Standard and Poor's Downgrade of the United States Credit Rating

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I. Introduction

The Standard and Poor's decision to downgrade the United States credit rating had several impacts on the US economy and economic markets as a whole. The decision to downgrade the US debt was made by S&P for several reasons. Through this paper I will be looking at those impacts and the reasons for the decision. I will start by going over the origins of credit rating agencies and how the first companies began rating debt. I will then go over why Standard and Poor's decided to downgrade the US Credit Rating: In section III I will look at S&P's rating criteria for sovereign nations, warnings before the downgrade and the rationale of S&P for the downgrade. I will then look at the United States Debt: in section IV I will go over the US debt as a whole, the debt ceiling, the Budget Control Act of 2011 and the opposing views of Republicans and Democrats. After this I will take a look at the question, can we trust Standard and Poor's decision: to do this I will go over what the critics of the downgrade have said, other agencies viewpoints, the difference between corporate and country ratings and Standard and Poor's performance as a whole. The last aspect I will look at in this paper will be the effects the downgrade had on the economy. I will look at how those economic factors may have led to the downgrade: in section VI I will go over Yields and Prices of securities, interest rates as a whole, and interest rates concerning the downgrade, the American dollar, and consumer confidence. To finish the paper I will give a brief overview of what I found throughout the paper and present my thoughts and final conclusion.

The Downgrade

On Friday, August 5, 2011, Standards and Poor's Securities Evaluations Inc., one of the largest Credit Rating agencies in the world, had its sovereign debt team downgrade the United States long term debt credit rating. This stripped the world's largest economy, the gold standard of credit rating for the past 70 years, of its AAA status to AA+. This AA+ rating is below more than a dozen other countries. S&P was essentially saying that the United States Treasury debt no longer deserved to be considered among the safest in the world. Before the downgrade, on April 18, 2011 S&P continued its dim prospective of the US by giving it a "negative outlook," meaning that America has little chance of regaining a higher credit rating in the near future. Looking at other countries that have been downgraded like Canada and Australia, we see it can take years to regain AAA ranking (Paletta & Phillips, 201).

When rumors started coming out on Friday, the day of the downgrade, that the downgrade was imminent securities and equities started to fall in the markets. Immediately after the downgrade, surprisingly, demand for US securities became higher as more investors wanted to put their money in US Treasury Bills. This along with many other reasons started the scrutiny of Standard and Poor's for their decision.

Standard and Poor's is not the only credit rating agency, however, it is the only one that downgraded the United States credit ranking. Taking a look at statistics from similar past downgrades, some negative effects on the economy stemming from the downgrade, may be slightly less (Goldstein, 2011). This may be due to the fact that multiple firms, like Moody's and Fitch Ratings, chose not to downgrade the US. Regarding this fact Standard and Poor's decision doesn't seem very creditable or reliable.

II. Origins of Credit Rating Agencies

"In 1609 the Dutch modified domestic and International finance by inventing the first common stock for the *Dutch East India Company* and founding the first pro-central bank the *Wisselbank* (Bank of Amsterdam)" (Sylla, 2001). The Dutch already had a government bond market for some decades and so possessed all the key components for a modern financial system (Neal, 1990). This was the first National and international Securities exchange in world history. A century later Alexander Hamilton, the first Secretary of the Treasury (1789 – 1795), worked to put in place a similar financial system in the United States. By 1795 the US had strong public finances, a stable dollar based, a banking system, a central bank, and a bond and stock market in several cities (Sylla, 2001). By the next century the US would surpass all other nations as the world's most prestigious national economy. "For most of the four-century of modern capital markets, the question of rating was controversial, because the majority of bond investing was in the public, or sovereign, debts of national governments" (Sylla, 2001). Ratings were controversy because investors trusted these governments on being more than able and willing to pay their issued bonds. Any government or sovereign state could use lands or other forms of securities for any of their loans. However, in these early years we can still find examples of some counties being less risky (having a higher ranting) than others. An example would be the Prussians in 1817. They tried to get a loan from the London branch of the European banking house to help pay their debt from the Napoleonic Wars. At the time a "constitutional monarchy was seen in London as a better credit-risk than a neo-absolutist regime" (Ferguson, 123). Even in the earliest years of a sovereign nation's credit-worthiness, social and political factors largely affected the credit rating and risk observed by investors.

In the United States almost all banks were chartered and regulated by individual states until 1863 (Niall, 1998). From 1817 till the 1840's most states issued sovereign bonded debts in domestic and international markets. They issued these debts for state programs such as building canals, roads, and financing other infrastructure projects (Sylla, 2001). In the early 1840's nine states defaulted on these debts. After these defaults local governments increasingly replaced states as public bond issuers (Sylla, 2001). These bond markets were seemingly small in comparison to those of the private sector. It is common knowledge that in the nineteenth century America was growing. The US was urbanizing and moving westward with the national view of *manifest destiny*. This led to a greater need for capital to fund the mass expansion for the urbanization, industrialization and westward move across the United States. Since most the need for money came from the westward movement, it makes since then that the need for funds revolved around the railroad corporations. As railroads grew larger after the 1850s, they moved to unsettled and undeveloped territories with fewer people there to invest in them. The solution to continue the influx of income was the development of a huge corporate bonded debt market, both domestic and international (Sylla, 2001). This corporate bond market was the first of its kind. It was an American financial creation that would later spread to the rest of the world. By 1909 the US corporate bond market was almost three times larger than that of any other country's bond market (Goldsmith, 1985). In that same year of 1909, John Moody, the originator of the bond-rating agency, began assessing the credit-worthiness of corporate railroad bonds. His original ratings were entirely for the bonded debts of the US railroads (Sylla, 2001).

John Moody began rating corporate bonds in 1909. However, the original corporate bond markets date back to the 1850's, nearly five decades before the first rating. Why was this? To answer this question refer to how lenders (creditors) got their information about borrowers (debtors). Before the first rating companies "there were three specific ways people would research and determine the risk of bonds. One was through credit-reporting agencies (not rating agencies) a second was through investment banks and lastly through the use of specialized/financial press" (Sylla, 2001).

At first people would make financial transactions with companies and financial debtors that they personally knew and where familiar with. As the scale and scope of business increased, the need for personal knowledge about customers that the buyer of securities had no knowledge of increased. This led to the development of credit-reporting agencies. The first case of a reporting agency was in 1841. Lewis Tappan, a dry goods and silk merchant in New York, compiled extensive records on the creditworthiness of his customers (Sylla, 2001). He founded the Mercantile Agency which gathered information on the creditworthiness of businesses all across the US. This agency later became the R.G. Dun and Company in 1859 (Baker, 2011). This company catered to wholesalers, importers, manufacturers, banks and insurance companies. The number of its subscribers grew from 7,000 in the 1870's to 40,000 in the 1880's and reported on more than one million businesses (Sylla, 2001). In 1849 John Bradstreet founded a similar firm and published the first commercial rating book in 1857 ("Timeline- d&b's evolution," 2011).

One reason investors were buying and trading securities such as bonds, before the implantation of credit rating agencies, was due to investment banks. Investment banks are financial firms specializing in the sales of new securities, issued by a company, to the public (Bodie, Kane & Marcus, 2010). This means that investment banks are the intermediaries between companies and other investors. They buy the securities from the company wishing to issue them and then sell them to investors. These institutions would back all securities they sold with their reputations (reputational capital). Bankers would insist that all relevant information be provided to them from any company they dealt with (Sylla, 2001). The investment bankers were the absolute insiders with all knowledge of the company's operation information. "In this way the investment banks could size up the company's personnel and continually monitor company affairs" (Sylla, 2001). However as US corporations and the scale of its business expanded, resentment grew among private investors over the investment bankers' access to privileged information. Their reasoning was "Why shouldn't all potential investors have access to the same information" (Sylla, 2001). Investors wanted to have all the information they could before buying and trading securities. These were some of the reasons that led to the mandatory disclosure laws for the issuers of new securities, as well as the Securities and Exchange Commission (SEC) in the 1930's (Mahoney, 2005). By this time John Moody had already began publishing information on the quality of investments through his railroad bond ratings. With the development of these laws some of the value of investment bankers' intangible assets, such as their reputational capital, had been giving to other investors.

When the world's first big businesses, such as the railroads came into play, they integrated a sense of multi-divisional enterprise. They operated over large geographical expansions and employed an abundance of professional managers. This led to the publications of Specialized/Financial Press (Sylla,

2011). These were publications, usually in the forms of news articles, about a specific company and its specifications (such as financial reports, assets, etc.). The first was *The American Railroad Journal* founded in 1832" (Simmons, 2006). "This journal really came into its own when Henry Varnum Poor became its editor in 1849 - 1862 (Sylla, 2001). While Poor was editor he published systematic information on all the property and assets held by the railroads. After 1862, Poor went into business with his son and started a firm to publish *Poor's Manual of the Railroads of the United States* (Sylla, 2011). This was an annual volume that first appeared in 1868. It reported financial and operating statistics for most of the major American railroads (Chandler, 1956). Poor died in 1905 and by 1916 the company entered the bond rating industry. The company merged with Standard Statistics, another information and ratings company, in 1941 (Sylla, 2001). This merger formed the Standard and Poor's (S&P) we know today. It would later be taken over by McGraw Hill publishing firm in 1966 (Chandler, 1956). Looking back at the original rating agencies, nearly two centuries later, Moody's and Standard and Poor's, remain the world's largest securities rating firms (Sylla, 2001).

John Moody first began rating railroad corporate bonds in 1909. A decade later he began to rate US state and local government bonds (Sylla, 2001). This was almost three decades before Standard and Poors would begin to rate state and local bonds.

