threshold of $15,130.*
    - *Roughly 70% of those on minimum wage work less than 40 hours per week, meaning they actually earn even less than this.*
  - Advocates have also argued that a higher minimum wage would decrease employee turnover, reducing the cost of training employees, and stimulate the economy by providing more money to people who would be more likely to spend the money than invest it.

Pro/Con

- **A primary argument against raising minimum wage is that it might increase unemployment.**
  - For example, a small business owner who has hired 20 employees at the minimum wage might only be able to afford to pay 15 employees if the minimum wage was raised.
  - This would also increase the amount of work the remaining 15 employees would have to do at a minimum wage rate.
  - A minimum wage is similar to a price floor, which almost always results in an unsold surplus. In this case, the surplus is of workers, meaning too many people want too few jobs.

- **Others argue that keeping a minimum wage low enables the worker to bargain in order to increase their likelihood of employment.**
  - An inexperienced worker might be more able to get a job during high unemployment if they are able to bargain for a lower wage in exchange for getting their foot in the door of an industry.

Intent vs. Outcome

- **While the intent of the federal minimum wage is to ensure the macroeconomic goal of higher living standards and a reduction in poverty, it is not always clear at what level (if any) this is best accomplished.**
  - It is possible that the goals of higher living standards for workers might be at the expense of some economic activity.
  - If so, it might also be possible to argue that the high economic productivity of the late 1800s and early 1900s was not acceptable given the deplorable conditions faced by many laborers.

Federal Agency Regulation

- **<u>Economic regulation</u> is defined as a type of government regulation that affects the price of goods or services or regulates the activity of firms into an industry.**
  - In addition to the Federal Reserve, other agencies include the Federal Communications Commission (FCC), the Securities and Exchange Commission (SEC), the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA), and more.

- **Government regulation has costs and benefits.**
  - The biggest benefit of government regulation is to protect consumers and business owners alike from businesses that could harm the consumer with their products or with the production of that product (such as through pollution).
    - *For example, the FDA ensures that all drugs have to be tested for safety and OSHA ensures that workers can do their jobs without a major risk of injury or death.*
  - However, this regulation and protection can also raise the cost of doing business and make it harder to get products to the market.

Antitrust Enforcement

- **Antitrust - Free and open markets are the foundation of a vibrant economy and antitrust laws work to ensure competition exists.**
  - Competition between firms lowers prices, results in higher quality products and services, provides more choices, and enables greater innovation

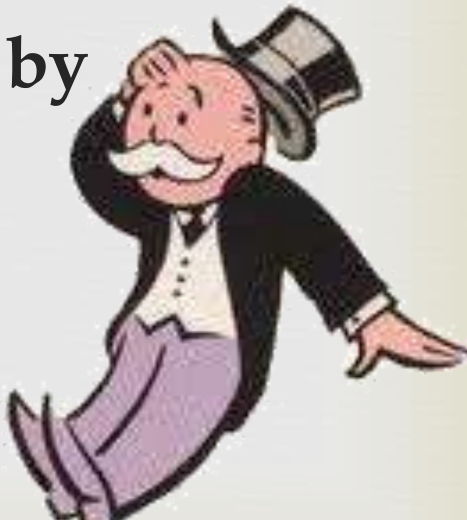
- **The Federal Trade Commission's Bureau of Competition enforces rules called <u>Antitrust Laws</u> that ensure the economy remains competitive for all businesses.**
  - The FTC's Bureau of Competition is designed to prevent monopolies and oligopolies.

Source: nordoniahillsbranch.akronlibrary.org

Antitrust Enforcement

- **A <u>monopoly</u> occurs when one business is the only seller of a product or service.**
  - An <u>oligopoly</u> occurs when just a few businesses sell a product or service.
  - For example, 3 companies control 90% of cereal sales (which is why the off-brand bagged cereal is so much cheaper).

