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Original Paper

The Real Effects of "Fed" Intervention

Caeden A. Byrd, Dr. Kelly Noe* & Dr. Stephanie Ross

Stephen F Austin State University, P.O. Box 13005, SFA Station, Nacogdoches, United States

* Corresponding Author, noekelly@sfasu.edu

Abstract

This paper is to inform the reader about the Federal Reserve and the overall banking system in the United States. It investigates how the policies enacted by the Federal Reserve affect Americans through their open market operations, inflation, and manipulation of the M1 money supply. The method used for this research paper is comprised of publicly available financial data from accredited institutions that are required to release this information. The conclusion found is that the Federal Reserve is enacting policies that help the economy in the short-term by providing much needed liquidity to businesses and entrepreneurs in time of recession or economic drawback. However, the long-term effects have been putting unneeded pressure on the middle and lower economic classes due to the rampant increase in the money supply, causing the prices of goods and services to increase alongside it. Evidence suggests that these policies may force many Americans to be stuck in part-time jobs, living paycheck to paycheck, and resulting in their overall wealth diminishing.

Keywords: federal reserve, bank runs, central bank, U.S. banking system, U.S. monetary policy, Keynesian economic system

The Real Effects of "Fed" Intervention

Most Americans recognize the Federal Reserve as the central bank of the United States; however, that tends to be the full scope of what they know. To many people, the Federal Reserve is mysterious, and it is ripe to conspiracy theories of Lizard overlords or secret societies that control our global economy. People all over the internet spew all kinds of misconceptions as to what the federal reserve is actually doing. To understand the Federal Reserve, like most things, one needs to start at the beginning. The debate over having a central bank in the United States can be traced all the way back to the country's first Secretary of Treasury, Alexander Hamilton. He was so adamant about having a central bank that he died in a pistol duel with Aaron Burr over that exact principle. At the time, the concept of a large central bank frightened the newly founded country; mainly to avoid repeating the mistakes of their European counterparts. During this time, several of the European countries started trying their hand at central banking, which in turn allowed one of the richest families in history, the Rothschilds, to gain immense power due to their financing of gold to support military actions. The Rothschilds became notorious in the world for their role in creating what is now modern international finance. However, at the time of the newly established United States, they basically owned all of Europe due to the massive debts the countries owed to them. This was the crux of Aaron Burr's argument against The Federal Reserve. However, Aaron Burr was not alone in this belief throughout the history of the United States. Several other prominent U.S. presidents, including George Washington, Andrew Jackson, and Ulysses Grant opposed the central bank, but were, in the end, unsuccessful.

Ultimately, the creation of three central banks resulted during the 200 plus years of the United States' history. The Bank of the United States was the first central bank. The second central bank was called the Second Bank of the United States, and the third and current iteration of the central bank is called The Federal Reserve which was established on December 23, 1913. The purpose of the Federal Reserve system was to ensure liquidity within the banks which was meant to create trust in the overall banking system and deter the public from bank runs. This reform was a result of a particularly severe panic in 1907, that caused several bank runs and truly showed the instability of the banking system at that time

(Chen, J. 2020, August 28). This fragility of the system became apparent because the very nature of a bank run is caused due to public opinion that a bank will fail, which will cause their depositors to “run” to the bank to withdraw their deposits. However, this is contradictory to the very system of banking which is to use depositors’ deposits to make loans and earn income from those loans. Banks attract depositors by their reputation or by maintaining public trust by ensuring the safety of their deposits. To ensure operations and customer needs, the bank keeps a small reserve, but it does not have all of their depositors’ money on hand; this is because some of those deposits have been loaned out to stimulate the local economy and earn income. Since they do not keep all of the money on hand, when a massive influx of people come in to withdraw their funds, the bank cannot service all of their requests. When everyone is withdrawing because they have lost faith in the safety of their deposit, this could potentially result in causing the bank to fail. When the bank fails, everyone who was a depositor and did not receive their withdrawal, loses the entire deposit. The Panic of 1907 left many in the United States, especially depositors, questioning their confidence in the financial system. The panic lasted for six weeks and was caused by the bankruptcy of two minor brokerage firms. “A failed attempt by F. Augustus Heinze and Charles Morse to buy up shares of a copper mining firm resulted in a run on banks associated with them. The New York Clearing House declared these banks solvent a few days later” (Moen & Tallman, n.d.). The New York Clearing House served as a quasi-central bank during this time, and they could set monetary policy, issue currency, and hold gold reserves. The depositors at these banks caused a “run” due to them wanting to move their money into more reliable banks. Basically, people who were depositors of banks not associated with The New York Clearing House were deemed by the public as less reliable, which in turn put more faith into central banking.

