

# **A macro analysis of the united states recovery with a particular focus on public debt**

Selman Selmanaj, Donika Limani, Pëllumb Reshidi

## *Abstract*

*The intention of this paper is to analyze the lingering effects of the 2008 crisis in the United States and the implication they have on the policies undertaken by the Obama administration. A particular focus is given to the debt accumulation and how that relates to the challenges of the long run development of the American economy. The first part of this paper will give a brief overview of some of the elements central to the causes of the crisis, namely the centralization of wealth and its implication for the unsustainable consumption patterns. It will then follow to consider how the previous issues relate to the weak aggregate demand and the expansionary policies used to tackle it. Additionally, an overview of the crisis effect on the already troubled labor market is laid out in the third part. After exploring the interventionist policies used by the US administration in the after-crisis period, we move on to the pressing issue of debt and possible scenarios that may arise in case it is not seriously addressed.*

## *Keywords:*

*US Crisis; US Recovery; Labour Market; Consumption Patterns; Public Debt*

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## 1. Introduction

In 2008 the United States entered in a depression oriented, steep recession. The GDP contracted at 8.9 per cent in the 4th quarter of 2008 and the unemployment peaked at 9.6 per cent in 2010. Four years after the crisis, the unemployment remains high at 8.5 per cent (December 2011) and GDP growth rate is at best modest at 3 per cent in the last quarter of 2011<sup>1</sup>. The causes of this crisis raised worldwide debates not only on practical concepts, but also on general ideas that shape the global economy. This paper argues that while the expansionary policies undertaken may stimulate the economy, more effort is needed towards policies that address its structural problems; by further considering possible scenarios arising from the issue of national debt, it seeks to shed light on the current intricate economic situation.

Building on previous experiences of economic crises, policy makers have gradually improved their abilities to use economic tools in managing the economy. However, the pace of recovery in the United States remains slow even with the enhanced knowledge about economic models. The brief background of the 2008 crisis explained initially in this paper is crucial to understanding the problematic parts in the current economic structure. Secondly, the consequences of the recent crisis and the structural issues of the economy make it hard for the expansionary policies to deliver their promises in strengthening demand and, hence, stimulate us to look for further explanations to our problems. Consequently, we observe problems of uncertainty in consumption patterns and structural mismatching issues in the labor market. It could be said that these problems have not gone unnoticed as the US government has undertaken a number of acts regarding them. Nevertheless, when considering a possible long term approach, a pressing concern such as national debt does not seem to be high on the government agenda. It is this issue we turn to in the final part of this paper. Considering the globalization of the economy and the interdependence that comes with it, a crisis caused by national debt could have an immense effect on the global economy. By working through a few possible scenarios, we intend to raise awareness about its importance. On that note, we conclude that more adequate policies are needed to tackle long term and structural issues such as those in the labor market or the long-term plan for debt reduction.

## 2. The weakening of Aggregate Demand

*'One of the fundamental tenets of the American economy has been that if you work hard, you can do well enough to raise a family, own a home, send your kids to college, and put a little money away for retirement. That's the promise of America'*<sup>2</sup>. This is the very first paragraph of the "Economic Report of the President" prepared by the President Council of Economic Advisers in the United States. It does not necessarily imply that, at the given time, hard work will not ensure such needs, but what may be inferred by studying the general situation, is that there is a chance that hard work will not be required at all. When the crisis of the 1930's struck, a great riddle was presented to the world.

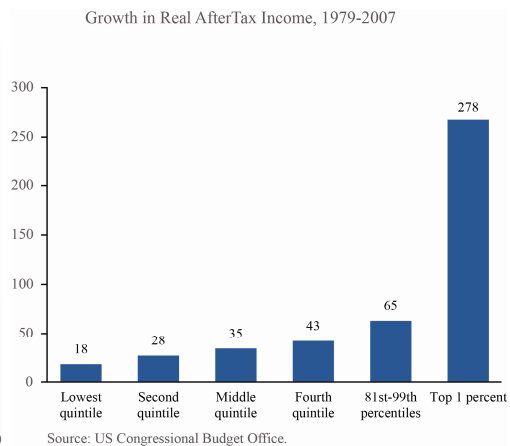
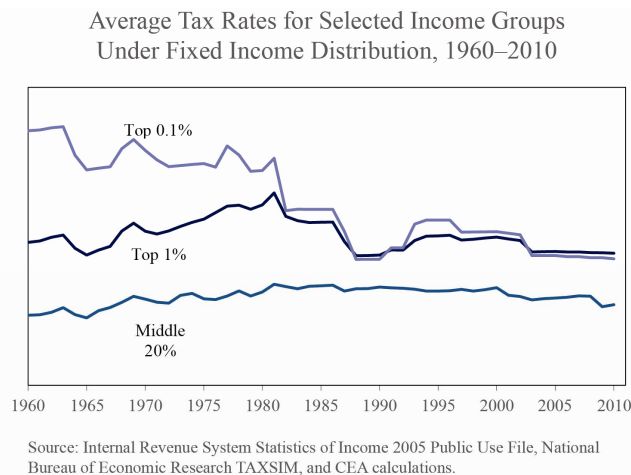
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<sup>1</sup> Economic Report of the President; Department of Commerce (Bureau of Economic Analysis).p.316