- **Healthy competition must be supported by government regulation.**
  - Without government regulation through the FTC, there would be less competition over time, resulting in higher prices, lower quality, and less innovation.



Source: thideology.wordpress.com

Patents

- **<u>Patents</u> are a method of protecting intellectual property of the creators of a product, service, or idea.**
  - A patent is essentially a government-supported monopoly, assuring that only the creator of something can legally sell it.
  - Patents in the United States are granted for seventeen years from the date the patent is issued or for 20 years from the date of filing.
    - *The United States Patent and Trademark Office handles application and documentation of all patents.*

- **If there were no patents, then someone who invested time and money to create an invention would not get any benefit from their work.**
  - If there is no benefit from the risk and cost of inventing, then no one will take on the opportunity costs of the inventing process.
  - While patents are a form of a temporary monopoly, they also promote innovation, advancement of technology, and progressive business and has helped to make America a leader of innovation in the world.

Patents

- **However, patents also come with disadvantages, mostly that they can cause increased costs for consumers.**
  - Because a patent is essentially a legal monopoly, it also means that a company may abuse the privilege to increase their own profits and reduce competition.
- **Patents, when used appropriately, reward and encourage innovation but also can be abused by companies with more focus on profit than public welfare.**
  - Despite the risk for abuse, without patents it is unlikely that companies would make substantial investments in research and development (R&D).
  - E.g. pharmaceutical companies spend large amounts of money on research and development, for which patents are essential in order to earn a profit.
- **While patents enable a brand-name drug to be far more expensive, they also increase the likelihood that the drug is actually made in the first place.**

International Trade

- **International Trade – a major goal of macroeconomics is to gain advantage from trade with other countries by expanding the market for US products and allowing for the import of foreign goods that cannot be produced in the US.**
  - Countries can benefit from international trade if each country does something better than the other (i.e. can produce goods or services at a lower cost).
  - Countries can maximize their welfare by specializing in the production of those goods where they are most efficient and enjoy the largest advantages over rivals.

- **For international trade to be sustainable, there must be a balance of payments.**
  - This means that exports out of the country roughly equal imports into the country.
  - If a trade deficit occurs (where imports exceed exports), the US GDP will decrease, slowing economic growth.
  - The US has a trade deficit for products but a trade surplus for services.

Importance of Trade

- **The value of international trade is highlighted by a concept called Absolute Advantage.**
  - Absolute Advantage refers to the ability of an individual or group to carry out a particular economic activity more efficiently than another individual or group.
  - If Amery can milk 50 cows in 2 hours, but it takes Brit 3 hours to milk 50 cows, then Amery has the absolute advantage.
- **Because each country has the absolute advantage for producing different goods, it most the most economic sense to let the most efficient producer of a good sell that particular good to the rest of the world.**
  - The most efficient producer of a good can produce and sell that good most cheaply.
- **This is similar to the concept of Comparative Advantage.**
  - Comparative Advantage is whether an individual, group, or country can make Product X or Product Y more efficiently.
  - If you can make X more efficiently than Y, and another country has the Absolute Advantage in making Product Y, it makes far more sense to import that product.

International Trade

- **Importance of international trade to the US:**
  - Manufactured exports supported roughly 6 million U.S. jobs in 2006.
    - *Those jobs accounted for 19.9 percent of all U.S. manufacturing employment, nearly one out of every five jobs.*
  - The USDA estimates that for every dollar of agricultural exports, this stimulates $1.27 in business activity.
    - *Every $1 billion of U.S. agricultural exports in 2012 required 6,577 American jobs throughout the economy.*
    - *The $141.3 billion of agricultural exports in 2012 produced an additional $179.5 billion in economic activity for a total economic output of $320.8 billion.*

- **Exports from Wisconsin are a major factor in the state economy.**
  - Export value for all Wisconsin commodities totaled $23 billion in 2013.
    - *This equates to almost $4000 in economic activity per resident.*

International Trade

- **While free trade is usually seen as a positive thing, sometimes countries may try to protect themselves from foreign competition.**
  - This can cause economic interruptions, raising the price for goods.
  - For example, a country may try to place a <u>tariff</u> on a good produced outside the country so that the cost of the foreign good is higher to Americans than the same good made in the US.

