

A Thesis Presented to

The Faculty of Alfred University

Findings of the Effects of the Glass-Steagall Act and the Dodd Frank Act

by

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1.) Abstract

This paper compares and contrasts the overall effects of the Glass-Steagall and Dodd Frank Acts. The legal components of both acts were researched, followed by an event study analysis of different types of data two years before and after the year that each act was implemented. Inflation rates, the annual averages of Moody's Seasoned Aaa Corporate Bond Yields, and unemployment rates within the United States were represented in tables and line graphs from the years 2008-2012 to show the effects of the Dodd Frank Act and 1931-1935 to show the effects of the Glass-Steagall Act. Data from inflation rates, the annual averages of Moody's Seasoned Aaa Corporate Bond Yields, and unemployment rates within the United States two years before and after both acts to the data were compared to the annual returns of the S&P 500 with dividends included two years before and after both acts to further compare the effects of the acts to market performance.

It was found that there was a strong pattern in the annual averages of Moody's Seasoned Aaa Corporate Bond Yields, a weaker pattern in inflation rates, and some similarities in unemployment rates when comparing data sets of the event study. There were no patterns between Moody's Seasoned Aaa Corporate Bond Yields and the annual returns of the S&P 500 with dividends included, but there were minimal patterns of the annual returns of the S&P 500 corresponding with dividends included between inflation and unemployment within both time periods.

2.) Introduction

When beginning my education at Alfred University, I was set on going to law school afterwards, so I was unsure of what major to enter. Upon my initial application, I had been able to set my major as “Pre-Law”, but since it was a program and not a full major, I chose to make my major business administration. Being this major has given me a broad perspective of the different aspects of the business world. My freshman year at Alfred University, I took Writing II with Dr. Robert Reginio, who convinced me to minor in English, which gave me an even broader perspective of the material I was being taught within the College of Business. While I was being taught how to utilize capitalism in the College of Business, I was ironically exploring its more exploitative nature upon America within the works covered within my English courses.

I wanted to connect law, finance, and economics, by researching legislation and measuring different types of economic data to compare trends before and after two major pieces of legislation regulating finance were passed. Both the Glass-Steagall Act and the Dodd Frank Act were legislative responses following major financial crises within the United States, and I wanted to see if I could find any patterns, given that both acts were regulating finance and were implemented following recessions. I did an event study measuring the data on the annual return of the S&P 500 with dividends included, inflation rates, the annual averages of Moody's Seasoned Aaa Corporate Bond Yields, and unemployment rates within the United States two years before and after both acts to look for any similar patterns in data. After presenting to the Board of Trustees the Student Managed Investment Fund Club's portfolio of over \$600,000 earlier this year, which had included several graphs comparing the portfolio's performance compared to the performance of the S&P 500 with dividends included, I wanted to further

showcase my graphing skills within my honors thesis by additionally comparing data from inflation rates, the annual averages of Moody's Seasoned Aaa Corporate Bond Yields, and unemployment rates within the United States two years before and after both acts to the data on the annual return of the S&P 500 with dividends included.

The first act that I wanted to look into, the Glass-Steagall Act, was implemented as a result of The Great Depression within the United States. The Great Depression was heavily spurred by the stock market crash in 1929. Throughout the 1920's, the United States stock market had heavily expanded as investing became more popular among middle class Americans. By 1929, hundreds of millions of shares within the stock market had been carried by a margin. The practice involved people buying stocks by taking out loans, but repaying the loans with the profits anticipated from a rise in the price of the purchased shares. When there was a drop in stock prices in October 1929, those that had purchased shares on a margin rushed to sell their stocks before their prices further dropped. However, the prices of shares were further decreased by their actions, since there was a larger supply than demand for the shares. As stock prices decreased, consumers and businesses lost confidence in the economy. Consumer spending decreased, especially in consumer goods and investments into businesses. Manufacturers stopped making as many products since there was less of a demand for them, which led to less jobs.

Passages of tariff acts had contributed to the Great Depression as well by causing deflation, or price decreases. Price decreases made it harder for profits to be made by sellers. The Fordney-McCumber Act had been passed in 1922 which raised the average import taxes for foreign goods to about 40% in an attempt to protect American farmers from overseas competition when there was a sudden decrease to prices of their crops due to overproduction. Despite the already high import tax from the Fordney-McCumber Act, those with agricultural

interests continued to lobby the federal government for further protection against agricultural imports.

Persistent lobbying led to the passage of the Smoot-Hawley Tariff Act on June 17 1930, which raised import tariffs by an additional 20%, and was the last legislation passed by Congress that set a tariff rate. Overseas banks began to fail as their exports further decreased from the tariff, so foreign governments took action to set their own trade barriers between themselves and the United States. The world economy was impacted, since global trade fell. Trade between the United States and Europe consequently fell by about $\frac{2}{3}$'s between 1929-1932, further increasing the loss of confidence within the United States market.

Banking panics between 1930-1932 furthered the Great Depression. The panics were composed of large amounts of bank customers that withdrew their deposits at the same time because they were afraid that their banks would shut down. The panics eventually led to banks being shut down. Bank failures further decreased spending and investments within the United States, since fewer banks were available to lend money. Closures of banks in turn led to monetary contraction within the United States. There was less money to lend, since many individuals had held onto cash instead of depositing it into banks. The Federal Reserve further increased monetary contraction by raising interest rates. Higher interest rates made it more expensive for loans to be taken out. The reduced amount of money within the United States contributed to lower prices. Lower prices made people hesitant to take out loans, since wages and profits were lower, making it harder for them to pay loans back or be able to spend more money.

Like the Great Depression, risky securities were a large factor of the 2008 financial crisis within the United States. Multiple practices led to the creation of this financial crisis. Banks

often sell mortgages to third parties. These securities sold are called mortgage backed securities. The creation of mortgage backed securities led to thousands of mortgages being bought and bundled together in order to make it easier for third party investors to buy because they didn't have to deal with individuals. Investors started taking advantage of mortgage backed securities, since they had higher returns than other low risk securities, such as treasury bonds, and they appeared to be safe investments, due to credit ratings agencies giving the securities high ratings. To promote mortgage sales, predatory lending practices began, such as making loans without verifying income or issuing adjustable rate mortgages with rates that were affordable at first, but would increase. The combination of lax lending requirements and low interest rates led to the increase of housing prices, which made collateralized debt obligations and mortgage backed securities appear more appealing to investors.

Collateralized debt obligations, another kind of security, also saw an increase in popularity in trading along with mortgage backed securities. Despite being composed of risky loans, collateralized debt obligations were rated highly. Credit default swaps began to be traded as insurance against the default of mortgage backed securities, but a company named AIG sold millions of dollars' worth of them without having enough money to actually back them up. Following the creation of credit default swaps, new securities were created that allowed for investors to bet on the rise or fall of mortgage prices.

Eventually, the housing market burst because people couldn't afford their expensive houses or keep up with mortgage payments that ballooned, or kept increasing over time. Borrowers began to default, and the market got flooded with houses despite no buyers. Since there was an increase in supply of houses, the price of houses fell, leaving other borrowers with mortgages for houses that were no longer worth the value of their mortgage anymore, which led

to more defaults. Large financial institutions stopped buying subprime mortgages, leaving subprime lenders with bad loans. Large lenders started declaring bankruptcy, and others were forced into mergers. Investors started losing money on their mortgage backed deposits and collateralized debt obligations. Unregulated, over the counter derivatives made it difficult for the state of firms to be evaluated from their balance sheets. The trading and credit markets froze, leading to the crash of the stock market.