<sup>2</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.3

In those times, economic crises could only be explained by supply shocks caused from natural disasters or wars. However, as it was evidenced, such events were not compulsory for crises to emerge. The world was introduced to a new kind of crisis caused by the demand side, by the weak aggregate demand in particular. Such crises were practically impossible to arise at earlier times, mostly because there was always a larger demand for goods than could be produced. In other words, the "Say's Law" had held its promise that Supply would create its own Demand<sup>3</sup>. After the full industrialization took place and with no war to waste production on, the potential to produce exceeded the demand for goods; Supply exceeded Demand to put it in more economic terms. As a result, for the first time in Capitalism's history, a demand side crisis appeared. Similar to that of 1930's, the recent economic crisis that initially shocked the United States is widely addressed as a demand side crisis. The weakening of the demand was primarily provoked by different factors such as the partial collapse of the financial sector that debilitated consumption and investment which shifted the aggregate demand, leading to a lower equilibrium. Since consumption is a crucial part of aggregate demand, the chain that lead to lower levels of consumption should be discussed.

A contributor to the weakening of the aggregate demand, as mentioned quite often in the report, is the centralization of wealth which accelerated from the discriminative taxes that were applied at the George Bush era (2001-2009)<sup>4</sup>. As the Congressional Budget Office recently noted, the top 1 percent of families had a 278 percent increase in their real after-tax income from 1979 to 2007, while the middle 60 percent had an increase of less than 40 percent<sup>5</sup>. Considering the marginal propensity to consume (MPC) where, after a particular point, the increase in wealth increases consumption only slightly, the centralization of wealth led to a fall in overall consumption. Consequently, considering that consumption is the major component of aggregate demand (70% of US GDP)<sup>6</sup> a fall in consumption caused by the centralization of wealth, though not the main factor, may have contributed to a fall in aggregate demand.



<sup>3</sup> See: John Maynard Keynes; *The General Theory of Employment Interest and Money*, ch II, section VII; 1936

<sup>4</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.84

<sup>5</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.48

<sup>6</sup> See: The World Bank website: <http://data.worldbank.org/indicator/NE.CON.PETC.ZS>; Acces date: 20.02.2012

The wealth centralization creates not only the problem of diminishing consumption, but also cause investments to fall, further weakening aggregate demand, as Keynes noted: "Not only is the marginal propensity to consume weaker in a wealthy community, but, owing to its accumulation of capital being already larger, the opportunities for further investment are less attractive"<sup>7</sup>.

Increasing levels of debt during 1979–2007 may have masked the influence of the rising inequality of incomes on aggregate consumer spending. Although the middle and lower income classes saw their incomes shrinking, their consumption was financed by excessive borrowing made easier by the deregulation of the financial sector. This implies that the unsustainable increases in consumption were not necessarily as a result of higher incomes, but of excessive borrowing. Hence, this unsupported increase in aggregate demand, especially in the housing market, lead to the creation of price bubbles. With the onset of the recession and financial crisis, however, the scope for this level of borrowing came to an abrupt end. Access to credit, particularly for mortgages, was severely restricted, and the average consumer was left with elevated levels of debt taken on before the crisis<sup>8</sup>.

In order for us to comprehend how the economic crisis and the aftermath of the housing bubble burst has affected consumption at present, we assume that individuals plan their consumption by considering the prospects of their income. In other words, based on the permanent income hypothesis, we can separate the income into two components: transitory and permanent. When people have to plan for the future, uncertainty comes into play and to capture it we have the equation:

$$\frac{1}{C_1} = \beta(1+r) \frac{1+\sigma}{E(C_2)}$$

Considering that

$$E\left[\frac{1}{C_2}\right] > \frac{1}{E(C_2)}$$

This indicates the convexity of the marginal utility. Therefore, uncertainty increases the marginal utility of future consumption, and, consequently lowers consumption today.