The ultimate purpose of the Federal Reserve is to bolster confidence in and to provide stability to the financial and banking systems. Since banks and similar institutions make money through the fees or interest earned from loaning out money, robbing a bank would only yield a maximum of ten percent of the amount the bank has in deposits. This is because the Federal Reserve requires banks “with more than $127.5 million on deposit maintain a reserve of 10% of deposits. Banks with more than $16.9 million up to $127.5 million had to reserve 3% of all deposits. Banks with deposits of $16.9 million or less did not have a reserve requirement” (Amadeo, 2020, October 27). This reserve policy provides peace of mind for depositors because it requires banks to maintain a certain level of liquidity. The Federal Reserve also provides stability in the financial and banking system. Inflation is regulated by the monetary policies, set by the central bank, surrounding the overall money supply. Thus, it allows for a single central entity to control the stability of prices through the regulation of inflation. This brings stability because speculators and investors can reasonably predict inflation and risk, which in turn allows them to make smarter/safer investments with more accurate predicted returns. The reason for this is because risk and return are positively correlated, which means the more return required, the more risk there needs to be associated to it. Inflation and price stability are forms of risk that are considered when making investment decisions, therefore making it easier to calculate the required return on an asset based on these figures, which are regularly updated and made available to investors from the federal reserve’s quarterly or annual data collected. This can best be explained by the formula below:

“*RRR*=Risk-free rate of return+ *beta* (Market rate of return−Risk free rate of return)

*RRR= Required Rate of Return

*Risk Free rate of return= (typically) The yield of short-term US treasuries

*Beta= The amount of risk associated to the stock or equity over time

*Market Rate of Return= The rate of return from the benchmark index, typically the S&P 500

*Inflation must also be factored into an RRR calculation, which finds the minimum rate of return an investor considers acceptable, considering their cost of capital, inflation, and the return available on other investments.” (Murphy, 2020, November 19)

Investors can obtain federal reserve data from the fred.stlousisfed.org. The purpose of this website is to be a free resource to provide investors with high quality research in the areas of macroeconomics, money and banking, and applied microeconomics. Also, the research shared to this website contributes to the monetary policy discussions for the Federal Open Market Committee (FOMC) meetings. The

Committee is made up of twelve members, and of these members there are seven Board of Governors, the president of the New York Federal Reserve bank, and the remaining four members are on a rotating basis of the other eleven Reserve Bank presidents.

These meetings are crucial for the development in financial markets and economic forecasts. Along with the decisions around the countries monetary policy and which would be most beneficial for the economy and the country overall, the Federal Reserve uses the decisions made in these meetings to lead the direction of monetary policy through directing open market operations (OMO). Open market operations or OMO refers to the buying and selling of U.S. Treasuries on the open market to regulate the supply of money that is on reserve to loan out to businesses and consumers. This allows the Federal Reserve to hit their target federal funds rate by controlling the amount of liquidity commercial banks have in their reserves by buying or selling government bonds with them. Basically, the effective federal funds rate (see Figure 1) is an interest rate that is determined by the market, but heavily influenced by the Federal Reserve through open market operations. This rate is used to determine how much interest is owed when an overnight operation occurs, which results when a bank borrows excess liquidity from another bank to ensure they meet their federal liquidity requirements or are in need to raise liquidity rapidly. This is where we can see the direct impact of the federal reserve on consumers (Heakal, R. 2021, March 08) because the effective funds rate is the “central interest rate” for the U.S. financial market. It influences prime rates, which is the rate banks charge customers with higher credit ratings, and longer-term interest rates like mortgage, loans, and savings (Effective federal funds rate. 2021, March 01).