The History of US Corporate Bond Market and Ratings Agencies Performance

The National Bureau of Economic Research (NBER) has produced research projects that study the US corporate bond quality and the performance of bond rating agencies, under the leadership of W. Braddock Hickman. Hickman wrote the following three books: *The Volume of Corporate Bond Financing since 1900* (1953), *Corporate Bond Quality and Investor Experience* (1958), and *Statistical Measures of Corporate Bond Financing since 1900* (1960). All three analyzed the years from 1900 to 1943. The key results of the NBER study are contained in Hickman's book Corporate Bond Quality and Investor Experience (1958) (Sylla, 2001). His data included all large "straight" corporate bond issues. These were defined as five million dollars or more and as fixed-income, single-maturity, railroad, public utility, and industrial corporations held by the investing public in the US (real estate mortgage and financial corporation bonds were excluded) (Hickman, 1958). As a result of the 44 year study Hickman found that there was a zero net loss rate for the whole period. However, just because there was a zero net loss as a whole does not mean that there were no defaults on bonds. In fact there were particular sub-periods within those 44 years where the default rate was high. For example, "for bonds issued and matured during 1900-1931 there was a 17 percent default rate and from 1932-1943 there was a 4 percent default rate. The biggest disappointment would have probably been in bonds issued before 1932 and matured after that date. Within those bonds there was a 23 percent default rate with a promised yield at 5.4 percent. The 5.4 percent was higher than the actual yield of 4.6 percent" (Sylla, 2001). So what was the reason for this and why was there an overall zero net loss? The answer to these questions is found in the history of US interests rates. Interest rates were low in the 1900's. They were even lower in the time leading up to and after World War II. Hickman's study only went to 1944 when interest rates in the US were hitting all-time lows for that time period. Due to this reason capital gains from the trading of bonds could have offset any of the defaults, meaning that as interest rates fell, the value and sale price of already held bonds would rise. The bond holders could then sell these securities

in the secondary bond market for a capital gain. The US Census Bureau produced a report demonstrating how the interest rates were lower during the years of Hickman's study. The report recorded bond yields and interest rates from 1900 to 2002 on high grade municipal bonds. After taking these interest rates for every year in the report I found the average interest rates displayed in the chart below:

Average from 1900 to 1931	Average from 1944 to 2002
3.973	5.254237
Average from 1932 to 1943	**Average from 1900 to 2002**
3.134	4.60932

("Bond yields and," 2003)

Hickman's study looked at three different forms of ratings. Within those three forms were the independent agency ratings of Moody's, Standards and Poor's and Fitch. Hickman found that "investment agencies, the legal lists, and the market typically assign high rankings to the large issues of large obligators on which the fixed charges were earned a large number of times at the offering" (Hickman, 1958). However, a closer look at his research reveals a higher default rate for railroad bonds than there are for public utilities as well as industries. This displays the fact that the ranking agencies favored railroads. The conclusion drawn from this is that, "while various ranking systems were efficient in ranking issues within an industry, they are less successful in judging default risks between major industrial groups" (Sylla, 2001). This is to say that while rating industries may be able to pick a broad group of "winners" within a select industry, they are in fact less successful at picking specific securities within that industry. This can be related to the downgrade of the US debt. To do this it must be assumed that sovereign nation's credit ratings, as a whole, can be viewed as an entire industry. In this aspect a rating for the entire credit worthiness of all sovereign nations would be much more reliable than any specific county. This is quite a large assumption however, the fact that rating agencies are much more reliable in picking entire industries and less so at picking companies within that industry, then the correlation in picking specific countries can be made.

Later in his research, Hickman would voice concerns about the cyclical behavior of credit rating agencies. This is where rating agencies are likely to give higher ratings in a good economy, and lower ones when things head south. Hickman cited this saying, "it is a curious fact that agency ratings should prove so sensitive to the short-run ups and downs of business" (Hickman, 1958). He went on further to say, "the surplus accounts of the financial intermediaries were cyclically unstable: they expand during good times when issues were upgraded and shrank during bad times when issues were downgraded" (Hickman, 1958). According to Hickman and his research, credit rating agencies are more likely to give positive reports when the market is doing well and it is a bull market. They are more likely to give negative ratings when the market is going down and is bear. The business cycle does affect the overall health of corporations. Hickman knew this, so his main concern was that the cyclical behavior of agency-ratings upgrades in good times and downgrades in bad times, when they happened to be used in conjunction with financial regulation. He noted this saying, "Under present valuation rules, the implication is that capital values and surplus accounts tend to shrink during business contractions at the very time when some assurance of financial stability is most needed by investment intermediaries and

their beneficiaries" (Hickman, 1958). He was basically citing the fact that while business industries may in fact be affected by the cyclical movements of the market, their ratings should not reflect that. He was more concerned with the overall picture of the market and felt that security ratings should reflect that instead of specific times during the short-run ups and downs of business. Hickman's research found that, in the long-run, rating agencies should not be so sensitive to the cyclical behavior of businesses.

III. Why did Standard and Poor's downgrade the US Credit Rating?

How Standards and Poor's determines Sovereign Credit Ratings

Before I go into the logic of S&P for their downgrade, I will take a quick look at how they rate a sovereign nation's credit. Standard & Poor's analysis of a sovereign's creditworthiness starts with its assessment and scoring of five key rating factors, listed in the table below.

Table 1
Scoring Of The Five Main Sovereign Rating Factors

Key rating factors	Score assigned, on a 1-6 scale, with '1' the strongest and '6' the weakest
Institutional effectiveness and political risks	Political score
Economic structure and growth prospects	Economic score
External liquidity and international investment position	External score
Fiscal flexibility and fiscal performance, combined with debt burden	Fiscal score
Monetary flexibility	Monetary score

(Dimitrijevic, 2011)

Each one of these factors is assessed and given a score from 1(the strongest) to 6(the weakest). They then combine those five scores to form a sovereign's "political and economic profile," and its "flexibility and performance" profile (Dimitrijevic, 2011). "The political and economic profile reflects S&P's view of the resilience of a country's economy, the strength and stability of the government's institutions, and the effectiveness of its policy-making. It is the average of the political score and the economic score. The flexibility and performance profile reflects S&P's view of the sustainability of a government's fiscal balance and debt burden, in light of the country's external position, as well as the government's fiscal and monetary flexibility. It is the average of the external score, the fiscal score, and the monetary score" (Dimitrijevic, 2011). This method used by S&P applies to all sovereign nations' ability and willingness to meet financial obligations to commercial creditors.

Warnings of the Downgrade

Standard and Poor's obviously did not just decide to downgrade the United States credit rating on a whim. They spent time analyzing, tracking and forecasting the US debt as well as political and economic factors. Every year the US government proposes a federal budget which must be approved by congress. The budget gives a detailed outline of the total tax projections and expenditures for the entire United States. If there is a deficit after the budget is created then there is a vote on whether or not to increase the debt ceiling or the debt limit. This is not an increase in the "borrowing power" of the government.

"The debt limit does not control or limit the ability of the federal government to run deficits or incur obligations. Rather, it is a limit on the ability to pay obligations already incurred" ("Debt limit: delays," 2011). The old debts already incurred by the federal government are worked into the federal budget proposed each year. If the debt limit is reached then it must be raised to incur any further debt.

It was on April 18, 2011 when Standard and Poors first issued a "negative" outlook on the US AAA credit rating (Swann, 2011). The total number of "negative outlooks" assigned to sovereign credit ratings by S&P is 232. Out of all those times they have only raised one sovereign rating with a negative outlook. Out of the 232 with negative outlooks, Standard and Poor's lowered 131 of them, approximately 56 percent (Dimitrijevic, 2011) .This indication gave the US a one-in-three chance of a credit reduction in the next two years (Chambers, 2011).

"The US Government budget deficit was more than 11 percent of its GDP in 2010. S&P projected it would rise to 80 percent or more by 2013. Standard and Poor's found this to be high compared to other countries with a AAA rating" ("Debt limit: delays," 2011). This meant that S&P was unhappy and unsure with the ways the United States continuously accumulated and managed its debt. They were concerned with the US Governments failure to control it. In an interview with Erin Burnett on MSNBC it was stated that the US would have to have a "meaningful progress towards balancing the budget in order to move the U.S. back to a "stable" outlook" (Burnett, 2011). S&P came out with its own press release stating, "We believe there is a material risk that U.S. policymakers might not reach an agreement on how to address medium- and long-term budgetary challenges by 2013; if an agreement is not reached and meaningful implementation is not begun by then, this would in our view render the U.S. fiscal profile meaningfully weaker than that of peer 'AAA' sovereigns" (Swann, 2011)[1] (Swann, 2011)[2].

The Rational of Standard and Poor's

"In their initial estimates, S&P projected that the debt as a share of GDP would rise rapidly through the middle of the decade, and they cited this as a primary reason for a downgrade" (Bellows, 2011).

The 2011 downgrade of the United States credit rating from AAA to a double AA+ rating had several impacts on the US and the world economy as a whole; I will cite these in more detail later in the paper. Now I will look at why S&P downgraded the US and see if they were right in doing so. After the downgrade on August 6th, Betty Liu on Bloomberg Television interviewed Warren Buffet. Warren Buffet is the chairman and chief executive officer of Berkshire Hathaway, and is one of the world's most renowned investors. Buffet was quoted saying "S&P erred when it lowered the U.S. credit rating....The U.S. merits a "quadruple A" rating" (Kirkland & Nazareth, 2011). Furthermore the US Treasury department was quoted saying that there was "no justifiable rationale" for Standard and Poors downgrade (Kirkland & Nazareth, 2011). However S&P stood by their decision on the downgrade. Spokesmen for Standard and Poor's claimed that the lowered rating was the fault of the political system that failed to adequately address deficit reduction in the legislation that Obama signed August 2nd to avert a default (Chambers, 2011). Referring to this, the main reason cited for the S&P downgrade was due to the fact that the United States had failed to agree upon legislation to decrease its debt. The August 2nd legislation did not lower the debt of the US, it only raised the debt ceiling. It has the

potential to possibly lower the debt however, only the future will determine if it actually does. . The legislation the people at S&P are specifically referring to is the Budget Control Act of 2011 that President Obama signed into law June of 2011. Standard and Poor's released a statement specifically citing this as the reason saying, "the downgrade reflects our view that the effectiveness, stability, and predictability of American policymaking and political institutions have weakened at a time of ongoing fiscal and economic challenges to a degree more than we envisioned when we assigned a negative outlook to the rating on April 18, 2011. Since then, we have changed our view of the difficulties in bridging the gulf between the political parties over fiscal policy, which makes us pessimistic about the capacity of Congress and the Administration to be able to leverage their agreement this week into a broader fiscal consolidation plan that stabilizes the government's debt dynamics any time soon" (Swann, 2011). Basically what S&P is saying here is that they do not foresee any agreeable solution, in the near future, coming out of the US Government to decrease the deficit and increase national revenues. "The firm's conclusion "was pretty much motivated by all of the debate about the raising of the debt ceiling," John Chambers, chairman of S&P's sovereign ratings committee" (Paletta & Phillips, 2011)