Taking logs of the equation above results into:

$$c_1 = \rho - r - \sigma + c_2^e$$

Where  $\rho$  measures impatience ( $\rho = -\ln\beta$ ); the interest rate ( $r$ ) takes into account the opportunity cost of spending today;  $\sigma$  captures the uncertainty or risk facing the individuals;  $c_2^e$  represents expected consumption (taking into account future wealth and income).

By assuming that consumption is the only component of aggregate demand and therefore in equilibrium we have  $Y=C$ , and  $c_1 = y_1$  and  $c_2^e = y_2^e$ , we get the micro founded IS equation.

$$y_1 = \rho - r - \sigma + y_2^e$$

<sup>7</sup> See: John Maynard Keynes; *The General Theory of Employment Interest and Money*, ch III, p.19; 1936

<sup>8</sup> Economic Report of the President; United States Government Printing Office; Washington (2012), p.70

The economic crisis and the housing bubble burst, specifically, has reduced the wealth of the households because of the fall of asset prices that reduces the value of houses, which are used as a collateral for borrowing. In our micro-founded IS model, this is manifested in the fall of  $c_2^e$ ; future expected consumption depends not only on the current income, but also on the income and wealth you expect to generate in the future. The housing prices could be seen as a permanent shock because it will take time for the prices of houses to reach the same level and even when they will, chances are they will not be as exaggerated as at the time of borrowing. This permanent shock has multifaceted effects on our equations since it stimulates a general lack of confidence in the future, an increase in  $\sigma$ . During recession periods, the future is typically characterized with high uncertainty; as a result, consumption levels fall and saving levels increase.

Before the crisis hit the US economy, personal savings were as low as 2.4% (2007) and then rose to an average of 5.3% in the three following years (2008, 2009, 2010) after the crisis<sup>9</sup>.

### 3. Stimulating Aggregate Demand

The Obama administration is using fiscal policies to tackle the low demand. When people consider the present discounted value of their lifetime income, they create an expectation of the level of tax they have to pay. The policy of the Obama administration is trying to lower the taxes for the lower income class by introducing the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act (TRUIRJCA), The American Recovery and Reinvestment Act (Recovery Act) and The American Jobs Act. They include a short-term extension of both the payroll tax cut and extended unemployment benefits that were set to expire at the end of 2011. "Extending the payroll tax cut into 2012 added an average of \$40 to each pay check of 160 million American workers."<sup>10</sup> Knowing that the lower income class has a higher marginal propensity to consume, the policies will increase their disposable income ( $Y_D = Y - T$ ), which is captured in  $c_2^e$ , and push the IS curve to the right. However, the present atmosphere in the US economy is one of uncertainty. When taxes are considered only transitory, the fiscal policy does not have the complete desired affect as people are still prone to precautionary saving because of the uncertainty of the future. The savings level in the last quarter of 2011 is 3.7%<sup>11</sup>, still higher than before the crisis indicating a higher uncertainty parameter,  $\sigma$ . On the other hand, in case of a credible shift in policies in favor of the lower income classes, better results may be delivered as the future expected tax level ( $T_e$ ) would also change and the uncertainty derived by the volatility in income would decrease.

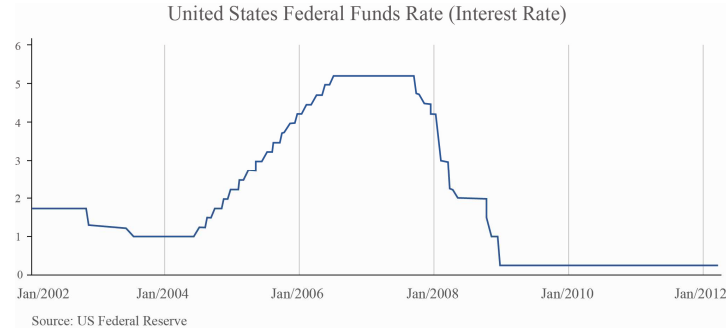
To add further difficulties, the United States may just be a case study for the theory of "Liquidity Traps". The theory presents a situation in which monetary policies such as cash injections, fail to decrease the interest rates. During an economic recession, it is common for the natural interest rate to drop, as the market's expected return on

<sup>9</sup> Economic Report of the President; Department of Commerce (Bureau of Economic Analysis); United States Government Printing Office; Washington (2012), p.354