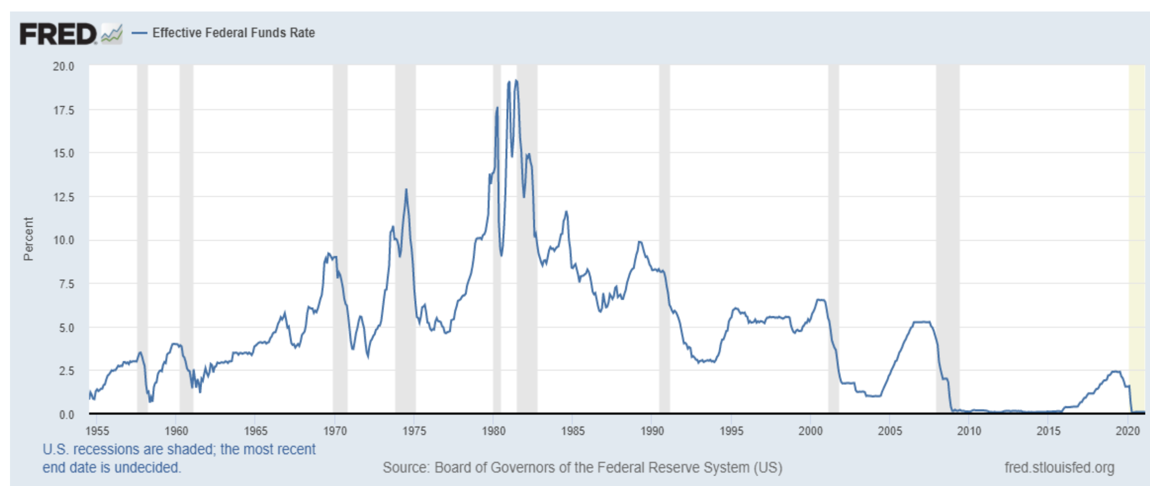

Figure 1. Historical Effective Federal Funds Rates from 1955 – 2020

Note. Adapted from fred.stlouisfed.org

As previously mentioned, the Federal Reserve has a major role in setting this rate through open market operations. Open market operations can give banks excess loanable reserves or deplete them of it. The more excess, the more loans can be made to consumers or businesses and vice versa for depleting reserves. The reason this happens is because buying securities adds money to the system, which makes borrowing money cheaper, whereas selling securities removes money from the system, making borrowing money more expensive. Figure 1 shows that every time the U.S. goes into a recession or contraction, the Federal Reserve lowers the effective funds rate through buying securities (OMO), causing interest rates to go down and making it cheaper to borrow. The trend reacts to the grey areas on the graph, which represent recession or contractions in the economy. The Keynesian ideology behind this is that when the economy enters a slump, the central bank can stimulate the economy by allowing consumers and businesses access to more capital (liquidity). This allows for spending to continue and

for businesses to take a more reduced financial impact, instead of resulting in a potential depression. This has been the monetary policy of the Federal Reserve for the last forty odd years and has ramped up in the last twenty years (Staff, I. 2020, October 26).

As stated above, the Federal Reserve has been acting on Keynesian economic policy theory. The Keynesian theory focuses on active government policy to manage demand and to prevent economic contractions or recessions. The theory looks at the total spending in an economy and how inflation, unemployment, and production output is impacted. This is essentially the focus of the U.S. government and the Federal Reserve spending. Since adopting Keynesian economic policies, both governmental and consumer spending has increased exponentially. Referring to Figure 1 above, the interest rates were rising from the 1950's through the mid 1980's. During this time, we saw the biggest boom in American history, along with the creation and growth of the middle class. The government and Federal Reserves' focus were on saving, which in turn echoed to many Americans. Would it be in the investor's best interest to put his money in a savings account yielding 10% or one yielding 0.65%? How likely would the investor look for an alternative store of value? Chances are good that the 0.65% looks less appealing and that forces people to look for riskier alternatives to store their wealth instead of keeping it in a savings account.