The Federal Reserve stepped in and made loans to banks with strong foundations to keep them from collapsing because some lenders were panicking. The Troubled Assets Relief Program (TARP) was created to bail banks out and eventually to aid AIG, homeowners, and autobuilders to keep the economy running. The government began reviewing balance sheets in “stress tests” and announcing healthy banks to clear up uncertainty in institutional lending. Congress passed a stimulus package that put \$800 billion into the economy through government spending and tax cuts to promote spending and to slow the rate of unemployment. Congress also passed the Dodd Frank Act to promote transparency, promote trust within the financial system, and to prevent another financial crisis. The Dodd Frank Act stopped banks from taking on a lot of risk, reduced predatory lending by setting up a consumer protection bureau, required financial derivatives to be traded in exchanges that all market participants can observe, and put mechanisms in place that in the event that large banks failed would cause them to do so in a controlled, predictable manner.

3.) Components of Both Acts

The Glass-Steagall Act was implemented in 1933 in an attempt to limit bank investing activities, as their involvement in the stock market using individual's assets were considered one of the factors blamed for the Great Depression. Its goal was to gain the public's trust in the banking system in order to prevent consumers from participating in bank runs by taking actions to protect consumers by stopping banks from risking individual's assets in investing and forcing them to refocus strictly on lending. Following the implementation of the act, banks were given the choice to pursue either solely commercial or investment banking within one year. Securities had to be under ten percent of a commercial bank's income, but commercial banks could underwrite government bonds.

Several entities were formed as a result of the Glass-Steagall Act. The Federal Deposit Insurance Corporation (FDIC) started to insure bank deposits to increase trust in banks once again. All Federal banks were required to become members of the FDIC by July 1, 1934, but other banks could choose if they wanted to join. The Federal Open Market Committee (FOMC) was also created by the act. Composed of twelve members, the FOMC holds eight meetings a year to review financial and economic conditions within the United States to determine if any monetary policy is needed in response. If any actions regarding monetary policy are to be taken, the members of the FOMC have to consider potential risks to their long term goals of price stability and sustainable economic growth.

Regulation Q within the Glass-Steagall Act prohibited demand deposits from having interest paid on them, and limited the interest with ceilings on other deposits. Its goal was to limit competition between banks to stop them from having to take on risk in order to pay high

interest rates. Regulation Q was eventually repealed by the Dodd-Frank Act, so the action allowed for banks to be able to provide interest on demand accounts starting July 21, 2011.

Other parts of the Glass-Steagall Act were gradually repealed over time, eventually contributing to the 2008 financial crisis. It went largely unchallenged until the 1980's. By then, financial firms had grown in power, the stock market was up, and the deregulation of the Federal Reserve was being pushed. Following the 1980's the SEC and courts allowed for mergers and acquisitions that didn't follow the Glass-Steagall Act. For example, Citibank was able to buy Traveler's Group in 1998, and obtained Salomon Smith Barney from the deal, which was an investment bank. In 1999, the Gramm-Leach-Bliley Act was passed as a result of lobbying from industry groups. It repealed Section 20 of the Glass-Steagall Act, so banks could once again invest their consumer assets.

Passed in 2011, the Dodd-Frank Wall Street Reform and Consumer Protection Act as a legislative response to the 2008 financial crisis in order to monitor banks, credit rating agencies, and mortgage lenders to prevent another crisis. Financial stability was promoted through the creation of the Financial Stability Oversight Council, Federal Insurance Office, and the Orderly Liquidation Authority monitored and had the tools to break up large firms that could tank the United States economy if they failed. The Orderly Liquidation Authority had a fund that could take apart financial companies in receiverships, so that tax dollars weren't wasted trying to save them. The Financial Oversight Council could break up large banks that could start "systematic risk", and had the power to increase their required reserves. The Federal Insurance Office watched the insurance companies that were "too big to fail". To increase the accuracy of investment ratings, the SEC Office of Ratings was begun. It monitors agencies so that entities such as businesses and municipalities have accurate ratings.

The Consumer Financial Protection Bureau was created to stop predatory lending practices, as the subprime mortgage market was blamed as one of the major factors leading to the 2008 financial crisis. It educates consumers on mortgage terms, and requires all lenders (other than those making automobile loans), to show their information on a form that consumers can easily understand. It also doesn't allow for the practices of mortgage brokers to steer consumers towards loans with the highest fees and interest rates in order to gain higher commissions.

The Volcker Rule, section 619 of the Dodd-Frank Act, was implemented in an attempt to end bank speculation within markets. It began on April 1, 2014 and all banks were expected to fully comply by July 21, 2015. Speculative trading was limited, and proprietary trading was stopped entirely. Banks could no longer associate with hedge funds and private equity firms. Financial firms had their involvement in derivatives be monitored in order to try to stop them from taking on too much risk. The Dodd-Frank Act also added to a whistleblower program started by the Sarbanes-Oxley Act of 2002 to protect consumers from corporations committing fraud on financial reports.

4.) Event Study Predictions

I compared unemployment rates, inflation rates, and the annual averages of Moody's Seasoned Aaa Corporate Bond Yields two years before and after the implementation of the Glass-Steagall and Dodd-Frank Acts to see if there were any patterns. I predicted that the annual returns of the S&P 500 including dividends would be very low before both acts, then gradually keep increasing. I predicted that inflation would be high before the acts were both passed, then it would lower and even out after the implementation of the acts. I predicted that unemployment

would be high before the acts since that was right after the crises, then it would lower after the passage of the acts. I predicted that bond yields would be high before the acts, to pay for the risk of investing after the crisis, and lower after as the economy was more stable.

5.) Event Study Results and Discussion

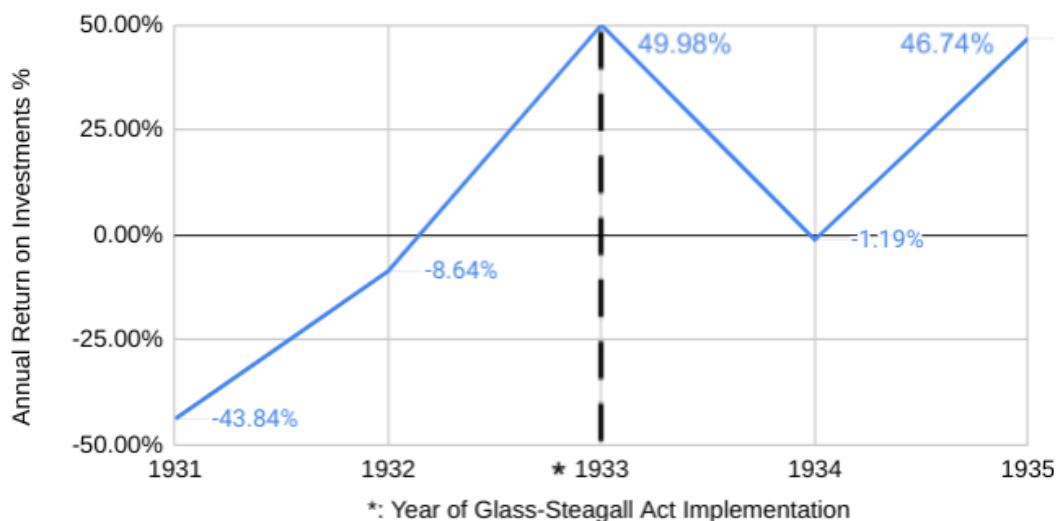
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Annual Returns on Investments
in the S&P 500, Including
Dividends