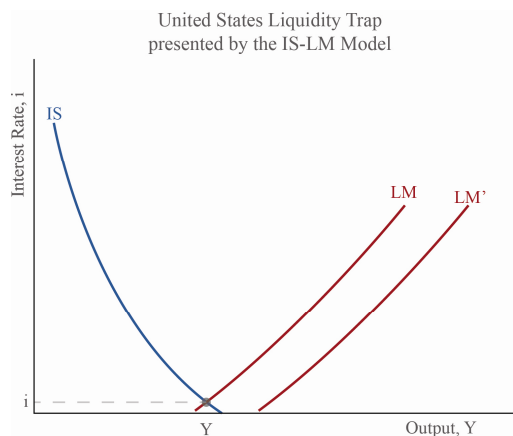
<sup>10</sup> Economic Report of the President; United States Government Printing Office; Washington (2012), p.97

<sup>11</sup> Economic Report of the President; Department of Commerce (Bureau of Economic Analysis); United States Government Printing Office; Washington (2012), p.354

investment is generally depressed in such circumstances. Consequently, the Central Bank aims to push the nominal rate down below the natural rate in order to increase lending and, thereby, consumption and investment. In the current case, the nominal rates are already approaching zero. As a result, the Central Bank cannot drive them below this point. Hence, in such a situation, monetary policy is perceived as impotent to stimulate the economy.



Expressed in the IS-LM model, presented below is the liquidity trap that the United States may be facing.



The further expansion of the LM curve though possible, will fail to give any desired effects. However, expansionary monetary policies applied until now are perceived as rather necessary, considering that in absence of such policies, the stimulation of the IS curve by fiscal expansionary policies, would have caused an increase of the interest rate, which would further complicate, if not crush the recovery. Nonetheless, Krugman argues that the Central Bank is not powerless in such a situation because it could sacrifice the price stability policy for effectiveness of expansionary monetary policy<sup>12</sup>. It is beyond the scope of this essay, however, to discuss the effectiveness of possible expansionary monetary policies, but it is crucial to notice that various approaches are being considered.

It would be natural to assume that the weak aggregate demand and the slow consumption growth have implications for the growing unemployment rate. It is common in recessions for there to be a rise in unemployment due to a decrease in consumption which leads to firms making less profit and firing more workers. The economic crises generally affect the cyclical component of the unemployment. Nevertheless, in the following paragraphs, we will see that while the aggregate demand

<sup>12</sup> Krugman, Paul "Japan's Trap"; Access date: 20.03.2012; MIT, May 1998

shock exacerbated the unemployment problems, the labor market itself had been undergoing structural change for more than a decade<sup>13</sup>.

Despite a substantial rise in private sector job vacancies over the past 12 months in the US, the unemployment rate has declined only slightly and remains well above its pre-crisis level. Growing labor demand in the United States was reflected in a slight increase in private payroll employment in 2010 and a more substantial rise in private-sector job vacancies over the past 12 months. There is also a growing demand for technological and high skilled workers while the jobs that require less education have moved abroad to cheaper labor costs. The construction workers were particularly hit as the demand for houses collapsed after the burst of the bubble and they further added to the mismatches occurring in the pool of unemployment.

This calls for a more detailed analysis of the trend component in the unemployment rate dynamics, which deals with the natural rate of unemployment in an economy. In a perfect competitive market without frictions, anyone willing to work at the going wage rate would be employed. Because the market in the real world is imperfect, there are frictions and structural issues that result into involuntary unemployment. In the case of US, the cyclical unemployment might have just added to the natural rate of unemployment through the loss of employability and an increase in mismatches in the market.

The search and matching frictions model by Diamond, Mortensen and Pissarides may help in describing one of the factors affecting the US labor market by leading to the relationship of vacancies and unemployment, known as the Beveridge Curve<sup>14</sup>.

$$U = 1 - eV^{1-\alpha}$$

The Curve implies a negative relationship between the number of unemployed workers and the number of job vacancies. It is purely a description of the matching friction in the economy and does not dictate the equilibrium level of unemployment.

The high vacancy rate and high unemployment currently in US contradict the Beveridge Curve (see graph below). The observations above implicate that parameter ( $e$ ) representing the matching efficiency may have shifted. This can be seen as evidence to the changes undergoing labor market demand and what is actually being supplied by American workers. It is reported that two of the fastest-growing industries among their members between 2007 and 2011 were the Internet and oil and energy; two of the fastest-shrinking industries were newspapers and construction<sup>15</sup>. What is more, the problem of unemployment is only made worse by the increase in long-term unemployment over the past few years. Workers out of jobs for extended periods may experience higher rates of unemployment owing to deterioration of skills.