Figure 2 below shows how lowering interest rates affects asset prices. Essentially, the higher the rate resulted in the lower asset returns. During the COVID-19 pandemic, the effective funds rate went nearly to zero at the beginning of 2020. Coincidentally, this caused asset returns (prices) to soar simply because the incentives for saving money were no longer there.

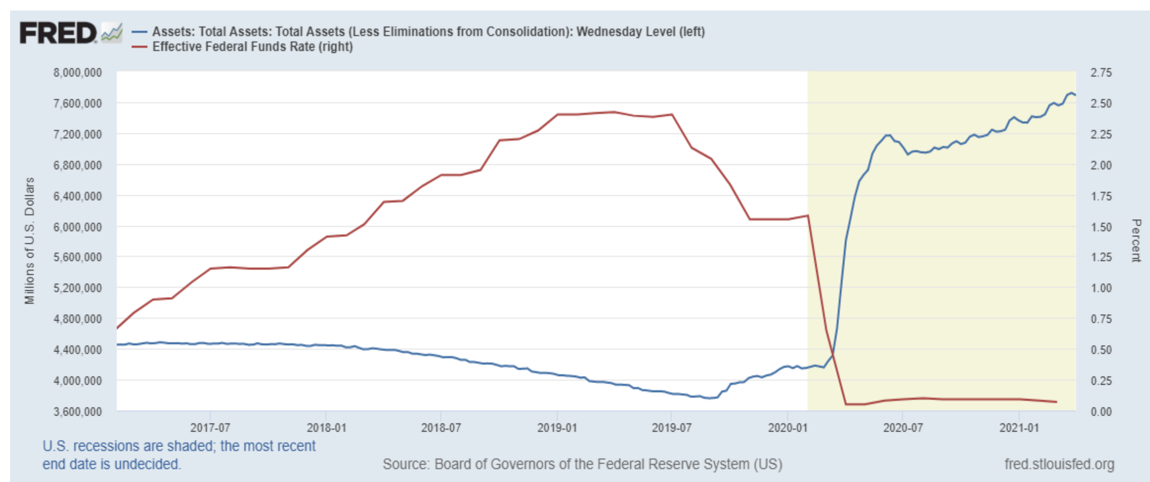

Figure 2. Relationship Between Asset Prices and Interest Rates (2017 – early 2021)

Note. Adapted from fred.stlouisfed.org

Also, notably, the U.S. stock market keeps climbing higher and higher, even amidst a recession (Troise, D. 2020, December 31). During March 2020, we saw the end of the eleven year bull run on the market as news of the COVID-19 pandemic spread and lock downs started to spread across the global economy. However, by August, all the losses the S&P 500 index had incurred were gone and were replaced with an all time high; this would not be the first time this would happen in 2020. The S&P 500 hit an all time high thirty-three times in 2020 alone. This is attributable to the quantitative easing and stimulus brought on by the COVID-19 pandemic.

Figure 3. Relationship between M1 money supply and the Wilshire 5000 index

Note. Adapted from fred.stlouisfed.org

As seen in Figure 3 above, there is a positive correlation between the increase in the M1 money supply and the Wilshire 5000 total market full cap index (which is a market-capitalization-weighted index of the market value of all American-stocks actively traded in the United States). The Wilshire steadily increases alongside the M1 supply before the start of 2020. But once the pandemic hits the market, it caused a dip to nearly 2017 levels. The M1 then drastically spike, causing the market to chase after it, which brought us all those new highs in 2020 and 2021.