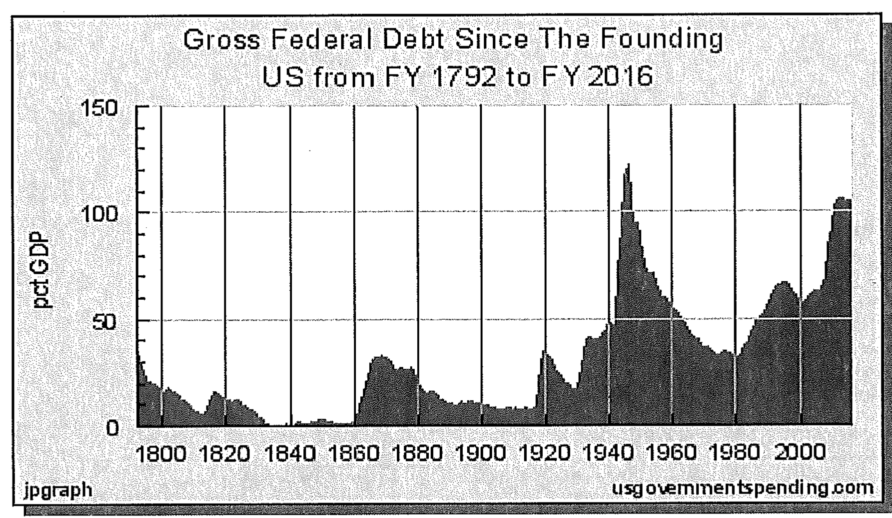
IV. US debt

"Recent demographic and economic changes, in particular the aging population and ballooning health-care costs, have made the long-term US picture an ugly one, a problem exacerbated by a deep recession, which cut tax receipts and prompted a flood of fresh debt-financed spending " (Paletta & Phillips, 2011).

Standard and Poor's cited the failure of the US to decrease its future debt as the main reason for its downgrade. Article 1, Section 8, Clause 2 of the US Constitution grants congress the power to borrow money on the credit of the United States (Records of the, 2000). "The United States public debt is the money borrowed by the federal government of the United States. It is borrowed through the issue of securities such as bonds, by the US Treasury and other federal government agencies. The national public debt consists of two main components. The first of which is debt held by the public, such as securities held by investors, the Federal Reserve System (deposits held there by private banks and individuals) as well as foreign, State and local governments. The second is intergovernmental debt, these are securities held in accounts administered by the Federal Government (Social Security, Medicare, Medicaid and National Defense)" ("Federal debt basics," 2011).

The US debt will increase and decrease depending on the difference between government receipts and spending. This is the annual unified budget deficit or surplus. The US debt has increased over $500 billion each year since 2003. On the day of the downgrade the US debt held by the public was over $9.7 billion, and the debt held by Intergovernmental holdings was over $4.5 billion, giving the United States a total deficit of over 14.3 billion dollars ("The daily history," 2011). The Gross Domestic Product for the US at the end of June 2011 was 15.03 trillion with total public debt outstanding at a ratio of 99% of GDP, and debt held by the public was at 68% of GDP("National income and," 2011). This means that over half of our entire debt is held by the public, investors like you and me, companies, governments foreign and domestic etc. "Government agencies like the Government Accountability Office, the Congressional Budget Office and the U.S. Treasury Department have all reported that the US Federal Government is

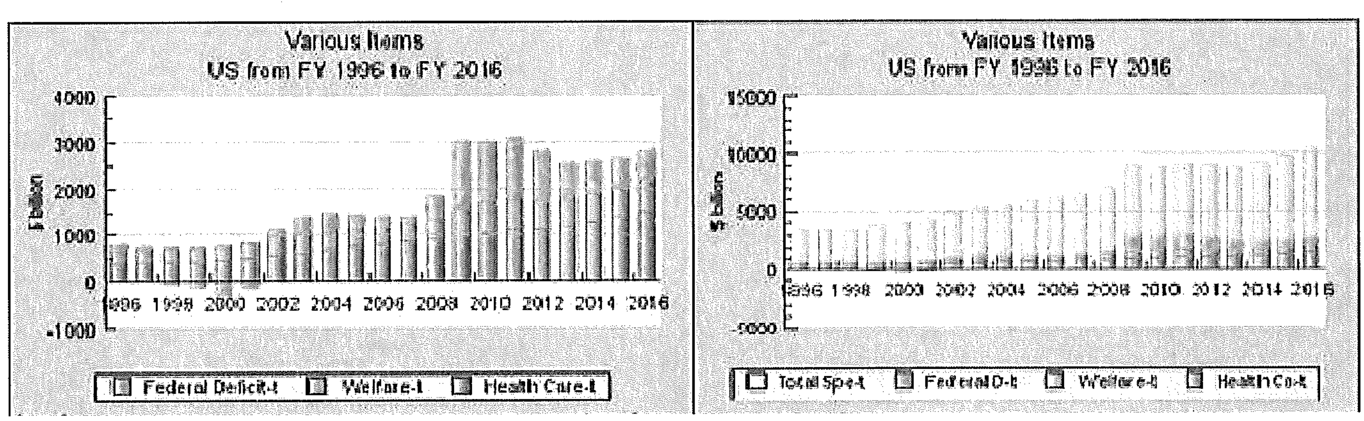
facing serious difficult and important financing challenges" (Krugman, 2011). Looking at the short run finances of the US, because of the recession and tax policies, revenues have decreased significantly. While the amount of government expenditures have increased due to wars, unemployment, insurance and other government spending ("The great debt," 2011).



"Government debt has typically peaked after wars. It breached 30 percent of GDP after the Revolutionary War, the Civil War, and World War I. It breached 100 percent of GDP in World War II. Government debt also breached 100 percent of GDP in the aftermath of the financial crisis of 2008" (Chantrill, 2011).

("Us federal debt," 2011)

Some say the long-run spending and its accumulation of debt is even more of a problem than short-run. Long-run government expenditures related to healthcare programs, such as Medicare and Medicaid are growing much faster than the economy as the population matures. The same is true for our country's Social Security program (Ruffing, Cox, & Horney, 2010). The graph below demonstrates just how much spending is taken up by these programs. Below, the first graph displays the amount of money spent on Healthcare and Welfare in relation to the federal deficit. We can see by looking at this chart almost the entire Federal deficit is taken up by these two programs. While the deficit is projected to decrease after the year 2012, if agreed upon legislation is produced, healthcare and welfare programs continue to increase. The second graph displays these two programs in relation to total spending for the US.



("Time series chart," 2011)

Looking at this one can see the rationale behind Standard and Poor's decision to downgrade the US credit rating; however, hasn't the US been in debt before? And in fact hasn't the debt to GDP ratio been higher in past years? The answer to these two questions is, of course, yes. Why then did S&P decide to downgrade the US now? The conclusion to this can be found by looking at the history of the debt ceiling and the recent legislation that has developed regarding it.

The Debt Ceiling

The process of raising the debt ceiling is separate from the process of financing government operations and has no direct impact on the federal government's deficit, if it is assumed that the ceiling will always be raised to accommodate new deficits. This assumption may be made since the US has always done this. Failure to do so would result in bankruptcy for the United States. Under Article I Section 8 of the United States Constitution, Congress has the sole power to borrow money on the credit of the United States. From the founding of the United States until 1917, the United States Congress directly authorized each individual issuance of debt separately (McCaffery). "It wasn't until 1917, with the passing of the Second Liberty Bond Act, that Congress established an aggregate limit, or "ceiling," on the total amount of bonds that could be issued" the ceiling was first set at $11.5 billion ("United states public," 2011). The "debt ceiling" we have now, which we're all familiar with, applies an aggregate limit on almost all federal debt. It was established by the Public Debts Act passed in 1939 and 1941 (McCaffery). In this system the US Treasury is authorized to issue federal debt (such as bonds) in order to fund governmental operations and expenditures up to that specified debt ceiling. Each time the debt ceiling needed to be raised there was a House vote on it. In 1979 Rep. Richard Gephardt proposed the debt ceiling be raised automatically, upon passing the year's budget, without having a vote. This became known as the Gephardt rule (Chaddock, 2011). This rule was later waived (by majority House Republicans) in 1995. They refused to raise the debt limit trying to force President Bill Clinton to accept spending cuts; this prompted two government shutdowns (Chaddock, 2011).

A federal budget is proposed every year. Within that proposed budget are projected tax collections and expenditures for the entire US. If there is a deficit in that, that's the projected amount of borrowing the government would have to do within that year. Congress must then approve that budget, so when there is a proposal to increase the debt ceiling within the year it is usually treated more as a common ritual, since it is a continued need for spending that has already been pre-approved (Epstein, 2011). If the debt ceiling is reached, the US Treasury has the power to declare a debt issuance suspension period. This gives them time to use "extraordinary measures" to come up with new funds for government expenditures, without having to issue new debt (Knoller, 2009). The first time the US Treasury ever had to use these measures was during December of 2009, and during the recent debt crisis of 2011, to avoid government shutdown (Knoller, 2009). The debt ceiling increase used to be a formality, now it seems to be a very powerful political device. It has been increased twelve times in the past ten years, three of those in the past nineteen months.

The Budget Control Act of 2011

The US Budget Control Act was passed on August 2, 2011, by the 112th United States Congress. It was passed in an effort to save the country from sovereign default that would have occurred on August 3, 2011. It raised the debt limit by $400 billion immediately and by $900 billion more fifty days after, by request from the president (Yeh & Hamilton, 2011). Overall it raised the debt limit by $2.1 trillion and cut discretionary spending by $917 billion and caps it for the next ten years. The rise of the debt limit is enough to allow the federal government to continue borrowing money until 2013. The cap on discretionary spending means that congress cannot spend more than that cap without a "super-majority vote" (Nazworth, 2011). The Act also created the Congressional Joint Select Committee on Deficit Reduction, as well as having options for a Balanced Budget Amendment (Dwyer, 2011). The Joint Selection Committee on Deficit Reduction consists of 12 members, 6 from each party. It was put into place to create legislation that will decrease the deficit. Its goal is to produce the reduction plans by November 23, 2011. The legislation produced will be immune from amendments and filibusters; its goal is to cut $1.5 trillion of government expenditures over the next 10 years (Defrank, 2011). The Act states that if congress fails to produce legislation that will decrease the deficit by a minimum of $1.2 trillion, then Congress can increase the debt ceiling by$ 1.2 trillion. However the $1.2 trillion increase of the debt ceiling would come from spending cuts in governmental security and non-security programs. It would mandate discretionary spending in these programs from the years 2013 to 2021 ("Budget control Act," 2011). The Act also states that congress must vote on a Balanced Budget Amendment between October 1, 2011 and the end of that year; however it does not have to pass it ("Budget control act," 2011).