- **In 1994, the North American Free Trade Agreement (<u>NAFTA</u>) entered into force.**
  - The United States, Canada, and Mexico agreed to eliminate all barriers to trade among the three countries.
  - This created the largest free trade area in the world, linking 450 million people and $17 trillion in trade.
  - A 2007 government publication on NAFTA estimates that the average family of four in the US gains up to $930 per year from the economic activity, lower costs, and larger markets created by free trade in North America.

Labor Unions

- **Labor Unions – while not a direct part of the US government, labor unions play a major role in the macroeconomics of the US.**
  - Many unions have won higher wages and better working conditions for their members.
  - The National Labor Relations Act of 1935 (NLRA) provided government support for workers to organize unions and bargain collectively with their employers about wages, hours, and working conditions.
    - *Workers originally formed unions to protect sudden wage cuts, lay-offs, or firings as well as end overly long working hours and unsafe conditions which were commonplace in the early 1900s.*

Labor Unions

- **Business owners often have unfavorable views of unions as they reduce their flexibility, reduce profits, and lessen the authority and freedom of an employer.**
  - While unions certainly played a role in eliminating abhorrent worker conditions, economists often see unions as an artificial price floor, causing a surplus of labor and an increase in unemployment.

- **Unions can coexist peacefully with businesses, particularly in high-skill areas where the cost of replacing an employee is high and the need for consistency is great (such as highly demanding professions like delivery companies).**
  - Whether unions are good or bad often depends on your perspective, position in a company, and political affiliation.

Keynes vs. Hayek

- **How macroeconomics should be regulated by governments has always been an area of major debate.**
  - Adam Smith argued for classical/laissez-faire economics, stating that the less governments interfered with the economy, the better they performed.
    - *Smith believed that the proper role of government was national security, protection of private property, and printing of currency but NOT interference with the economy.*
- **Keynes was among the first to suggest that government intervention could be good to stop the downward spirals that caused recessions and ultimately depressions.**
  - Keynesian economics is the ideology that depressions are caused by too little spending, which can be countered and reversed by government spending.

Keynes vs. Hayek

- **Not everyone agree with Keynes – two days after Keynes published his ideas, four professors led by Friedrich A. Hayek responded with their own ideas.**
  - Hayek argued that while consumer spending was helpful, investment was also beneficial to economic productivity.
- **More so, Hayek questioned the value of creating government deficits in order to stimulate the economy.**
  - To Hayek, less government intervention meant more economic freedom, and when people are free to choose, the economy runs more efficiently.
- **Hayek argued that it was better to focus on eliminating barriers to trade created by tariffs and other forms of protectionism and increase the exchange of goods by reducing regulation.**

Source: www.econedlink.org

The Great Recession

- **Keynes vs. Hayek is really “recovery through government spending” vs. “recovery through austerity and prevention of deficits”, or even more simply “government vs. business” as the way to manage the economy.**
  - Keynes and Hayek represent opposite ends of an ideological spectrum; most macroeconomic regulation in the US falls somewhere between these two extremes.

- **The Great Recession of 2008 has been seen as the ultimate test of whether Keynes or Hayek was correct.**
  - Some argue that the prevention of a second Great Depression through increased government spending and bailouts is proof the Keynes was right.
  - Others argue that Hayek was proven right by the fact that the recovery has been so feeble and that a focus on private investment would have resulted in a stronger recovery.
  - Ultimately, we have no way of proving who is right because we have no control (an economy similar to the US where an opposite action or no action was used) for this economic experiment.

Source: redstateeclectic.typepad.com

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