Many Americans are ingrained to think that the economy is strong when the market reaches all-time highs. We have seen that idea pushed countless times over the previous two administrations (Obama and Trump) as a talking point for how well they have managed the economy. However, the stock market does not represent the entire U.S. economy. Instead, the market only represents 14% of American families who are directly invested and 52% who have some level of investment in the markets, mostly through retirement and 401k accounts. This is in addition to the 63% of American households that own real estate. As you can see, owning assets is not an overall American thing. Most Americans do own some form of assets, but it is not the whole. The market is reaching all-time highs due to the nearly zero rates, and it has never been cheaper to take on debt to buy a house, to start a business, or to buy stocks on margin. Margin trading is taking a loan out to buy stocks, options, or futures and paying it back in the short term. However, there is always a price for admission. The real cost of all this money printing, quantitative easing, and stimulus handouts is an over-inflated sense of strength in the economy and increased prices for goods and services. Most Americans assume the stock market is a good indicator of the economy. So, when you see different administrations speak of the new highs set for the stock and real estate markets, and all the benefits that means for the economy, just know that it does not represent the whole, and that this further adds to the downward pressure put onto the impoverished class of Americans (What percentage of Americans own stocks or real estate? 2021, January 19).

As stated above, the current monetary policy of the U.S. is to incentivize spending by keeping interest rates low, which allows for more liquidity in the economy, and allows asset prices to continue to rise. This adds unneeded pressure to the lower class for several reasons. First, increased prices for assets make it harder for the lower class to get into the game. Second, the increased inflation makes it harder for them to keep up with their living standards (sometimes it forces them to decrease it). Third, the lowering of interest rates is generally of no benefit since their debt is typically consumer credit card debt which is not impacted by the effective funds rate. Essentially, the current monetary policies of the federal reserve give the illusion that it is helping the middle and lower class. However, in reality, it decreases their buying power (through rising inflation), which makes it harder not only to buy consumer goods, but asset classes as well. The middle class is struggling to stay afloat. According to a

study done by CareerBuilder, "78% of U.S. workers are living paycheck to paycheck" (Friedman, 2021, January 07). The study shows that one in ten people earning $100,000 plus a year are living paycheck to paycheck. In addition, the study suggests that more than one in four workers do not set aside savings each month, with three out of four individuals being in debt of some kind and feeling that they will always be in debt. Also, more than half of minimum wage workers say they must work "more than one job just to make ends meet." Lastly, the study found that twenty-eight percent of workers making $50,000-$99,999 will always live paycheck to paycheck, with seventy percent of them in debt. This is a direct result of the monetary policies, and the middle class is barely able to keep up with costs necessary to maintain a regular way of life in the United States.

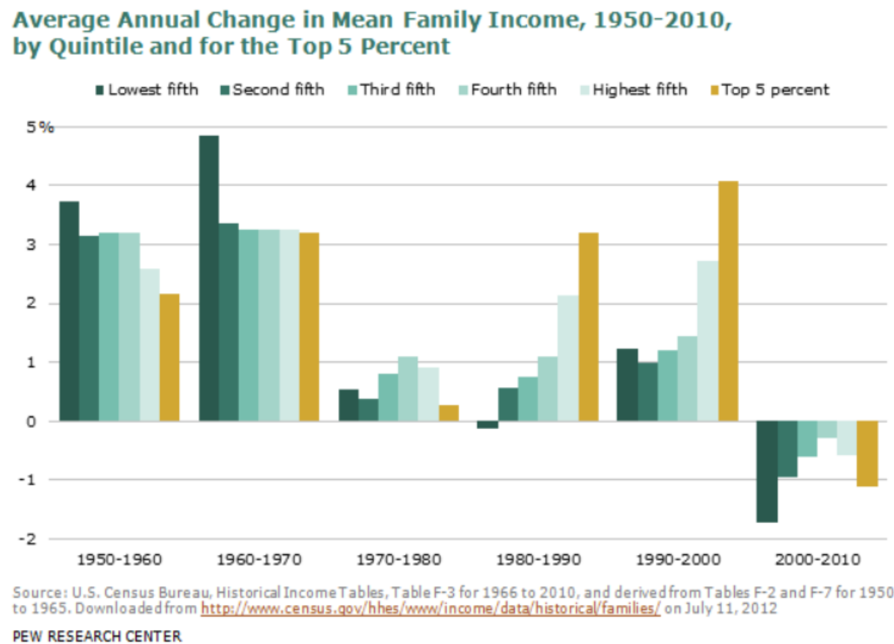

Figure 4. The Average Annual Change in Mean Family Income from 1950 – 2010

According to Figure 4 above, everyone's income since the beginning of the new millennia has had a negative change, meaning that their overall earned income is going down. So, they are earning less and losing buying power. Unfortunately, this is only the tip of the iceberg because as the middle class's income decreases, so has their share of the total income paid in the United States. Basically, since the middle-class workers are earning less, that difference has been going to the top twenty percent of earnings (Figure 5).