Recent Failure of the "Super Committee"

Just recently the so called "Budget Super Committee" failed in its task. On November 21st the super committee, tasked with finding at least $1.2 trillion in budget savings by this summer's debt ceiling deal, admitted that it was "hopelessly deadlocked" (Parker, 2011). This failure should trigger across-the-board budget cuts in defense spending and social programs that will go into effect in the start of 2013. The cuts will be approximately $600 billion in automatic cuts in US military spending and another $600 billion in domestic spending reduction (Alberts, 2011). The failure will also send shock waves through the legislative process, affecting nearly all of the bills Congress will consider for the rest of its session. No one knows exactly what will come from this. Many expect Congress to change or undo the automatic budget cuts called, "sequestrations" but the fight over how to do that will likely be a difficult (Parker, 2011). Most likely the effects that will come from this will be related to taxes, Medicare and other governmental services.

The payroll tax cut, enacted as part of the tax cut compromise in late 2010, is set to expire at the end of the year, and is worth $934 per year for the average worker, according to the left-leaning Center for Budget and Policy Priorities (Parker, 2011).

Social Security and Medicaid are exempt from the super committee's budget triggers, but Medicare is one of the objects up for debate regarding cuts (Parker, 2011).

While most entitlement programs are exempt from the automatic cuts, there will likely be across-the-board cuts in most non-defense federal programs (Parker, 2011).

President Barack Obama was quick to blame the GOP specifically for intransigence on ending tax breaks for the rich. In a White House briefing he said, "There are still too many Republicans in Congress who have refused to listen to the voices of reason and compromise that are coming from outside of Washington" (Walsh, 2011). There is a possibility that the automatic spending cuts will not take place. Republicans and Democrats are debating this now. President Obama had this to say about that debate, "Already, some in Congress are trying to undo automatic spending cuts. My message to them is simple: No. 1, I will veto any effort to get rid of those automatic spending cuts to domestic and defense spending. There will be no easy off-ramps on this one. We need to keep the pressure up to compromise, not turn off the pressure" (Walsh, 2011). He went on further to say that "One way or another, we will be trimming the deficit by a total of at least $2.2 trillion over the next 10 years" (Walsh, 2011).

Republican vs. Democrat

The use of raising the debt ceiling as a political tool has many elected officials working against each other. The constant battle between Republicans and Democrats for control of the house and Senate as well as the presidency, can severely hinder legislation. This was clearly seen in the apathetic way with which the most recent debt ceiling crisis was handled. Neither party could seem to work together to produce an agreeable piece of legislation. A statement by S&P said that "The gulf between the political parties had reduced its confidence in the government's ability to manage its finances" (Applebaum & Dash, 2011). "The statutory debt ceiling and the threat of default have become political bargaining chips in the debate over fiscal policy" ("Fact checking the," 2011). The recent Budget Control Act wasn't passed until August 2nd, only one day before sovereign default threatened the country. The Act itself was the final chance in a series of proposals which caused bitter divisions between both parties, ending only when the President Obama called a meeting with the heads of both parties.

Democratic politicians placed the blame for the downgrade on Republicans. In an interview with MSNBC, Senator John Kerry referred to S&P's decision as the "Tea Party downgrade." He blamed Republican adamancy for revenues and disregard for the consequences of a default, as the reasons for the lack of effective legislation (Kerry, 2011). Kerry went on to say that the biggest problem with the recent government and economy is not spending, but the misuse and misallocation of debt. He says the government's problem is not the short term debt but the long term debt, such as Social Security Medicare and Medicaid, along with the lack of jobs, job creation, and growth, and the government's inability to agree upon effective legislation to fix these problems.

Congress has failed to agree upon a solution to increase national revenues and lower the deficit. S&P noted these problems in a statement: "Compared with previous projections, our revised base case scenario now assumes that the 2001 and 2003 tax cuts, due to expire by the end of 2012, remain in place. We have changed our assumption on this because the majority of Republicans in Congress

continue to resist any measure that would raise revenues, a position we believe Congress reinforced by passing the 2011 Budget Act" (Swann, 2011).

"From a credit perspective, the negative effects on government finance are likely to outweigh the positive effects of higher economic growth. Unless there are offsetting measures, the package will be credit negative for the US and increase the likelihood of a negative outlook on the US government's Credit rating" (Steven Hess).

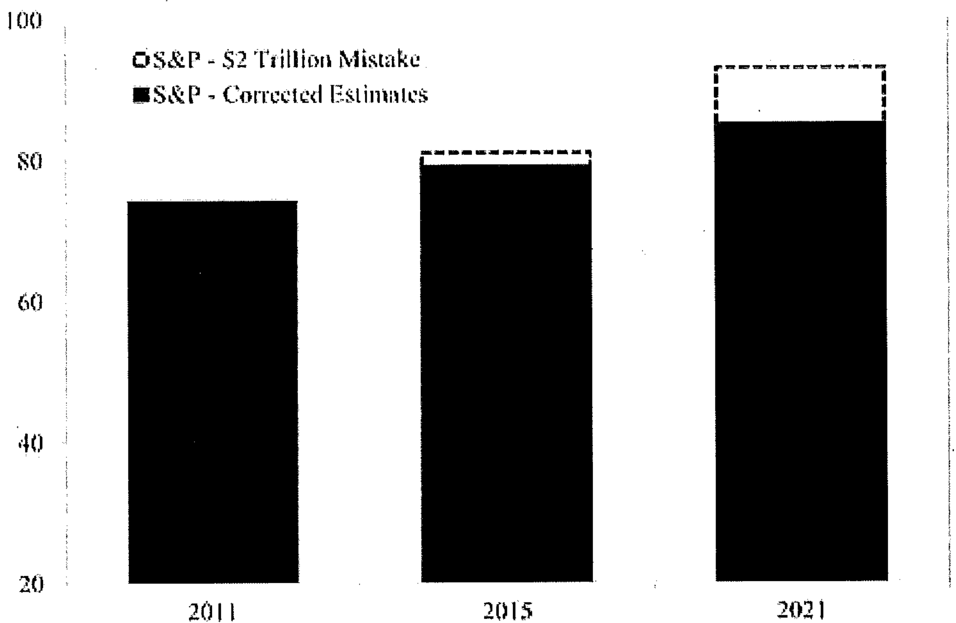
V. Can we trust Standard and Poor's?

What their critics say about the Downgrade

On the day of the downgrade, around 1:30pm August 5th, Standard and Poor's presented the US Treasury department with a document outlining their intentions to lower the US credit rating. John Bellows, Acting Assistant Secretary for Economic Policy, says the Treasury quickly found flaws in S&P's reasoning. The Treasury department swiftly pointed out that S&P's reasons for their downgrade was based upon a $2 trillion error in the deficit reduction of the Budget Control Act. S&P took the deficit reduction from the Act and applied it to the wrong baseline (starting point). The Treasury Department noted that this was simply a "basic math error, with significant consequences" (Bellows, 2011).

However, S&P still "chose to proceed with their flawed judgment by simply changing their principal rationale for their credit rating decision from an economic one to a political one" (Bellows, 2011). S&P went from saying it was because of an out of control deficit to, the weakened "effectiveness, stability, and predictability" of U.S. policy making and political institutions (Paletta & Phillips, 2011). Does this mean Standard and Poor's actually "jumped" too its downgrade judgment too quickly?

Even if there was a mathematical error in their calculations, S&P did cite the United States failure to agree and produce a plan to lower the deficit, as well as address the credit ceiling, as one of their main reasons for the downgrade. However let's take a closer look at this. The Budget Control Act will decrease the US deficit by at least $2 trillion in the next 10 years. This fell short of S&P's expectations for a $4 trillion decrease. Simple math tells us that's a $2 trillion difference. They found this sum to be enough to warrant a credit downgrade. If we think about this it tells us that, S&P thinks a 2 trillion difference in projected deficit is very significant. While on the other hand their own $2 trillion calculation error of the deficit reduction, in the Budget Control Act, was irrelevant (Bellows, 2011). Initially S&P cited the debt to GDP ratio, found with their $2 trillion mistake, as the main reason for the downgrade. When the Treasury sent them the corrected estimates, projected debt was lowered by $2 trillion over 10 years and debt compared to GDP in 2021 fell by 8 percent. This corrected graph shows a much more stable public debt than what S&P had originally projected.



Data are taken from the two separate versions of S&P estimates sent to Treasury on Friday. (Bellows, 2011)

This is what the Congressional Budget Office (CBO) calculated, with the Budget Control Act decreasing the deficit by $2.1 trillion relative to the baseline (Bellows, 2011). "Standard and Poor's mistake came when it incorrectly added that same $2.1 trillion in deficit reduction to a different baseline where discretionary funding levels grow with nominal GDP over the next 10 years. Relative to this alternative baseline, the Budget Control Act will save more than $4 trillion over ten years – or over $2 trillion more than S&P calculated. The difference in the baselines is that in the one the CBO uses, the discretionary spending grows with nominal GDP. This is higher because the CBO assumes that nominal GDP grows by just under 5 percent a year on average, while inflation is around 2.5 percent a year on average" (Bellows, 2011). The 2 trillion dollar error made by S&P was one that seemed to be casually discarded. One would think that such an error would be reason enough to reassess a decision, or at the very least take another day to reevaluate and rethink your original analysis. Apparently this was out of the question for Standard and Poor's. On the very same day they chose to proceed with their original decision and downgraded the US credit ranking. I believe John Bellows said it best in his blog on the Treasury website. "The magnitude of this mistake—and the haste with which S&P changed its principal rationale for action when presented with this error—raise fundamental questions about the credibility and integrity of S&P's ratings action. Independent of this error, there is no justifiable rationale for downgrading the debt of the United States...Lenders of the US have a collective judgment is that the U.S. has the means and political will to make good on its obligations" (Bellows, 2011).