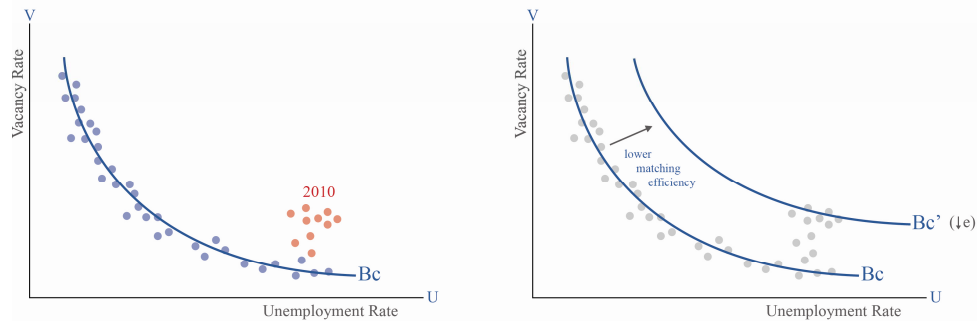
<sup>13</sup> Casaux, S. and Turrini, A.; "Post-crisis unemployment development: US and Europe approaching?"; European Commission, Directorate- General for Economic and Financial Affairs, Issue 13, May 2011

<sup>14</sup> Blanchard, O. and Katz, L., "What We Know and Do Not Know About the Natural Rate of Unemployment"; The Journal of Economic Perspectives, Vol. 11, No. 1; American Economic Association (Winter, 1997), pp. 51-72

<sup>15</sup> Economic Report of the President; United States Government Printing Office; Washington (2012), p.188



Beveridge Curve Evolution



In order to tackle this issue, the Obama administration continued extensions of the Emergency Unemployment Compensation and Extended Benefits programs through 2012 and the American Jobs Act proposal, which includes significant reforms to the unemployment insurance system designed to speed the return of benefit recipients to work<sup>16</sup>. While intended to encourage the unemployed back into employment, unemployment benefits may have the adverse effect of raising the opportunity cost of finding a job. If we consider the natural unemployment rate to be  $u_n = z + \mu$ , then the unemployment benefits may manifest in an increase of  $z$  and, hence, an increase in the natural rate of unemployment ( $\mu$  captures the mark-up).

These structural and frictional changes to the labor market are important for the policies that need to be used. If indeed the changes above have increased the natural unemployment rate, further fiscal or monetary policies would temporarily lower the unemployment rate, but it would result into higher inflation rate and no change in unemployment rate in the long run as workers adjust their expectations. However, at the present time, considering that unemployment in the United States is above 8% and the natural rate of unemployment, although no official data is available, is estimated to be around 6.7%, there is still scope for these policies to function.

The Obama administration has noticed the aforementioned hardships in the labor sector and, thus, various policies have been undertaken in order to address the matching efficiency problem and counteract the outward shift of the Beveridge Curve. By proposing as part of his Fiscal Year 2013 Budget, the Pathways Back to Work Fund, the Trade Adjustment Assistance (TAA) and the Workforce Investment Act (WIA) is trying to retrain the and accommodate the labor force according to the needs of the market<sup>17</sup>. The Administration is also addressing the manufacturing sector with new tax proposals that eliminate tax advantages for moving jobs overseas and reward companies that choose to invest in or bring jobs back to the United States. This has resulted into more than 400,000 net new jobs in the U.S. manufacturing sector since the beginning of 2010<sup>18</sup>. With the economy now operating below its capacity and many underutilized resources, the Administration forecasts that the recovery will continue to gain strength. In general, it is accepted that although growth rates over shorter periods can vary considerably, the growth rate of the economy over the long run is determined by the growth of its supply-side components.

Therefore, the Administration with particular policies plans to stimulate the aggregate supply which would lead to a decrease of the natural rate of unemployment.

<sup>16</sup>Economic Report of the President; United States Government Printing Office; Washington (2012),p.200

<sup>17</sup>Economic Report of the President; United States Government Printing Office; Washington (2012),p.205

<sup>18</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.195



Consequently, a further decrease in the unemployment rate could occur without risking accelerating inflation.

#### 4. Interventionist approach

The previously discussed measures that were taken to counteract the devastating effects of the crisis remind us of Robert Lucas' quote: "We're all Keynesians in the Foxhole"<sup>19</sup>. In other words, it appears that in times of crises, applying Keynesian Expansionary Strategies has become the worldwide approach. According to the Report published by the Economic Advisory of the United States, The breadth and speed of the emergency economic recovery measures that were put in place to address the financial and economic crisis, including the Recovery Act and Financial Stability Plan, as well as extraordinary actions by the Federal Reserve Board, are the main reasons why the economy avoided a steeper and more prolonged decline<sup>20</sup>.