1931	-43.84%
1932	-8.64%
1933	49.98%
1934	-1.19%
1935	46.74%

* : Year of Glass-Steagall Act
Implementation

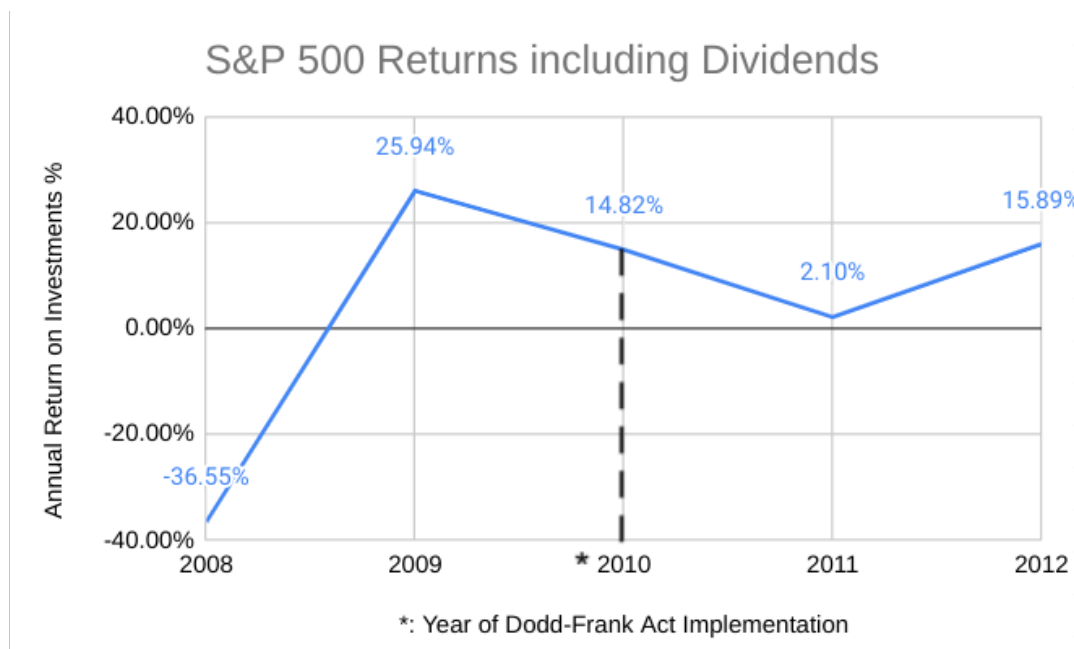
S&P 500 Returns including Dividends



Annual Returns on Investments
in the S&P 500, Including
Dividends

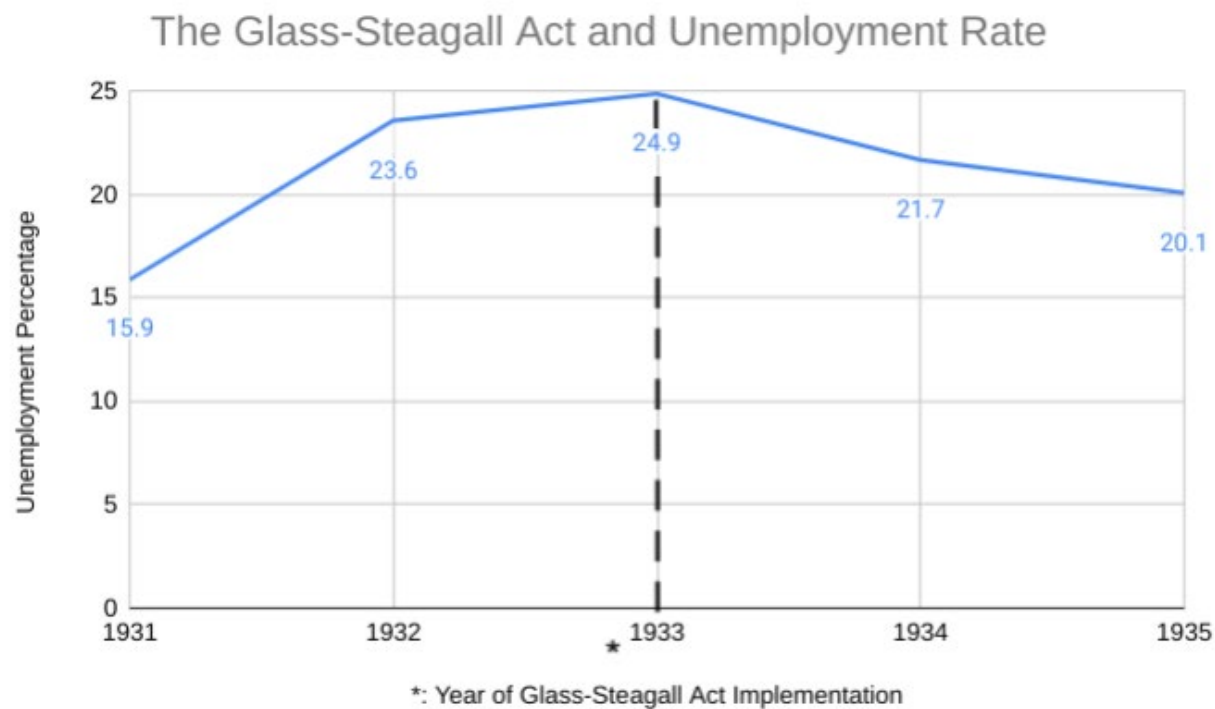
2008	-36.55%
2009	25.94%
2010	14.82%
2011	2.10%
2012	15.89%