The error found by the Treasury department, while a very large one ($2 trillion off), did not sway the final decision by Standard and Poor's. The company responded to the mistake early Saturday morning, August 6, 2011 saying, that their final decision was not affected by a change of assumptions regarding discretionary spending growth (Calabresi, 2011). In a press release S&P said, "That they used an "alternative Fiscal Scenario" of the CBO, which includes an assumption that government discretionary spending would grow at the same rate as nominal GDP. After talking to the US Treasury, S&P decided that the CBO's baseline Scenario, assuming discretionary spending at a lower rate, is more accurate to the projected savings set out by the Budget Control Act of 2011. The original S&P rating was determined

using a 3-5 year time horizon" (Standard & Poor's, 2011). After S&P used this new method, in looking at the short-term they determined that the projected debt in 2015 would be $14.5 trillion, 79 percent of the 2015 GDP, versus there original findings of 14.7 trillion, 81 percent of GDP. This is a $345 billion dollar difference (Standard & Poor's, 2011). In the long-term, using the CBO baseline, debt would be $20.1 trillion in 2021, 85 percent of GDP, instead of $22.1 trillion in 2021, 93 percent of GDP, a $2 trillion difference (Standard & Poor's, 2011). Standard and Poor's went on to say that there primary focus concerning the downgrade was the US's current level of debt proportionate to the economy. They continued to lay blame on elected officials, with their lack of determination and cooperation to solve the current debt crisis, for the rationale behind the downgrade (Standard & Poor's, 2011).
The US Treasury Department is not the only institution that did not see the relevance in the S&P downgrade. Warren Buffet was quoted on Fox News saying that the downgrade "Does not make sense." Buffet has absolute faith in the US credit, his company Berkshire Hathaway had just filled out the 10q form before the downgrade. They had $47 billion in cash and cash equivalents and well over $40 billion of it in short end T-bills. Buffet said the downgrade "doesn't tempt me to sell. We'll stay right there" (Claman, 2011).

Other Agencies Views

Moody's Investor Service analysts are saying, that the United States is running out of time to reduce its debt burden before they too, would downgrade the country's debt. Since August 2, 2011, Moody's confirmed the US AAA rating had a negative outlook. In a statement, Steven Hess, the Vice President and Senior Credit Officer in the Sovereign Risk for Moody's, said "it would not be impossible that US lawmakers could come up with additional deficit-reduction measures next year. However failure to come up with these reductions by the end of 2013 would probably lead Moody's to downgrade the US credit rating" (Bradimarte, 2011). The downgrade could happen before that if the current plan of the Budget Control Act does not turn out to be creditable. Hess was quoted saying "If the process for further deficit reduction that is included in the Budget Control Act produces results that are not really credible, that combined with the economic performance could potentially cause an early move on the rating" (Bradimarte, 2011).

The Tuesday following Standard and Poor's downgrade, Fitch Ratings blatantly disagreed with S&P, saying the US deserved a "top-notch" credit rating (Frierson & Brandimarte, 2011). Fitch went even further by asserting their confidence in the US Governments plans for deficit reduction.

Corporate vs. Country Ratings

We know that a credit rating is an indicator of an institution or country's willingness and ability to pay its financial obligations. The credit rating of a specific sovereign nation refers to that country's overall credit worthiness. This reflects factors in that country such as economic status, transparency in the capital market, levels of public and private investment flows, foreign direct investment, foreign currency reserves, political stability, or the ability for a country's economy to remain stable despite political change (Heakal, 2009). The credit rating of a sovereign nation is considered to be a financial indicator of the entire country's investment atmosphere. Most investors will use this to make decisions on where to invest money abroad. "In most circumstances, a country's sovereign credit rating will be its upper limit of credit ratings" (Heakal, 2009).

"Sovereign ratings are gaining importance as more governments with greater default risks borrow in international bond markets. But while the ratings have proved useful to governments seeking market access, the difficulty of assessing sovereign risk has led to agency disagreements and public controversy over specific rating assignments. Recognizing this difficulty, the financial markets have shown some skepticism toward sovereign ratings when pricing issues" (Cantor & Packer, 1995).

Standard and Poor's Performance

Clearly, financial markets do not agree with S&P's assessment. But this is due to more than just S&P's admitted analytical errors in assessing the US federal budget, or its infamous track record of awarding stellar ratings to the now-defunct investment bank Lehman Brothers and the still-struggling insurance company American International Group Inc. on the eves of their respective collapses in 2008 (Hersh, 2011).

One of Standard and Poor's largest mistakes led to the housing market crash that was one of the main factors for the 2008 economic recession. S&P was among the ratings agencies whose top ratings for bundles of troubled mortgage loans sparked the global financial crisis (Kollewe, 2011). S&P's job it is to provide objective analysis of the risk posed to investors by bonds, companies and countries. During the housing boom before 2008, the system "broke down," as hundreds of billions of dollars of assets later shown to be worthless received high ratings from S&P. This happened when top ratings were awarded to bundles of troubled mortgage loans, making them appear less risky. A Congressional panel called them "essential cogs in the wheel of financial destruction" ("Standard & poor's," 2011). After the fallout, critics pointed to a conflict of interest inherent in the fact that the raters of those mortgages were paid by the entity whose debt was being rated. Investigations have turned up evidence that analysts felt pressured to give investments a higher rating at the risk of losing business ("Standard & poor's, 2011). This led to an investigation of Standard and Poor's by the US Justice Department. The New York Times reported that the investigation began before the downgrade of the US credit rating by S&P. The Justice department is specifically concerned with the instances in which S&P's analysts wanted award lower ratings on mortgage bonds but may have been overruled by other S&P business managers since they were being paid by the issuers of those securities (Kollewe, 2011). Standard and Poor's have been heavily criticized for failing to anticipate the problems related to these mortgages, which triggered the global financial crisis.

VI. What were the Effects on the Economy?

United States debt has been considered the gold standard of sovereign nations for more than 70 years. It is seen as the safest place for investors and has led to fundamental economic theory as a "risk-free" asset. When Standard & Poor's decided that US Treasury debt no longer deserved to be considered among the safest investments in the world, they under-minded a fundamental aspect of the financial world.

Before the downgrade on August 5, 2011, the price of Treasuries fell sharply and yields rose, the 10-year Treasury note ended the day with a yield of 2.34 percent (Applebaum & Dash, 2011). After the S&P downgrade, the following opening day of the market on August 8, all three major US stock indexes fell

(Dow Jones lost 635 points, 5.6 percent. S&P 500 lost 80 points 6.7 percent. NASDAQ lost 175 points, 6.9 percent). While the S&P downgrade contributed to an equity loss that erased about 6.1 trillion dollars from global stocks between July 26 and Aug. 12, the bond market responded by driving up prices and sending yields to record lows (Detrixhe, 2011). The US dollar was still considered a safe haven and even gained value against the Euro and British Pound (Sweet, 2011).

Yields and Prices

The term "yield" describes the income return to the owner on an investment. Prices and yields on securities are inversely related. This means that as prices go up yields will go down. Both prices and yields of a security reflect the credit rating or risk of that security. Riskier investments will have an expected yield higher than other options with less risk. So higher rated securities will cost more and yield less. Contrarily, after the S&P downgrade of the US credit rating, US bonds and bills increased in price while their yields fell.

There are four main types of yields used for bonds, notes and bills. These are the nominal yield, current yield, yield to maturity, and the yield to call. The nominal yield is also called the coupon yield. This is the yearly amount of interest that the security pays the owner of the security. The current yield is the ratio of the same annual interest payments and the bond's current price which it can be purchased at. The yield to maturity is the internal rate of return (IRR) of the security. This represents all the cash flows of the security. The IRR takes into account the purchase price, all the coupons received, and the face value of the security that the investor will receive upon maturity. Yield to call is the IRR of the security's cash flows, if an investor was to buy and hold a security only until the call date. This yield is valid only if the investor calls the security at the first opportunity instead of holding it till maturity. Below are the formulas used for calculating these yields.

Nominal Yield Formula

$$\text{Nominal Yield} = \frac{\text{Annual Interest Payment}}{\text{Par Value}}$$

Current Yield Formula

$$\text{Current Yield} = \frac{\text{Annual Interest Payment}}{\text{Current Market Price of Bond}}$$

Yield to Maturity, Yield to Call, or Yield to Put Formula

$$\text{Bond Price} = \frac{C_1}{(1+Y)^1} + \frac{C_2}{(1+Y)^2} + \dots + \frac{C_n}{(1+Y)^n} + \frac{P}{(1+Y)^n}$$

- **C = coupon payment per period**
- **P = par value of bond or call premium**
- **n = number of years until maturity or until call or put is exercised**
- **Y = yield to maturity, yield to call, or yield to put per pay period depending on which values of n and P are chosen.**

(Spaulding, 2011)

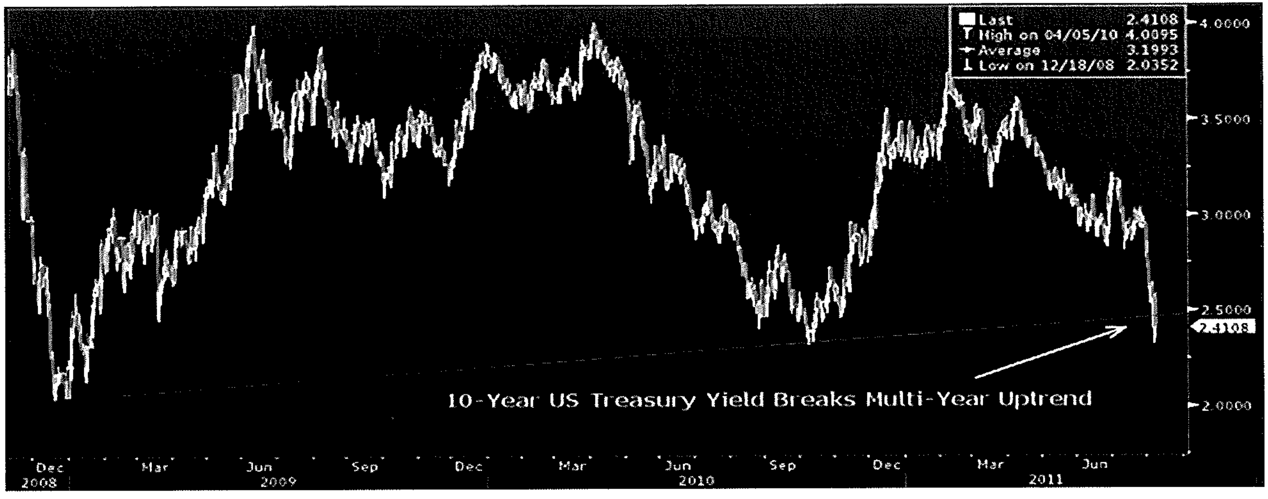
Most fixed income securities like bonds and US bills have a par value; this is the face value that the security is issued at. The security will then pay a specific rate of interest on that value. This is a known rate of return for the security which is why they are referred to as fixed income securities. When dealing with ratings and risk, the higher the risk of a fixed income security, the greater the chance that the issuers of that security will be unable or unwilling to pay the coupons and par value. In the most general sense, risk is the possibility of something undesirable (Spaulding, 2011). Since the goal of investing is to get the greatest return possible for an investment, investment risk is the possibility that the investor will get back less than their initial investment or expected return, or get less with one investment than they could have with a different investment. The primary risk for fixed income securities is market risk or interest rate risk. It is called market risk, because it will only affect the price of the security if the investor sells it before the maturity date.