By checking the recent data, such a proclamation can be confirmed. The steepness of the 2008 recession was in fact not much different from the steepness of the Great Depression. The main difference from the former and current recession may be that the crises though unexpected appeared in a world that has previously experienced such endeavors and if not mastered, has at least developed appropriate techniques to better handle such phenomena. The graph above and the one below evidently show the crises strike and then the gradual start of the recovery.

<sup>19</sup> Robert Skidelsky; *The Return of the master*, p.10; September 2009

<sup>20</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.44



The results of these policies seem promising: private-sector employment has increased for 23 straight months, and the unemployment rate fell from a high of 10.0 percent in October 2009 to 8.3 percent in January 2012<sup>21</sup>. Real exports grew 5.2 percent during the four quarters of 2011 after jumping 8.8 percent in 2010. As noted, the rebound in exports since the trough of the recession has been strong and reflects rising demand for U.S. goods and services abroad<sup>22</sup>.

## 5. The Public Debt

Building on the new occurrences resulting from the policies undertaken to address structural and business cycle issues, it may be concluded that the United States are witnessing a undeniable recovery. Nonetheless, a closer study leads us to examine not just the GDP, unemployment and interest rates, but also the United States Debt. Although the US debt has been constantly growing since the 1970, a rapid increase has been witnessed in the last decade primarily as a result of the 2001 and 2003 tax cuts, increased military operations, the unfunded Medicare prescription drug benefit and slow job and economic growth<sup>23</sup>.

There are numerous reasons why the debt issue is of high importance to the economy. For instance, work done by Carmen M. Reinhart & Kenneth S. Rogoff including a multi-country historical large dataset on central government debt as well as data on external (public and private) debt, present descriptive evidence showing that when the debt to GDP ratio exceeds 90 percent, median growth rates fall by one percentage point, and average growth falls considerably more. Similarly, annual growth declines by about two percentage points when external debt reaches 60 percent of GDP, for higher levels, growth rates are roughly cut in half<sup>24</sup>. Therefore, the great debt increase raises not only the chances of a defaults but also damages a nation's output.

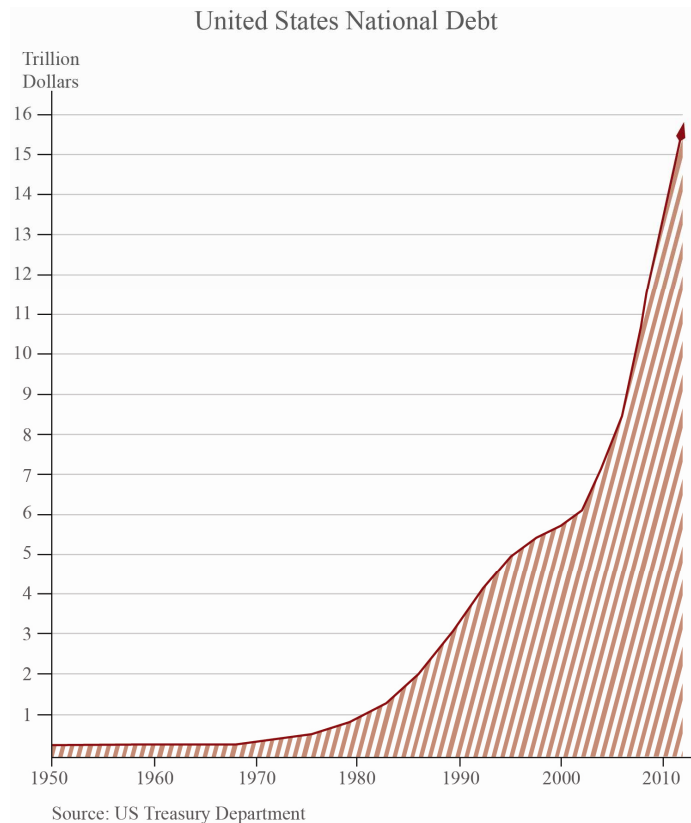
<sup>21</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.22

<sup>22</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.60

<sup>23</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.30

<sup>24</sup> See: Carmen M.Reinhart, Kenneth S.Rogoff; Growth in a Time of Debt; National Bureau of Economic Research; Massachusetts Avenue-Cambridge; January 2010

At the end of December 2011, U.S. debt totaled \$15.2 trillion, of which \$10.5 trillion was held by the public and \$4.8 trillion was intergovernmental debt<sup>25</sup>.



According to the International Monetary Fund, the US joined a group of countries whose public debt exceeds their GDP. The last time the US debt topped the size of its annual economy was during World War II. At the end of the war the US debt ratio was 108.6%<sup>26</sup>. However, the deficit at the time was driven by war spending, a degree of spending that drastically fell once the war ended.