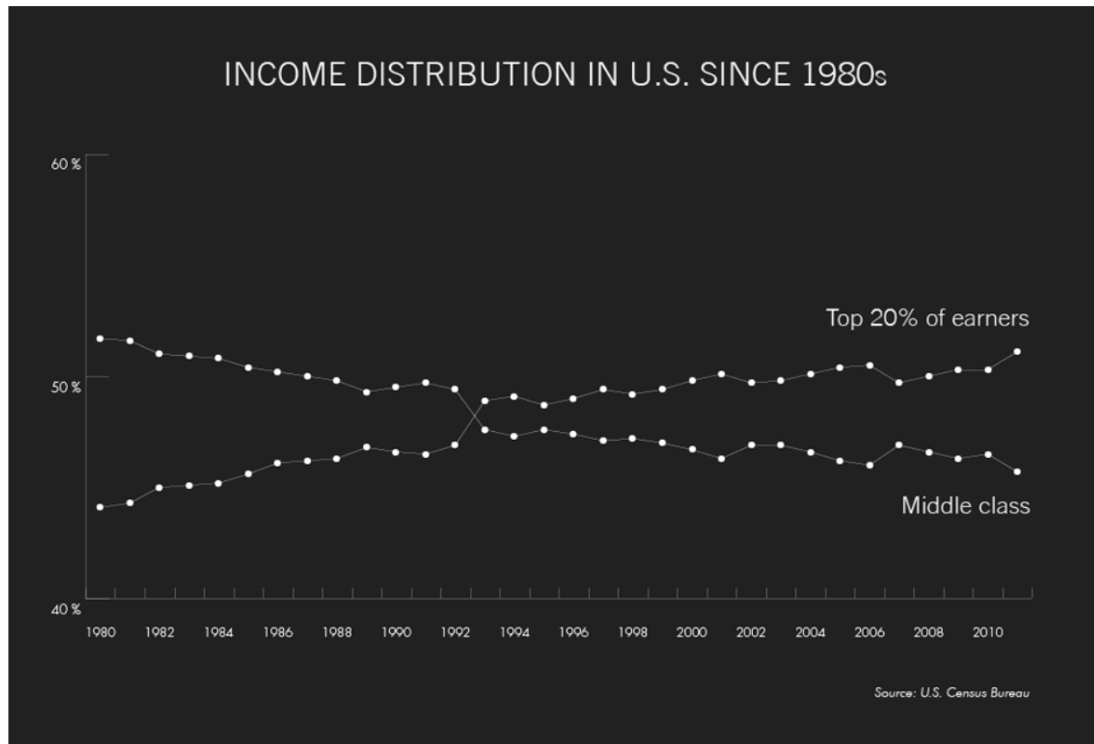

Figure 5. Income Distribution in the United States from 1980 - 2010

Note. Adapted from Breslow, J., & Wexler, E. (2013, July 9). The state of America's middle class in eight charts. Retrieved April 07, 2021, from https://www.pbs.org/wgbh/frontline/article/the-state-of-americas-middle-class-in-eight-charts/

This shrinking of income has been caused by several factors. One of the major factors, outside of the monetary policies contributing to this, is the difficulty Americans have had in finding full-time jobs. Many Americans have become stuck in their part-time job, unable to collect full time benefits and pay. This has severely affected their income and standard of living. We can better see this illustrated with the graph below (Figure 6).