*: Year of Dodd-Frank Act
Implementation

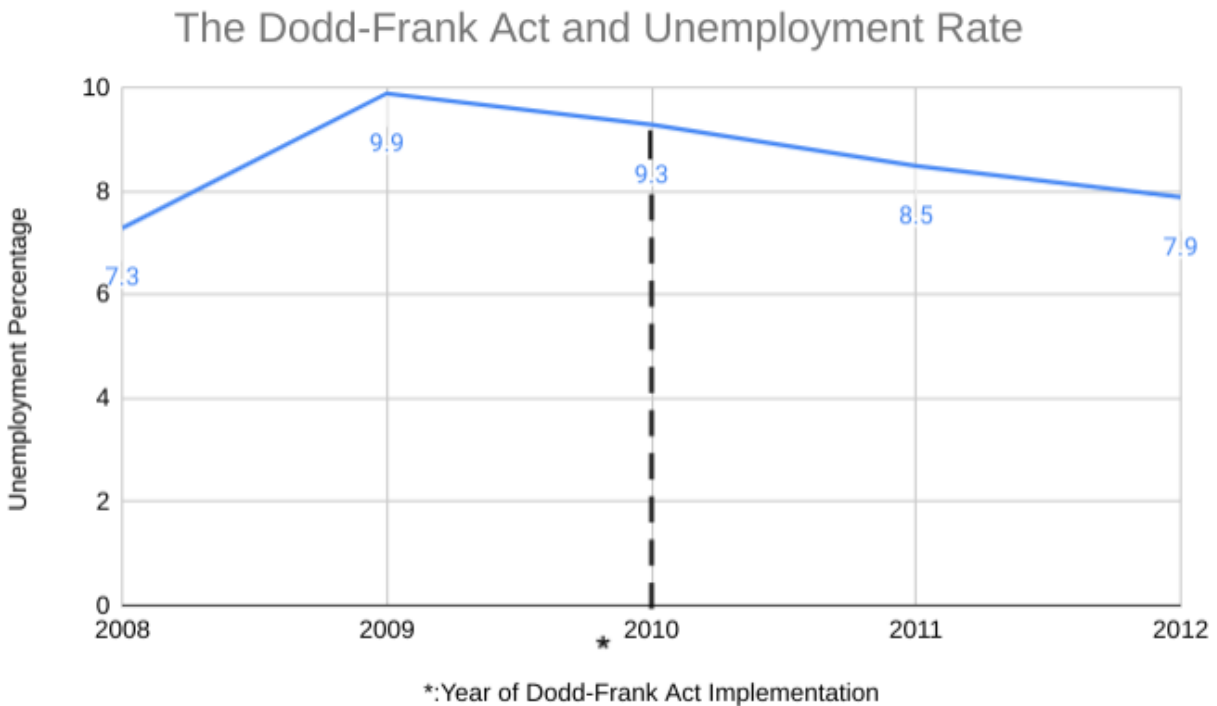


The annual rate of returns with dividends included before both acts were passed was negative within both time spans. Returns peaked on the first graph in 1933 when the Glass-Steagall Act was implemented, but peaked on the second graph the year before the Dodd-Frank Act was implemented. Following the implementation of both acts, annual returns decreased the year after before notably returning to almost the same percentage of the annual return of the year of the implementation of the act the second year following the implementation of both acts.

Unemployment Rate 1931-1935	
Year	%
1931	15.9
1932	23.6
*1933	24.9
1934	21.7
1935	20.1
*: Year of Glass-Steagall Act Implementation	



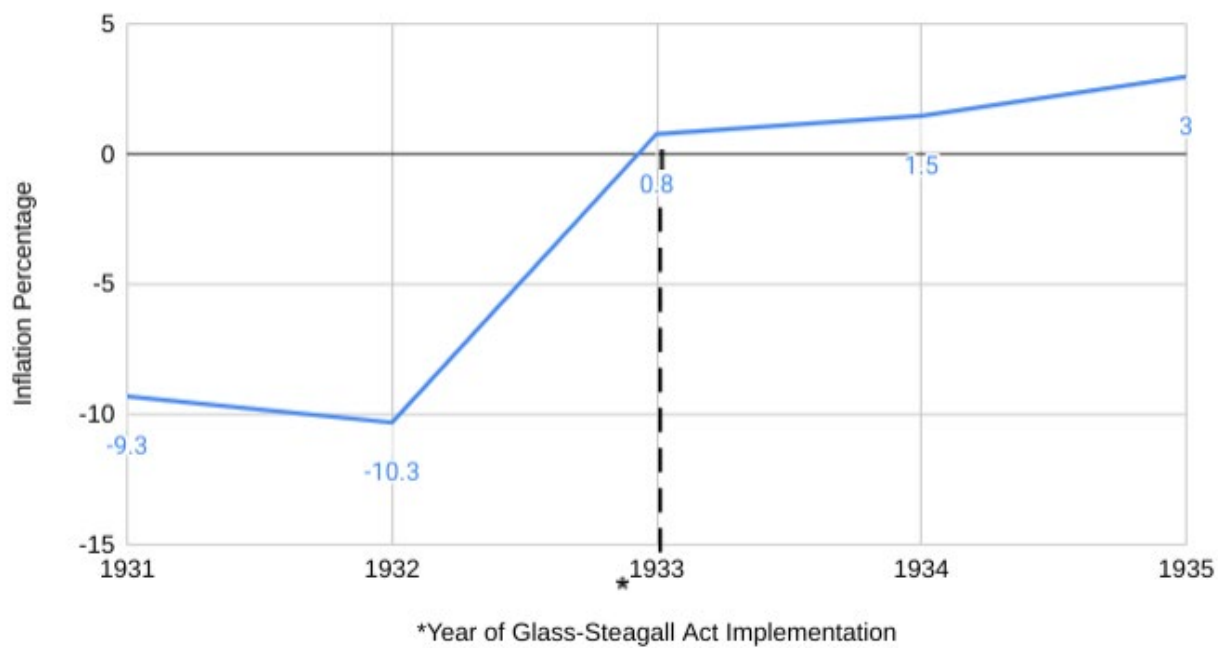
Unemployment Rate 2008-2012	
Year	%
2008	7.3
2009	9.9
*2010	9.3
2011	8.5
2012	7.9
*: Year of Dodd-Frank Act Implementation	



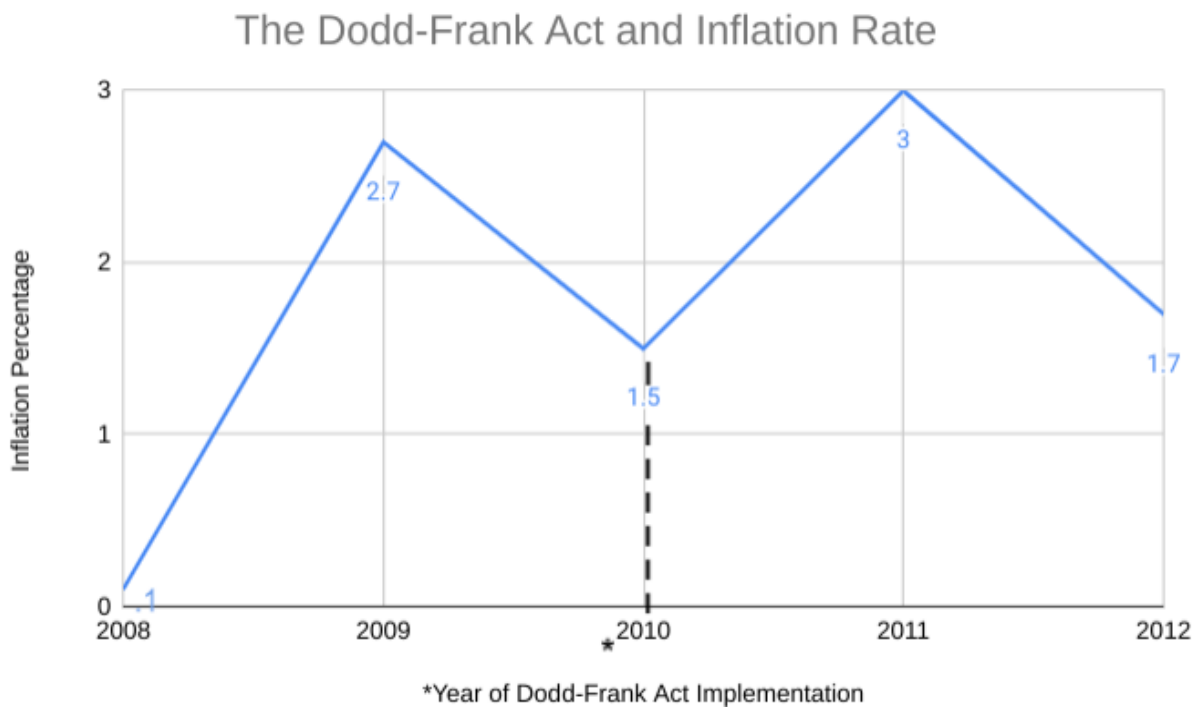
The year that the Glass-Steagall Act was implemented, unemployment was at an all time high within the United States and started lowering only following the act. The unemployment rate had already started decreasing before the implementation of the Dodd-Frank. Following the implementation of both acts, the unemployment rate decreased.