The price of a bond depends on the issuer's credit rating. This is the perceived ability of the issuer to pay its debt obligations. The greater the credit rating of the issuer, the less yield they have to pay on that bond to sell it. If the holder of a bond wants to sell it before its maturity date in the secondary market, the bond's price will reflect the issuer's credit rating. This is to say that the price of riskier securities will be less than that of higher rated securities. The lower price will drive the yield up.

"Yields on 10-year U.S. Treasuries, closed at 2.11 percent on Aug. 10, a percentage point below the 3.1 percent yield on AAA rated French debt and two points below Belgian bonds' 4.1 percent yield" (Detrixhe, 2011).

After Standard and Poor's decided to downgrade the US credit rating, demand for US backed securities soared raising the price and lowering the yield. Standard and Poor's considered US debt riskier and

investors were more eager to lend money to the US by purchasing its securities. This was not expected to happen. Before the downgrade on July 20, Terry Belton, a spokesman for JPMorgan said "A U.S. credit-rating cut would likely raise the nation's borrowing costs by increasing Treasury yields by 60 basis points to 70 basis points over the medium term" (Detrixhe, 2011). However, prices rose and yields fell. Yields were low even after the downgrade for the simple reason that there is nowhere else for investors to go. The downgrade removed stability from an already uncertain market. The reason investors purchase US Treasuries is because they want a safe dollar denominated asset (Detrixhe, 2011). S&P may have considered the US a more risky investment but people still believed in US backed securities. "Eleven days after lowering the credit rating on the U.S. for the first time, Standard & Poor's is suffering a downgrade among global investors as American bonds are proving world beaters -- undermining S&P's mathematical assumptions" (Detrixhe, 2011).



(Bloomberg, 2011)

The following week after the S&P downgrade, "the Treasury paid a record-low average yield of 2.13 percent on $72 billion of 10- and 30-year notes and bonds, saving taxpayers $647 million in interest payments during the life of the debt" (Detrixhe, 2011). US securities are still viewed as a safe haven by investors in this volatile and uncertain market.

Interest Rates

An interest rate is the rate at which interest is paid by a borrower for the use of money that they borrow from a lender. Interest rates are a vital tool of monetary policy, which is when a country controls the supply of money for the purpose of economic growth and stability. In the United States the Federal Reserve sets the interest rates known as the Federal Funds rate. This is the rate that depository institutions, such as banks, pay to borrow money from each other. The purpose of this monetary tool is to make the growth rate of real GDP stable in relation to long run aggregate supply at the expected inflation rate. When the Fed wants to reduce interest rates they increase the supply of money. They do this by buying government securities, putting more money into the financial system. When the supply of money is added to the economy, interest rates fall. So when the US sells government securities, they are taking reserves out of the market. When the supply of money is decreased interest rates will rise. They accomplish these actions through the Federal Open Market Committee (FOMC). The changes in interest rates can have both negative and positive effects on the economic market.

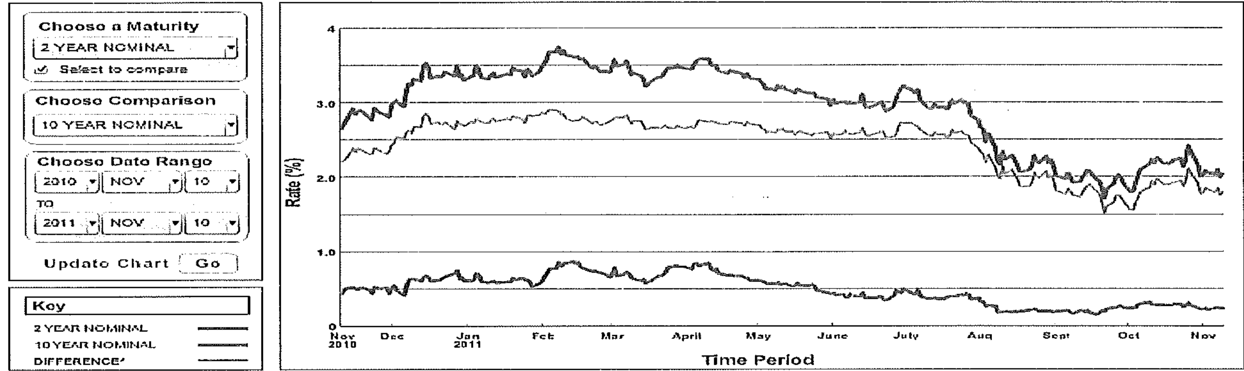
One of the ways interest rates have a large impact is on spending. There is a possibility that the borrower will not repay or default on a loan. This is the risk of every loan. To compensate lenders for that risk, there must be some type of reward or incentive to lend money. This is the interest rate. Interest is the amount of money that lenders earn when they make a loan that the borrower repays. The interest rate is the percentage of the loan amount that the lender charges to lend money (Bio, 2011). Borrowers are willing to pay these interest rates in order to have the ability to spend the lent money immediately. The lower the interest rates the less costly the borrowed money will be. So the lower the interest rates the more inclined people will be to borrow more and spend more. Contrarily, the higher the interest rates, the less likely borrowing takes place therefore spending will decrease.

Interest rates also effect inflation and have colossal impact on economic recessions. Inflation refers to the rise of prices in goods and services over time. This is normal in a strong economy but if the rate of inflation becomes too high and is left uncontrolled then the purchasing power of that nation's currency will decrease. The Fed can control this rate of inflation through interest rates with the use of monetary policy. If the Fed decides to raise the federal funds rate, causing spending to decrease, this will lower the rate of inflation by driving prices down. This is due to the fact that higher interest rates mean less borrowing and spending. Alternatively, if the Fed keeps interest rates low borrowing money becomes cheaper. In most cases this will cause people to borrow more since the cost of that borrowed money is now lower. This increase in spending can cause inflation to increase. The influx of spending can lead to ending of recessions within the economy.

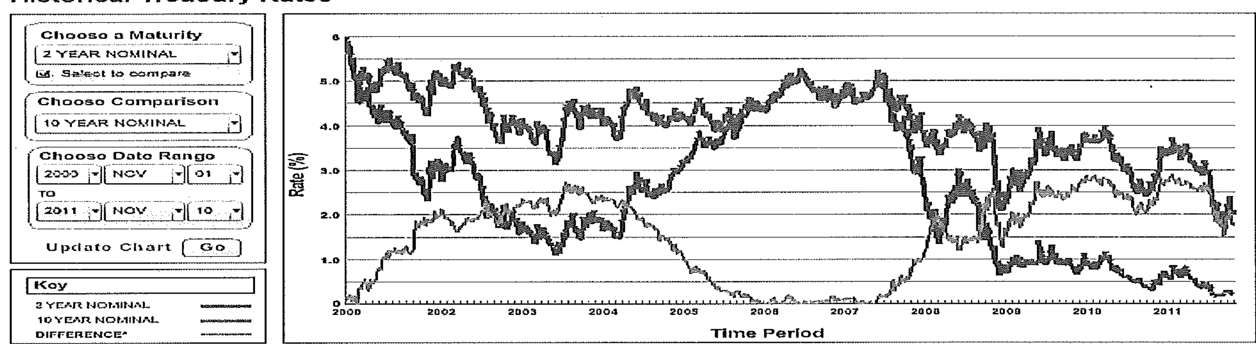
Interest rates also directly affect the US bond and stock market. The point of investing is to get the highest possible return upon an initial investment. This can be through dividends, growth or coupons on any investment. To determine what will offer the greatest return, investors will consider the rate of return on an investment relative to their acceptable rate of risk. The federal funds rate will determine how investors will invest their money. This is because the returns on both CDs as well as US backed securities are affected by this rate (Bio, 2011). As interest rates rise the yields on these securities will usually rise causing the price to drop. The longer the maturity of the bond, the more it will fluctuate in relation to interest rates, since there is a greater risk from capital loss. Rising or falling interest rates also affect the psychology of consumer and business (Bio, 2011). When interest rates are rising, both businesses and consumers will cut back on spending. This will cause earnings to fall and stock prices to drop. This is a result of the cost of raising money by selling bonds and securities are more expensive.

In a 2006 research paper produced by the US Treasury, James Girola, found that "the average long-term government real interest rate back through 1870 is just under 3 percent" (Girola, 2006). However, interest rates in the United States are at all-time lows and have been for some time now. Below are two graphs from the Treasury department that show just how low rates are and how low in comparison to previous rates they are being kept. The short term interest rate represented by the 2-year nominal rate has been especially low since 2008.

Historical Treasury Rates



Historical Treasury Rates



(US Department of the Treasury, 2011)

There is no question that since 2008 we have been in a very slow growth economy. This slow growth should have caused interest rates and yields to decrease. In fact many people were predicting this. Most thought that there was a "bubble" in government debt and interest rates were on the verge of an enormous increase. In 2009 Morgan Stanley released a statement saying "Our US economics team expects bond yields to rise to 5.5% by the end of 2010 – an increase of 220bp that outstrips the 137bp increase in the Fed Funds rate expected over the same horizon" (Wieseman, 2009). However, this is very different from what has really happened. Short-term rates have stayed near zero and long-term rates have stayed below historical norms (Krugman, 2011). This goes against the belief of all classical economic theory. If interest rates are so low consumers should be borrowing and spending more. This would improve economic conditions. So why is this not happening?