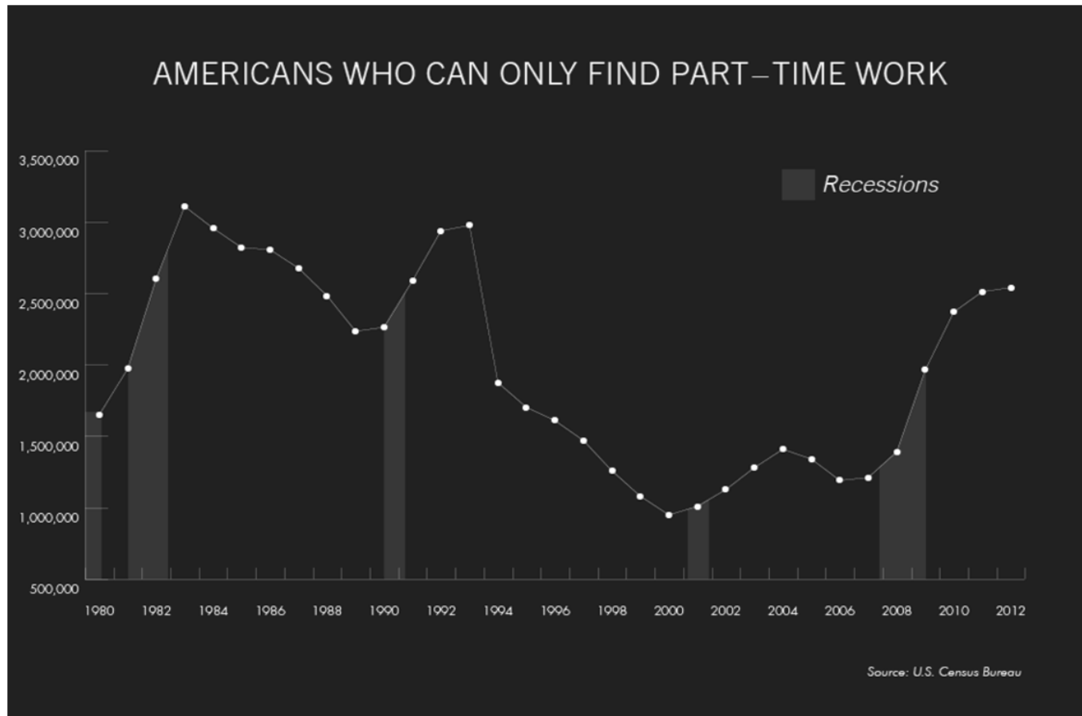

Figure 6. Americans Who are Only Able to Secure Part-Time Work from 1980 - 2012

Note. Adapted from Breslow, J., & Wexler, E. (2013, July 9). The state of America's middle class in eight charts. Retrieved April 07, 2021, from https://www.pbs.org/wgbh/frontline/article/the-state-of-americas-middle-class-in-eight-charts/

This predicament is only exacerbated through the increase in jobs abroad in our multinational corporations. Since the turn of the millennia these large multinational recognizable corporations have been shredding jobs in the U.S. and replacing them with workers abroad. Now, this has become a double-edged sword. Since shareholders expect growth from their investment contribution, these companies utilized the strength and demand for the U.S. dollar to employ more workers abroad for less than what it would cost to employ domestically. This allowed for a decrease in their expenses and an increase in their profits or return for investors. So yes, a percentage of Americans are still benefitting. However, according to the stated information above, that percentage is small when compared to everyone else in the U.S. This provides further evidence as to the pressure being placed on the middle and lower classes. The reasoning for corporations to move operations abroad is because the cost of doing business here in the U.S. is expensive and only becoming more expensive due to inflation. Figure 7 graph below shows the jobs created domestically and abroad by multinational corporations.