In the years before 1917, Congress had to approve each required borrowing. This made the borrowing process rather ineffective. As the nation entered World War I, it was clear that more flexibility was needed, consequently, lawmakers agreed to give the federal government blanketed approval for most types of borrowing, as long as the total was less than an agreed upon limit and, thus, the Debt Ceiling was created. If the country faces a budget deficit, which results from the total expenditures exceeding the total collected revenues, the only way this shortfall can be paid for is if the government, through the Department of the Treasury, issues debt instruments such as Treasury Bonds, and therefore borrows the shortfall amount. The amount that the government can borrow is limited by federal law particularly with the concept of the Debt Ceiling, which can only be increased with a vote by congress.

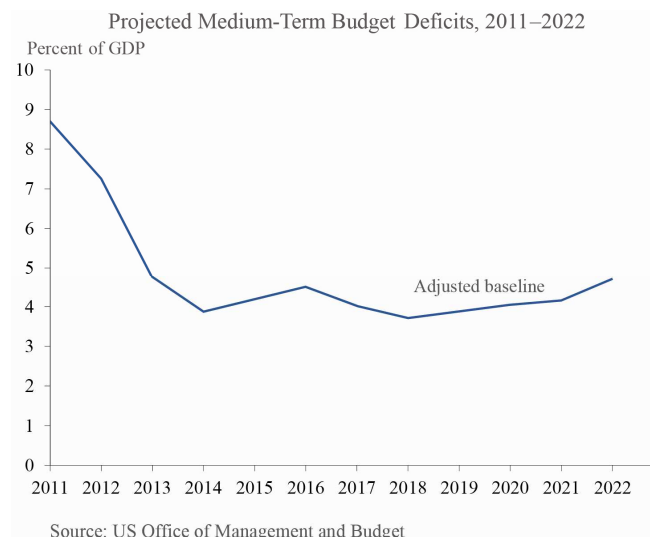
<sup>25</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.96

<sup>26</sup> See: Joshua Aizenman, Nancy Marion; Using Inflation to erode the US Public Debt; Journal of Macroeconomics; September 2011

In 2011 as a result of financial developments, the Obama administration stated that, without a debt ceiling increase, the US would enter sovereign default.

A potential default would effectively impose a significant and long-lasting tax on all Americans and their businesses and possibly lead to the loss of millions of American jobs. At a minimum, a default could hurt U.S. bonds, the dollar and investors' portfolios. Furthermore, the occurrence of an International Crisis in the financial market was conceived as probable. Faced with such a situation, an agreement entitled the "Budget Control Act of 2011", the main purpose of which was to further increase the debt ceiling, passed the House on August 1 2011, and the Senate on August 2 2011<sup>27</sup>. Since 1962, the Debt Ceiling has been raised 74 times and it has almost tripled in the last 15 years, noting an increment of 11 times only in the past decade<sup>28</sup>. The primary purpose of the "Budget Control Act of 2011", a last-minute act, since the US was extremely near defaulting on its bonds, was to address the immediate prospect of default, not to solve the debt problem.

As an attempt to tackle government overspending issues, President Obama submitted a balanced plan to the Joint Select Committee on Deficit Reduction that would have reduced the deficit by \$4 trillion over 10 years with a mix of spending cuts and additional revenue. The deficit as a share of GDP fell from 9.0 per cent in FY 2010 to 8.7 per cent in FY 2011. fell to 8.7 percent in FY 2011 from 9.0 percent in FY 2010<sup>29</sup>. The President's Fiscal Year 2013 Budget proposes to let the tax breaks expire for income above \$250,000 a year, thus, reversing a decade-long trend of tax benefits for the high income group, while approving tax cuts for those families earning \$250,000 or less<sup>30</sup>.



What should be noted is that even though the Obama Administration is taking in to account the management of the deficit, the reduction of the debt is not even mentioned. There could be numerous serious implications if the debt issue is not taken seriously. This paper outlines a few different paths that US might follow: Eliminating

<sup>27</sup> See: Budget Control Act of 2011; Public Law 112-25; August 2, 2011

<sup>28</sup> See: D.Andrew Austin, Mindy R.Levit; The Debt Limit: History and Recent Increases; January 20, 2012

<sup>29</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.57

<sup>30</sup> Economic Report of the President; United States Government Printing Office; Washington (2012),p.86

Deficit Spending, Continuing Deficit Spending, Defaulting or Increasing the Money Base. We will look at each of these scenarios and expand on possible outcomes.