Inflation Rate 1931-1935	
Year	%
1931	-9.3
1932	-10.3
*1933	0.8
1934	1.5
1935	3
* : Year of Glass-Steagall Act Implementation	

The Glass-Steagall Act and Inflation Rate

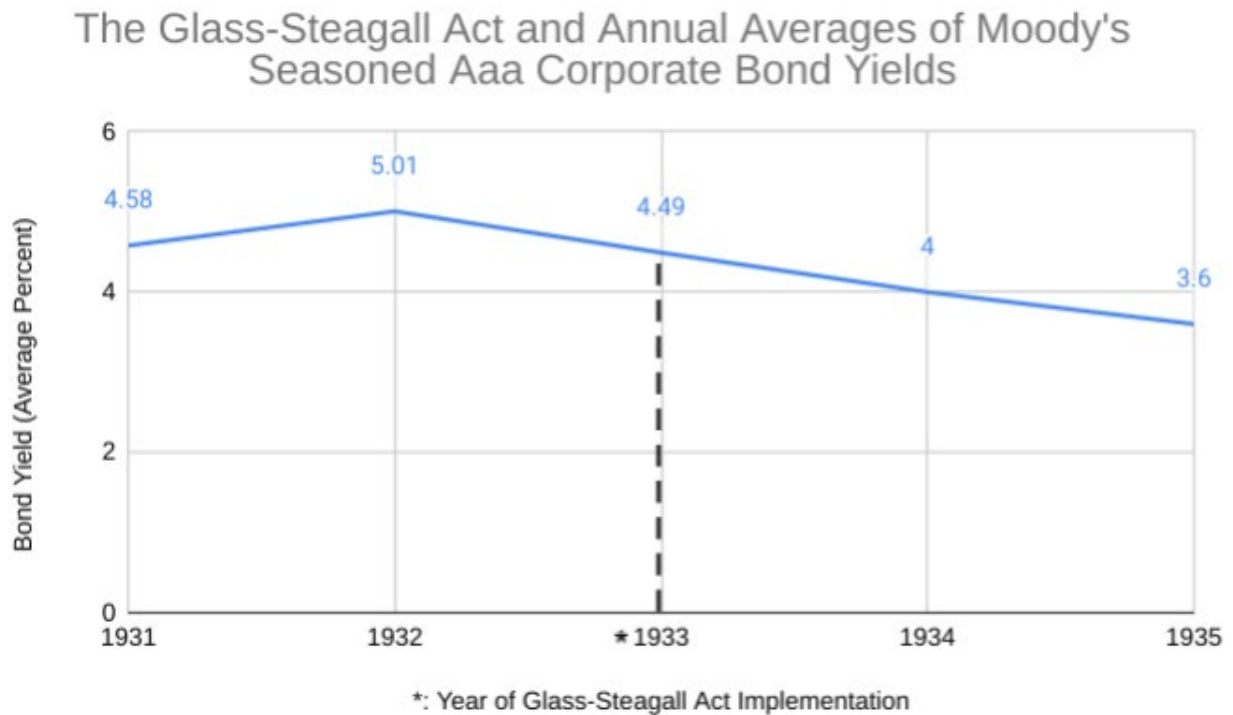


Inflation Rate 2008-2012	
Year	%
2008	0.1
2009	2.7
*2010	1.5
2011	3
2012	1.7
*: Year of Dodd-Frank Act Implementation	

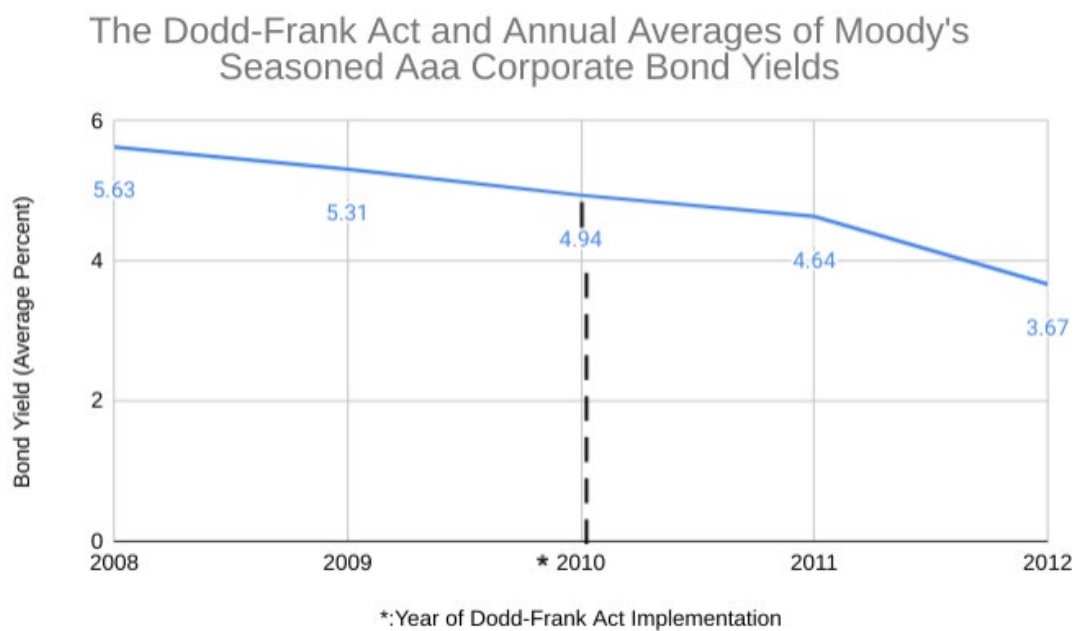


I was surprised that inflation after both crises increased, rather than decreased. I was also surprised by the high amount of negative inflation, or deflation from lowered prices, that occurred before the implementation of the Glass-Steagall Act, and that inflation following the implementation of the Dodd-Frank Act was so volatile. It doubled in 2011, the year following the implementation of the act, then decreased almost the same amount. Despite the deflation preceding the Glass-Steagall Act, the rate of inflation made large jumps before both acts in 1932-1933 and 2008-2009. The inflation rate two years after both acts were implemented increased from what it was the year of the implementation.