I believe it is a result of an economic theory, first proposed by John Maynard Keynes, called "liquidity trap". This is a condition where the monetary policy of the Fed, by moving interest rates or affecting the money supply, is unable to stimulate the economy. A Liquidity Trap happens when people have unfavorable expectations about the economy. This causes them to accept less risk and increase their liquidity preference. The result is less spending and borrowing. So even though there is an increase in the money supply and borrowing is cheap, rates will stay low, because people are unwilling to accept the risk of borrowing money. In this situation the regular monetary policy tools of the Federal Reserve are useless. "To get out of the trap a country must "loosen its belt," persuade its citizens to forget about the future, and convince the private sector that the government and central bank aren't as serious and

things aren't as grim they seem" (Krugman , 1999). This relies mainly on consumer sentiment within the economy.

The low rates are also a result of the Federal Reserve. The Fed set the interest rates at a specific target. Lately the rate has been at all-time lows staying around zero to "1/4" of a percent. Long rates are being held down by slow economic growth, but mainly because of the high "safe haven" demand for US securities by investors.

Interest Rates concerning the Downgrade and Debt

Interest rates continuously change leading to interest rate risk, which affects almost every security. The price of a security will change opposite the interest rates. If interest rates decline, meaning the market yield declines, then the price of a bond will rise lowering the yield.

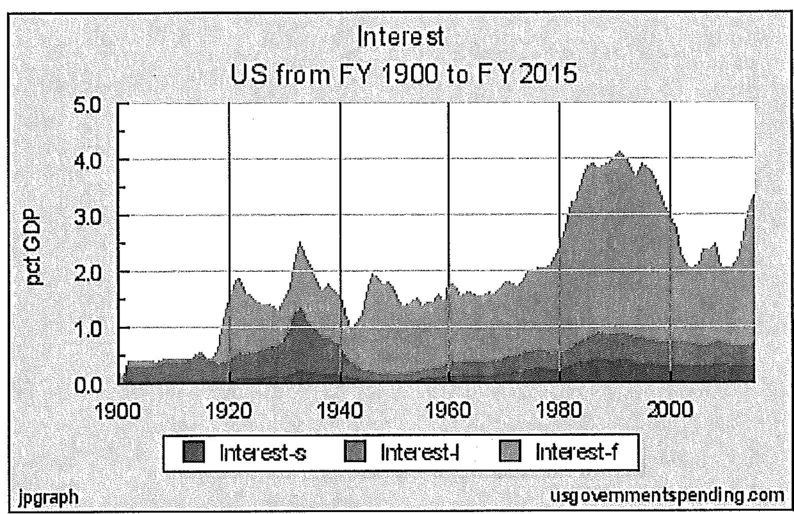
Ever since Alexander Hamilton refunded the debts of the Revolutionary War with a federal debt, the United States only went into debt to pay for its wars. But then in the 1930s the administration of President Roosevelt attempted to get the nation out of the Great Depression with federal borrowings ("A century of," 2011).

Ben Bernanke, chairman of the Federal Reserve, said "U.S. Government bonds are considered the lowest-risk bond investment class in the world, and serve as a benchmark for interest rates for other, more-risky bond and asset classes. If investors can't count on the safety of U.S. debt, they would ask for higher interest on that asset class, pushing up the interest rates on other assets, among other ripple effects" ("Will S&P's downgrade," 2011). Yet the rating downgrade did nothing to dampen the appetite for U.S. government bonds. Strong demand for US debt the week following the downgrade drove yields down to their lowest levels on record, saving taxpayers some $647 million (Hersh, 2011). This would in fact make the US debt cheaper, which is the opposite effect the downgrade should have had. Why was this?

Since Standard and Poor's was the only one, out of three major, credit rating agencies that decided to downgrade the US, the impact it may have on the US debt market is still being debated. This means that US securities are still considered as an acceptable REPO and as collateral within exchanges (Armstrong, 2011). Foreign holders of US debt, including reserves in central banks, presently hold about 46% of the total debt. Even if the US decides to cut domestic spending the interest expenses on all their debt would still be owed. So a majority of those interest expenditures will be paid to those foreign bondholders. Therefore the downgrade from S&P should have made foreign bondholders very happy, if interest rates would have risen like normally after a downgrade. If interest did rise and the Budget Control Committee decreased the US budget, the cut in social spending along with the Republicans' demand for no new taxes in-coupled with a possibility of higher interest rates would be a recipe for economic disaster. The US will honor the interest payments due to foreigners, while having no influx of revenue from taxes, along with the US public having to pay more money for social programs, and the government paying more for the ability to borrow money. This would cripple the economy. It is the same economic policy the IMF is trying to force Greece into and what caused the Great Depression in the United States (Armstrong, 2011). Thankfully this did not occur. However, if there are any more

downgrades of government issued debt the market may react differently. Any more downgrades have the potential to send mortgage rates up between 0.5-1.0percent, which would have a very adverse effect on the economy (Armstrong, 2011). This is not saying that bonds already issued would provide a higher rate and yield. Bonds already issued have a fixed coupon rate and face value. If interest rates rise then the face value of those already issued bonds would fall but still pay the same coupon rate. The above paragraph is talking about the securities the government would have to issue to pay for its debt. The new issued bonds would have to pay a much higher rate and would be much more costly for the US.

The Federal Reserve says that US government securities would still be counted as AAA-rated under the risk management regulations (Armstrong, 2011). This was so that banks, insurance companies and other investors would not have to rearrange their portfolios due to risk. Central Banks can't just dump US securities because they are still needed to buy commodities and represent the risk-free rate. The real damage that the S&P downgrade had on the US was highlighting the Sovereign Debt Crisis.

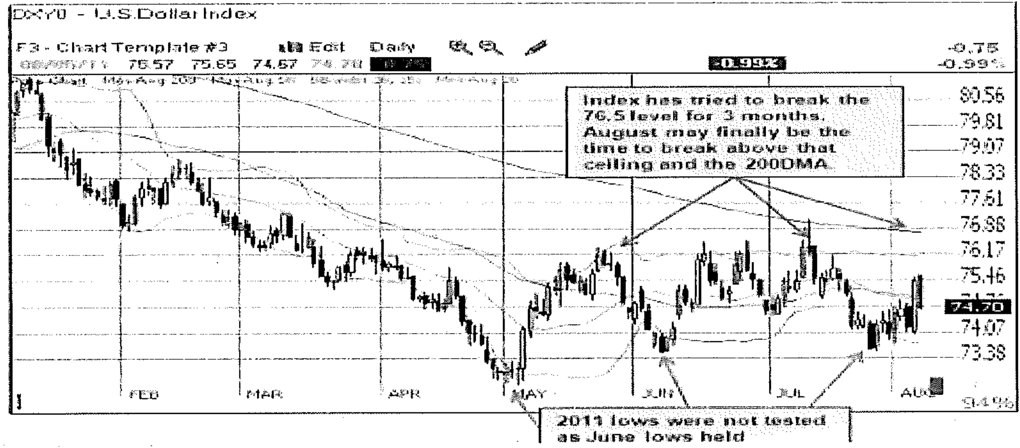


("A century of," 2011)

"The real risk from government debt is the burden of interest payments. Experts say that when interest payments reach about 12% of GDP then a government will likely default on its debt. This chart shows that the US is a long way from that risk. The peak period for government interest payments, including federal, state, and local governments, was in the 1980s, when interest rates were still high after the inflationary 1970s. Of course, the numbers don't show the burden of interest payments from Government Sponsored Enterprises like Fannie Mae and Freddie Mac" (Chantrill, 2011).

The American Dollar

In an interview with Bloomberg, Nouriel Roubini, an American economist who predicted the housing market crash and recession of 2008, said "the S&P downgrade could help lock the U.S. into a recession and send Treasury rates down not up" (Roubini, 2011). In another interview a spokesman was quoted saying "China, the largest creditor of the world's sole superpower, has every right now to demand the United States address its structural debt problems and ensure the safety of China's dollar assets" – and recommends the U.S. cut military spending and social welfare programs" ("China is livid," 2001). The downgrade obviously shed some dim light on the US and its governmental debt as a whole. However, the news of the downgrade does present an interesting scenario for the continuation of the dollar's increase from its previous July lows (Duru, 2011). The bad news from the debt-ceiling crisis and the S&P downgrade had failed to move the dollar index into 2011 lows. On the Thursday before the downgrade there was a large 4.8% sell in the S&P 500 index that caused the dollar to climb 1.7%



(Duru, 2011)

A Standard and Poor's downgrade of the US Sovereign Credit rating sent stocks reeling. "The US Dollar traded higher against all major currencies except for the safe-haven Japanese Yen and Swiss Franc in response to the Standard and Poor's credit rating agency downgrade of US sovereign credit" (Rodriguez, 2011). In the face of the downgrade, such an unprecedented event, investors were scrambling for safe-haven assets. The effects on currency markets were swift and straightforward. Safe-haven currencies benefited substantially, while riskier counterparts fell sharply on the sudden equity market sell-off. All currencies except the Japanese Yen and Swiss Franc traded lower against the US Dollar. Historically the Swiss Franc has been the investors top choice during times of heightened market tensions, while the Japanese Yen has remained similarly correlated to the S&P 500 (Rodriguez, 2011). Despite the downgrade investors continued to buy US Treasuries and therefore, should then theoretically favor the US Dollar against higher-yielding counterparts (Rodriguez, 2011).