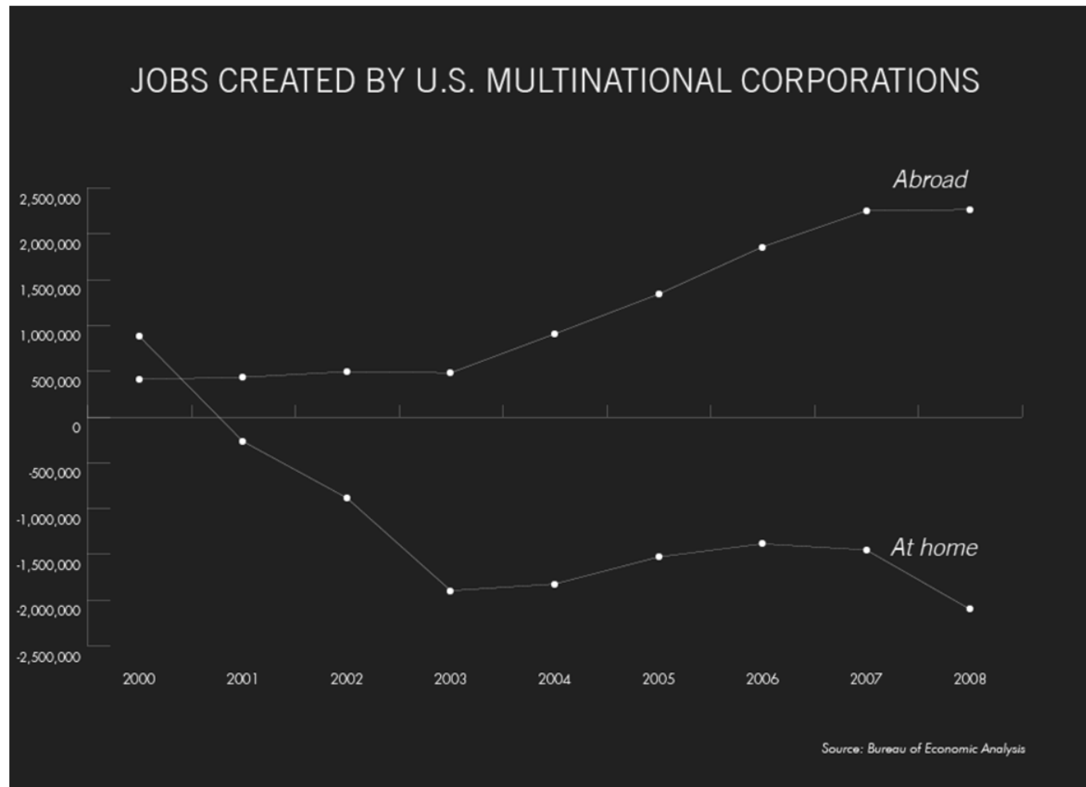

Figure 7. Jobs Created by U.S. Multinational Corporations from 2000 – 2008

Note. Adapted from Breslow, J., & Wexler, E. (2013, July 9). The state of America's middle class in eight charts. Retrieved April 07, 2021, from https://www.pbs.org/wgbh/frontline/article/the-state-of-americas-middle-class-in-eight-charts/

Conclusion

The Federal Reserve is the central bank of the United States and was passed into law by the Federal Reserve Act on December 23, 1913. They control the monetary policies that govern the United States banking system. Currently, the Federal Reserve practices Keynesian economic theory, which looks at the economy in terms of total spending and its effects on output, employment, and inflation. The Federal Reserve sets monetary policies via the Federal Open Market Committee. The purpose of the Federal Reserve is to keep the stability of prices, assets, and the economy. The recent policies set by the central bank has been one of constant increase in the money supply through Open Market Operations. The effects of these policies have put pressure on the middle and lower classes through the loss of buying power (inflation). This has caused the middle class to shrink, and it has forced Americans to take on more debt, with the majority living paycheck to paycheck. The Federal Reserve is not necessarily bad, and overall has aided in propelling the United States to becoming the largest economy in the world. However, like all things in this world, unchecked power can lead to corruption. The Federal Reserve faces no consequences from the public. They are the ones skirting the blame for common hardships falling upon Americans. The blame is always directed at the government or large corporations, somewhat deservingly, but they are just acting based on the policies set forth by the central bank. The Federal Reserve is not a malevolent organization created to subjugate everyone into financial slavery. However, they are a very powerful organization that can affect every American and needs to be treated as such. Allowing the Federal Reserve to have unchecked responsibilities is inconsistent with the major principles for the foundation of the U.S. related to limiting the role of government and the associated checks and balances.

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