Annual Averages of Moody's Seasoned Aaa Corporate Bond Yields	
1931	4.58
1932	5.01
*1933	4.49
1934	4
1935	3.6
*: Year of Glass-Steagall Act Implementation	



Annual Averages of Moody's Seasoned Aaa Corporate Bond Yields	
2008	5.63
2009	5.31
*2010	4.94
2011	4.64
2012	3.67
*: Year of Dodd-Frank Act Implementation	



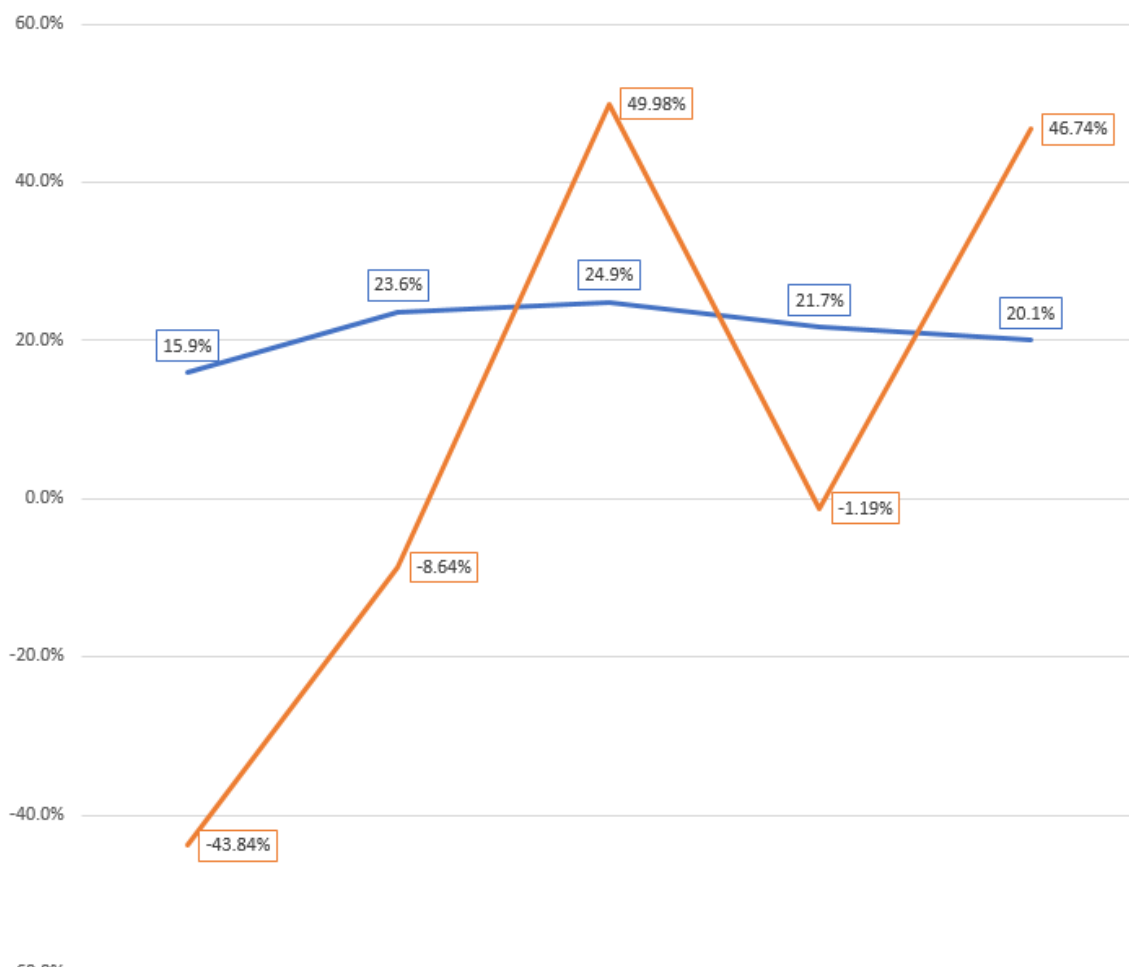
The average yields in the years before and after the Dodd-Frank Act followed a downward slope, but slightly increased the year before the implementation of the Glass-Steagall Act before continuing on a downward slope. The slopes of both graphs and the actual percentages of the annual averages of yields had the strongest correlation out of the data that I

compared. Both time spans had the highest yields for the two years before both acts were passed and slowly decreased starting the year that both acts were implemented.

6.) S&P 500 Annual Returns including Dividends and Comparison to Economic Data Study

Results and Discussion

Percentage of Unemployment vs. S&P 500 Returns including Dividends (1931-1935)

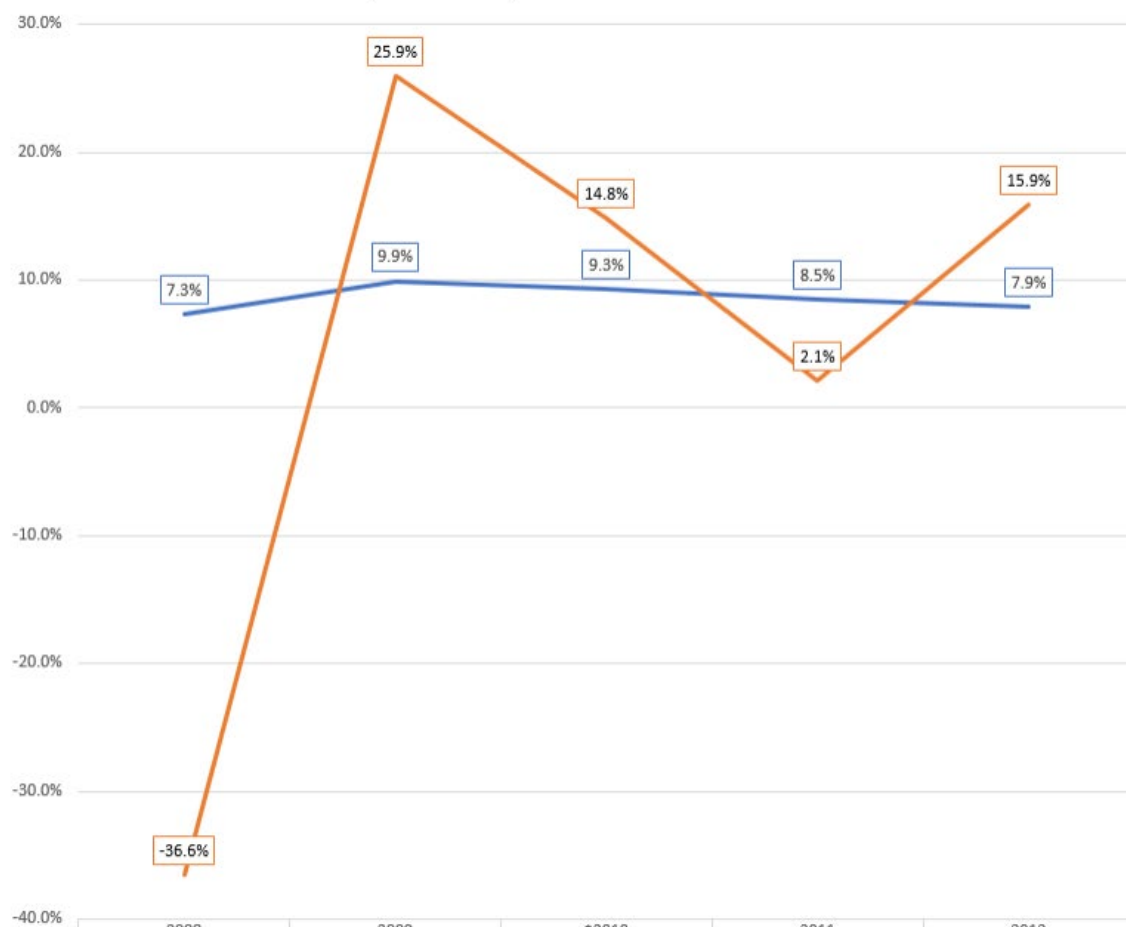


	1931	1932	*1933	1934	1935
Percentage of Unemployment	15.9%	23.6%	24.9%	21.7%	20.1%
S&P 500 Returns including Dividends	-43.84%	-8.64%	49.98%	-1.19%	46.74%