Country Baskets: G10
Values as of 08/08/11 Ranked By 3M Deposit/NDF Impl

Total Currencies Ranked: 11

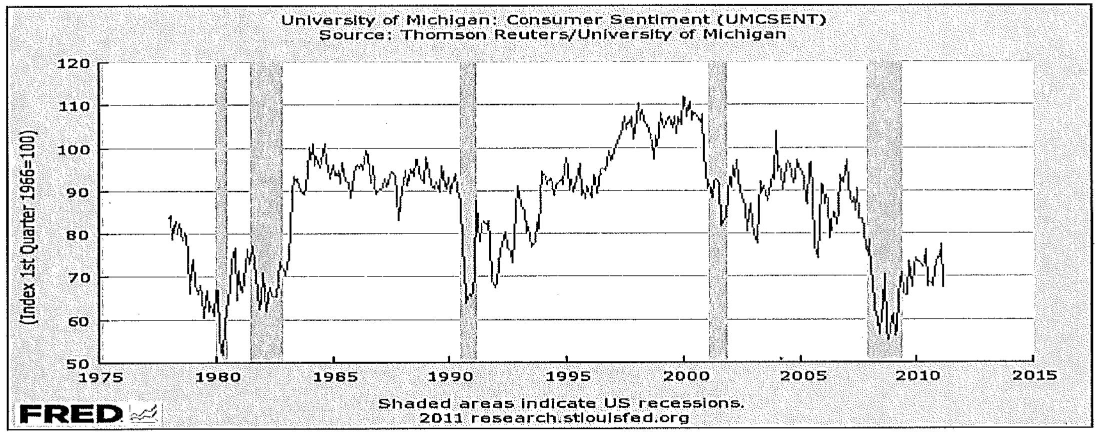
Deposit Rates		
1) Australian Dollar	AUD	5.00
2) Norwegian Krone	NOK	2.97
3) New Zealand Dollar	NZD	2.87
4) Swedish Krona	SEK	2.47
5) Euro	EUR	1.51
6) Danish Krone	DKK	1.44
7) Canadian Dollar	CAD	1.08
8) British Pound	GBP	0.79
9) United States Dollar	USD	0.25
10) Japanese Yen	JPY	0.15
11) Swiss Franc	CHF	0.13

(Bloomberg, 2011)

If the historical currency market correlations against the S&P 500 continue, then the US Dollar would be expected to improve further against the Australian Dollar, New Zealand Dollar, Euro, and Canadian Dollar during financial market turmoil. Immediately after the downgrade early reactions suggest that in the short term the US dollar will actually gain strength.

Consumer Confidence

Consumer confidence is an economic indicator, represented by the Consumer Confidence Index (CCI), which measures the degree of optimism that consumers feel about the overall state of the economy, their personal financial situation and job prospects ("Consumer confidence index," 2011). How confident consumers feel about the stability of their incomes will help determine their spending activity. Due to this fact the CCI serves as one of the key indicators for the overall shape of the economy.



("University of michigan:," 2011)

The University of Michigan publishes a monthly CCI report called the Consumer Sentiment Index. Richard Curtin is the chief economist of these surveys. In his last report he said, "The recent surge in pessimism was due to lost confidence in the ability of the government to enact policies that would counteract the growing threat of a renewed recession. Consumers have shifted from being optimistic about the potential impact of monetary and fiscal policies to a sense of despair and pessimism about the role of the government. The only more common expectation than the government playing a positive role in promoting economic growth is the expectation that government can be a potent and successful force. That presumed effectiveness has been lost. The result is that consumers have become more cautious spenders" (Curtin, 2011).

Index of Consumer Sentiment				
Aug'11	Jul'11	Aug'10	M-M Chng	Y-Y Chng
55.7	63.7	68.9	-12.6%	-19.2%
Index of Consumer Expectations				
47.4	56.0	62.9	-15.4%	-24.6%
Current Conditions Index				
68.7	75.8	78.3	-9.4%	-12.3%

("Index of consumer," 2011)

This research shows that in August, after the S&P downgrade occurred, consumer confidence immediately fell. The downgrade, economic conditions and governmental policies convinced people that the current slow growth was not over and another one was likely to occur (Curtin, 2011). The future outlook among individual households was grim. Consumers reported worsened finances and no gains on expected income, leading to the anticipation of rising unemployment rates (Curtin, 2011). "Consumers have shifted from being optimistic about the potential impact of monetary and fiscal policies to a sense of despair and pessimism about the role of the government. Never before in the history of the surveys have so many consumers spontaneously mentioned negative aspects of the government's role in the economy, and never before have consumers rated economic policies so unfavorably" (Curtin, 2011).

VII. Summary

Through this paper I have cited reasons for Standard and Poor's decision for downgrading the US credit rating form AAA to AA+. I have looked at the reasons for the downgrade the performance and credibility for S&P as well as what some of their critics had to say. I looked at what a downgrade may have done to the US debt as well as some of the economic effects I may have had.

"The United States has maintained the highest credit rating for decades. S& P first designated it AAA in 1941, reflecting a steadfast belief that the richest nation in the world would not default on its debt payments. The rating was also bolstered by the role of the dollar as the world's leading currency, ensuring that demand for American debt securities would remain strong in spite of burgeoning deficits" (Applebaum & Dash, 2011). The decision to downgrade the US Treasury debt may have been Standard and Poor's way of trying to improve its overall image and worthiness, after recent mishaps. Credit rating agencies have been trying to restore their credibility after missteps leading to the financial crisis. After highly optimistic credit ratings of bundled mortgages that later collapsed, a downgrade of federal debt, can be seen as a controversial decision that critics have said agencies are unwilling to make (Applebaum & Dash, 2011). However, S&P made this decision in spite of the fact that investors consider US debt among the safest and riskless investment in the world. Yields rose before the downgrade, but then afterwards, yields sank as investors poured money into US Treasuries as a safe-haven from falling stocks and the unpredictability of an extremely volatile market.

Regarding the downgrade, I agree with the conclusion made by Paul Krugman. Krugman is an American economist, Professor of Economics and International Affairs at the Woodrow Wilson School of Public and International Affairs, one of the most widely cited economists in the world today and Noble Prize winner in Economic Sciences. His conclusion was basically, "S&P assessments aren't worth too much with respect to the risk of sovereign default. This may explain why investors are still voting with their feet for U.S. Treasuries. Though they may help cause havoc in equity markets, S&P ratings don't offer any valuable evidence on the safety of government debt."

However, a triple-A rating can be viewed as a status symbol for a country. To that effect, the downgrade of the US rating could be seen as a loss of reputation within the eyes of the world community. Below is

a chart of Standard and Poor's ratings of countries with AAA's and the United States, it also displays the outlook for the country by S&P:

Country	Rating	Outlook	Date
Australia	AAA	Stable	2011-08-05
Austria	AAA	Stable	2011-08-05
Canada	AAA	Stable	2011-08-05
Denmark	AAA	Stable	2011-08-05
Finland	AAA	Stable	2011-08-05
France	AAA	Stable	2011-08-05
Germany	AAA	Stable	2011-08-05
Guernsey	AAA	Stable	2011-08-05
Hong Kong	AAA	Stable	2011-08-05
Isle of Man	AAA	Stable	2011-08-05
Liechtenstein	AAA	Stable	2011-08-05
Luxembourg	AAA	Stable	2011-08-05
Netherlands	AAA	Stable	2011-08-05
Norway	AAA	Stable	2011-08-05
Singapore	AAA	Stable	2011-08-05
Sweden	AAA	Stable	2011-08-05
Switzerland	AAA	Stable	2011-08-05
United Kingdom	AAA	Stable	2011-08-05
United States	AA+	Negative	2011-08-05

(McGraw-Hill Companies, 2011)

In this respect, the United States may be seen as having lost some of its creditworthiness reputation in comparison to these 18 countries ranked above it. This obviously wasn't the case in the minds of investors, but as far as our country's prestige goes, the US is ranked below them. This lower rating along with a negative outlook means that it could take the US years to get back an AAA rating from S&P. This is even more apparent when taking into account recent reports produced by Standard and Poor's. S&P recently put out a report saying, "the number of entities poised for upgrades decreased by 11 from our most recent report to 272 as of Aug. 25. This marks the first time since March 2009 that the number of potential upgrades has declined for three months in a row" (Vazza, Gunter, Moskowitz & Khan, 2011). So those people that think the US will quickly regain the prestige of a AAA rating are more than likely wrong. The fact is the US has a long time to wait until Standard and Poor's improves its rating.

VIII. My Thoughts

The conclusion of my research about the Standard and Poor's downgrade of the US credit rating is that while the downgrade can be viewed as having great symbolic significance, it carries few clear financial implications. S&P and other rating agencies may have the ability to downgrade the credit rating of the US, but what really matters is whether or not the markets are willing to downgrade US debt markets. This is clear, due to the fact that even after the downgrade US Treasuries still remain the "flight-to-quality" asset of choice, as well as the basis for the risk free rate. While few financial implications may be found form the downgrade, it was successful in one specific aspect. The downgrade essentially highlighted the "debt problem" of the US and place emphasis on the problems within our government to concisely agree upon solutions for many of the problems facing our country today.

Regarding the economic consequences of the downgrade, it is possible that the short-run results from the downgrade may be more psychological than practical. Moody's Investors Service and Fitch Ratings have maintained an AAA rating of US debt. This is a result of the continuing investor confidence in US backed securities. However, the downgrade has the potential to serve as psychological deterrent for an American economic recovery. The US economy is having trouble finding traction for recovery and improvement. The downgrade could in fact do more damage to investors' increasing lack of faith within the US political system that is already seen as struggling to reach agreements even on everyday policy matters. It also has the potential to lead to further downgrades of companies and states within the US, which would effectively raise their costs of borrowing.

The question of whether or not the US should have even been downgraded is still being debated by many. The magnitude of S&P's $2 trillion error and the haste with which S&P changed its principal rationale when presented with this mistake, raises questions about the credibility and integrity of Standard and Poor's final decision.

In conclusion, I have found that while there may have not been many long term or clear financial implications from the downgrade, it did provide a warning to the United States. The US needs to get its federal deficit under control. The US must realize that continuing with spending programs that are approaching or already bankrupt, like Social Security and Medicare, while providing no new influx of revenues, will ultimately lead the country into default. This along with lowering consumer confidence is a recipe for economic and political disaster. The US government needs to stop being so stubborn and unwilling to agree upon solutions for our national debt. The highlighting of the debt was easy for Standard and Poor's. This is seen with the ease that they were able to change their principle rational for the downgrade. The controversy within our government that arose from the debate to raise the debt ceiling to avoid a default within our country was embarrassing to say the least. If our nation's leaders would just become more agreeable in developing solutions to the national debt, consumer confidence would increase along with many other aspects of our economy. This would be the answer to many of our economic problems and lead the US towards economic recovery. It could be the beginning to

restoring the United States prestige as one of the best economy's in the world, as well as being the gold standard of the "risk-free" investments for government backed securities.

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