*Year of Glass-Steagall Act Implementation

— Percentage of Unemployment — S&P 500 Returns including Dividends

Percentage of Unemployment vs. S&P 500 Returns including Dividends
(2008-2012)

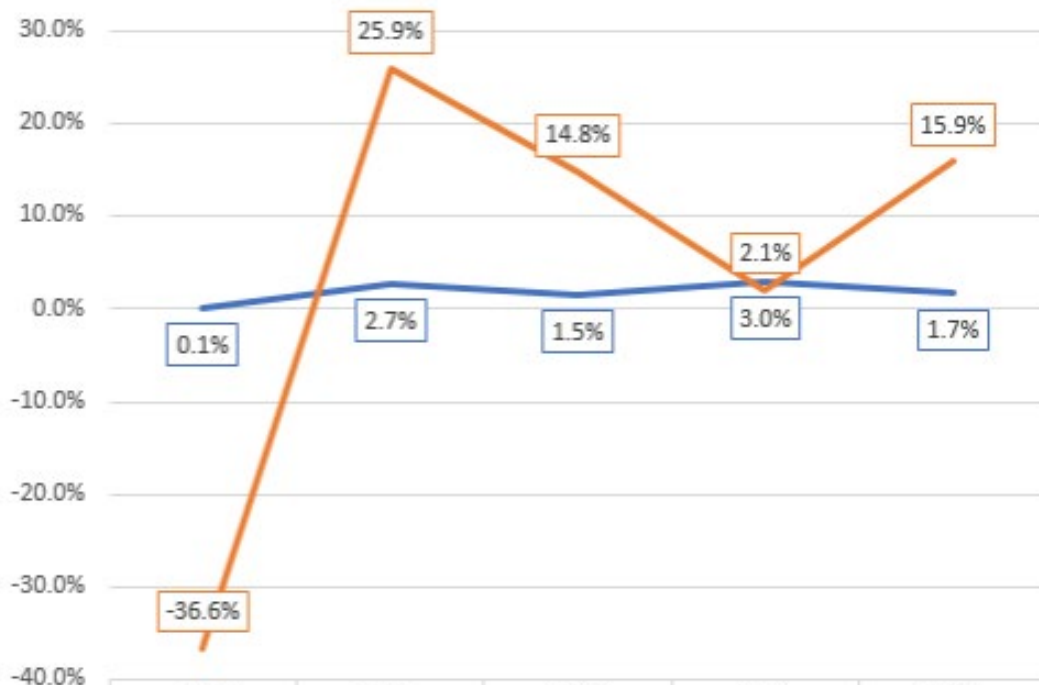


	2008	2009	*2010	2011	2012
Percentage of Unemployment	7.3%	9.9%	9.3%	8.5%	7.9%
S&P 500 Returns including Dividends	-36.6%	25.9%	14.8%	2.1%	15.9%

*Year of Dodd-Frank Act Implementation

— Percentage of Unemployment — S&P 500 Returns including Dividends

Percentage of Inflation vs. S&P 500 Returns including Dividends (2008-2012)

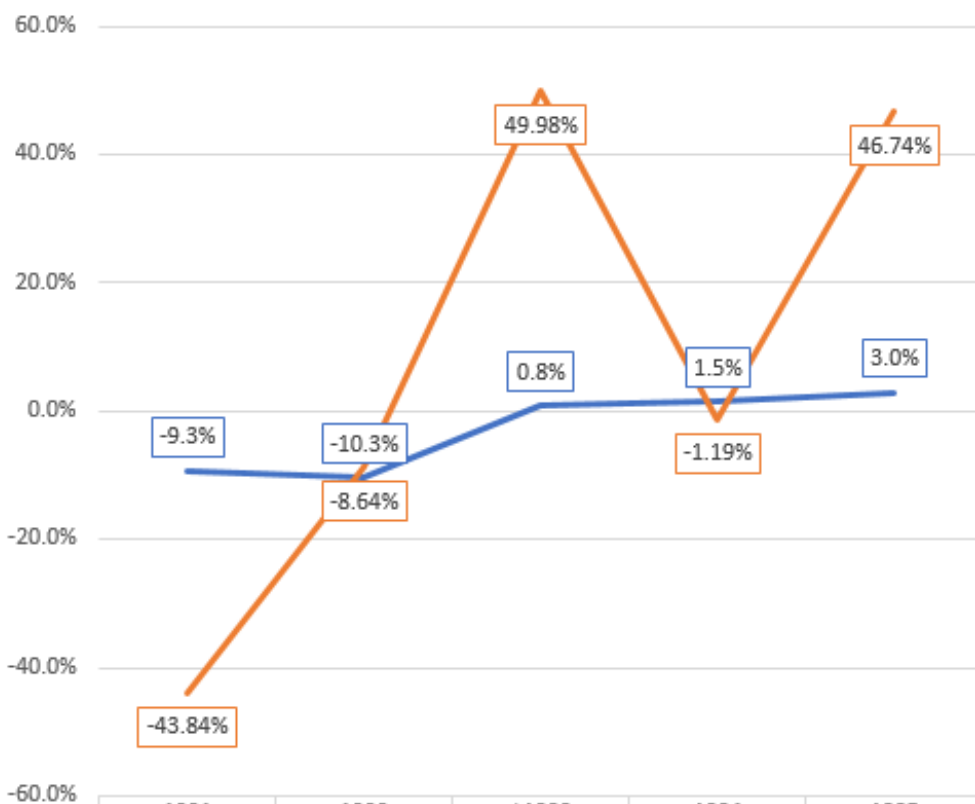


	2008	2009	*2010	2011	2012
Percentage of Inflation	0.1%	2.7%	1.5%	3.0%	1.7%
S&P 500 Returns including Dividends	-36.6%	25.9%	14.8%	2.1%	15.9%

*:Year of Dodd-Frank Act Implementation

— Percentage of Inflation — S&P 500 Returns including Dividends

Percentage of Inflation vs. S&P 500 Returns including Dividends (1931-1935)

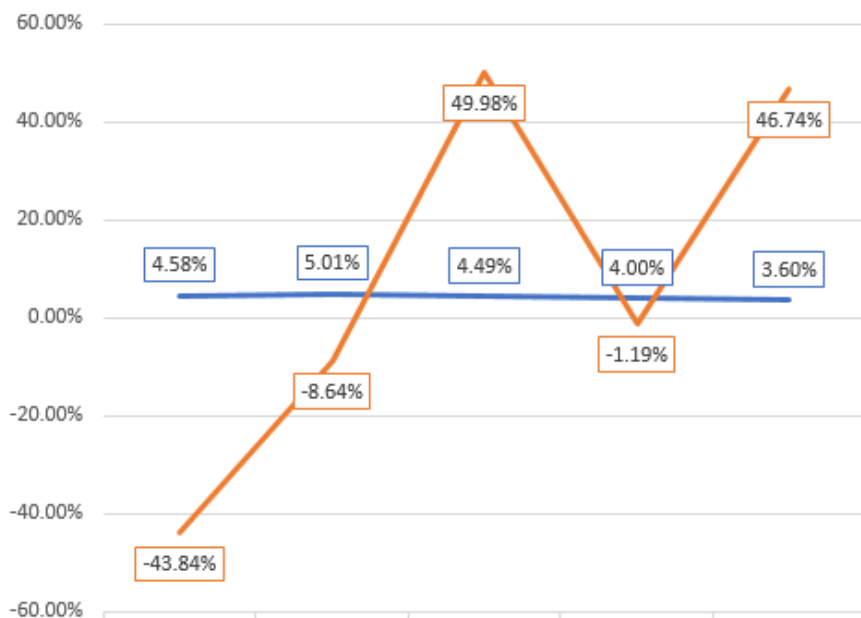


	1931	1932	*1933	1934	1935
Percentage of Inflation	-9.3%	-10.3%	0.8%	1.5%	3.0%
S&P 500 Returns including Dividends	-43.84%	-8.64%	49.98%	-1.19%	46.74%

*Year of Glass-Steagall Act Implementation

— Percentage of Inflation — S&P 500 Returns including Dividends

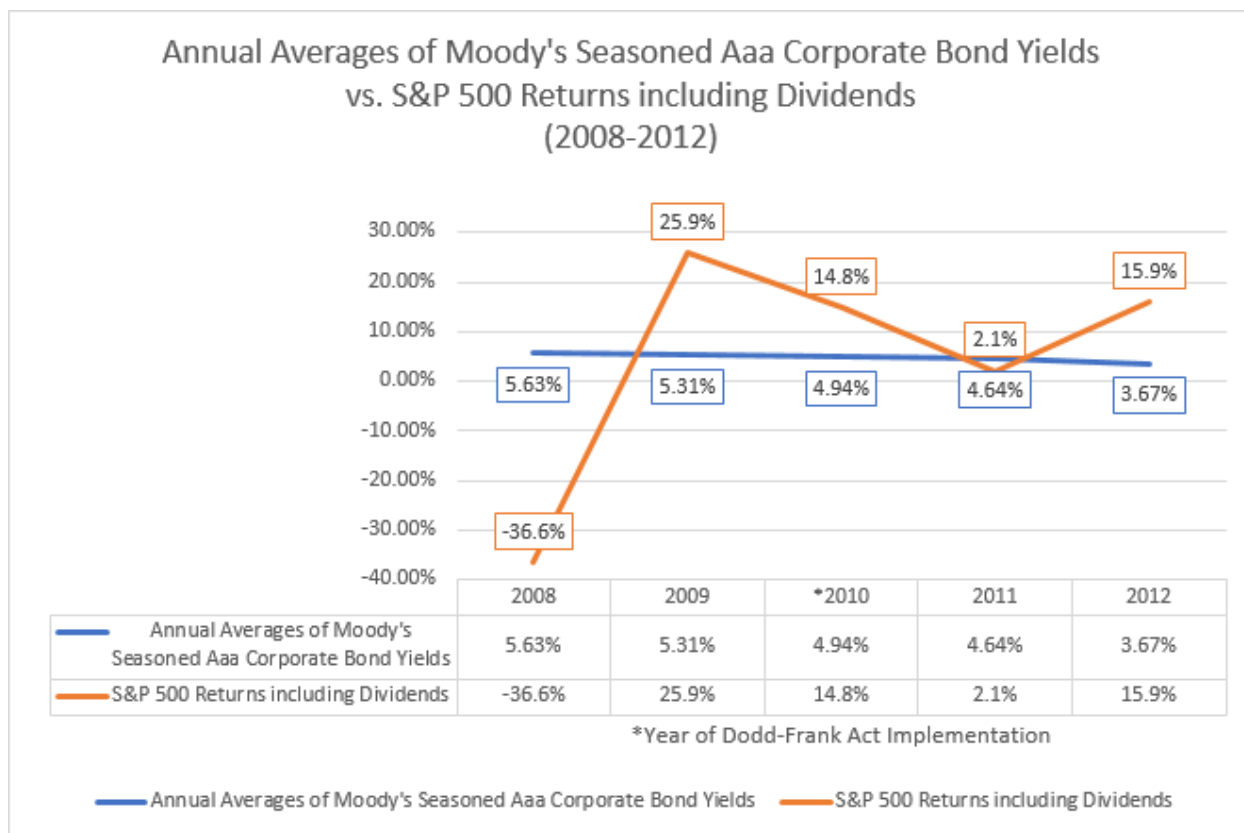
Annual Averages of Moody's Seasoned Aaa Corporate Bond Yields vs. S&P 500 Returns including Dividends (1931-1935)



	1931	1932	*1933	1934	1935
Annual Averages of Moody's Seasoned Aaa Corporate Bond Yields	4.58%	5.01%	4.49%	4.00%	3.60%
S&P 500 Returns including Dividends	-43.84%	-8.64%	49.98%	-1.19%	46.74%

*Year of Glass-Steagall Act Implementation

— Annual Averages of Moody's Seasoned Aaa Corporate Bond Yields — S&P 500 Returns including Dividends



Although many of the S&P 500 annual returns with dividends included appear to not have huge patterns when compared to the economic data, I was able to make some key observations. Unemployment within both time spans was at its highest point at the highest point of the market returns. The highest change of inflation followed the highest change of the market within both time spans. Inflation made an 11.1% jump and the market made a 58.62% jump from 1932-1933, and inflation made a 2.6% jump when the market had a 62.5% jump from 2008-2009. Despite the volatile market, bond yields stayed consistent, remaining between 3-5% during both time spans even while market returns were negative.

7.) Conclusions

My predictions of the annual returns of the S&P 500 with dividends included, unemployment and bond yields were correct, but my prediction of inflation data was the opposite of what the actual trend was. The strongest patterns that I observed were in the bond yields and S&P 500 annual returns with dividends included. There was a pattern of similar downwards slopes of unemployment following both acts. There was a lack of strong patterns between the comparisons of economic data to the annual returns of the S&P 500 with dividends included, but the highest changes within inflation and unemployment mirrored the highest changes within the annual return rates.

I wanted to highlight the liminal, in between spaces within America that often aren't narrated, to show the disruptive effects upon them caused by the manipulation of legislation.

I ultimately observed that American capitalism and the legislation regulating it has similar patterns, despite the time difference of over three quarters of a century. The market steadily grows, until it can't continue to support itself and falls, so legislation limiting banks is demanded in order to protect consumers. Following the implementation of the limiting legislation, the market steadily grows, and deregulation eventually leads to another recession.

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