### 5.1. Eliminating Deficit Spending

Alternatively to the sovereign default the US government could cut spending by the amount of its deficit by 37 per cent or in monetary terms by roughly 1,323,000,000,000 \$<sup>31</sup>. Assuming that the reduction is applied equally to every category of spending, it would mean that Social Security and federal retired pension recipients would see their monthly checks shrink by 37%. Furthermore, 37% of federal employees, including military, Border Patrol, the FBI and so on would have to be fired or have to accept a 37% lower wage. Even Medicare would not be able to escape the 37% cutoffs. However, taking into account the previously discussed government engagement in the economy, we may conclude that the US economy is highly depended on governmental stimulation at the present time. If such a reduction would be applied, the US Demand could experience an immense shock that might just fully reverse the recovery causing a reappearance of the recession.

The 37% reduction is crucial if the US seeks to eliminate its deficit spending. The decrease may be less than 37%, which in certain aspects is the objective of the Obama Administration. On the other hand, considering long-term developments, it will only be a matter of time until the United States hit the Debt Limit again. Hence, a reduction of less than 37% postpones but does not solve the problem.

### 5.2. Default

First and foremost, it should be noted that the US debt is owned by Local Governments, International Governments, Intergovernmental Holdings, Pension Plans, International Investors, Mutual Funds, Commercial Banks and Households. The default on such creditors would put them in a critical position, which could translate in to a downward sloping crisis that most likely will have a global impact. The creditor's losses will be accompanied by Downgraded US Bond Ratings which will cause further difficulties regarding the US public debt. The objectives and effects of ratings will be discussed shortly.

### 5.3. Continuous Deficit Spending

Letting the next generation deal with the aftermath of the public debt problem appears to be the preferred solution for the current leadership. However, the reality stands slightly different. Apparently, the piled up debt will not only harm the future generation, its aftermath might come quicker than anticipated.

Every emitted bond goes through a specific ratings system. The purpose of this system is to inform the investors of the bond's quality, assess how likely a borrower is able to repay its debts and help those who are trading debt contracts in the secondary market. Thus, Rating Agencies help assess a fair price for trading debt contracts such as Treasury gilts. The big three rating agencies are Fitch, Moody's and Standard & Poor's.

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<sup>31</sup> See: Congressional Budget Office; The Economic Impact of the President's 2013 Budget; April 20, 2012

Recently Dagong, a Beijing-based rating agency has acquired attention and as a result we may add it to the aforementioned top rating agencies.

We will proceed by observing the manifestation of the current US debt level and the recent increase of the US debt ceiling in the bond rating world. Moody's and Fitch continue to rate the federal government's bonds as AAA, which is the top rating of these agencies, but their long-term outlook has changed to negative. In other words, if the ratings change, they will most likely be downgraded. On August 5, 2011, Standard & Poor's credit rating agency downgraded the long-term credit rating of the United States government for the first time in its history, from AAA to AA+, with a negative long-term outlook<sup>32</sup>.

Dagong has also downgraded US government bonds with the following statement:

*"On August 2, 2011 (EST) the Congress of the United States of America (hereinafter referred to as the US) approved the bill on raising the debt ceiling of the government. Though this decision enables the government to continue the practice of repaying its old debt through raising new debt, it has not changed the general trend that the increase in national debt outpaces the increase in economy and revenue, making this incident a turning point for the US government's solvency to decline even further. Hence, Dagong decides to downgrade the local and foreign currency credit rating of the US put on the negative watch list on July 14 from A+ to A with a negative outlook..."*

*By raising the debt limit the US temporarily prevents the government from debt default, but it does not improve the national solvency; rather the heavier debt burden on the government will cause the US sovereign debt crisis to further deepen...*

*As a result the US solvency will continue a declining trend, and the accumulation of the contradiction between the lowering solvency and the rising debt add to the inevitability of triggering a sovereign debt crisis...."*<sup>33</sup>. United States Bond Ratings

| Rating Agency     | Rating | Outlook  |
|-------------------|--------|----------|
| Moody's           | Aaa    | Negative |
| Fitch             | AAA    | Negative |
| Standard & Poor's | AA+    | Negative |
| Dagong            | A      | Negative |

Source: Moody's Sovereign Ratings Summary - August 5, 2011  
 FitchRating Complete Sovereign Rating History - April 27, 2012  
 Standard & Poor's Sovereign Rating List - November 29, 2011  
 Dagong Complete Sovereign Credit Rating - April 11, 2012

Despite the emitter, ratings have an immense effect on the bond's market. The rating decline of a particular bond will most likely decrease its demand. Moreover, as demand decreases, the emitters of the bond will have to pay higher interest to re attract investors. In other words, as the US bonds lose their triple A ratings, the US government will be

<sup>32</sup> See: Standard & Poor's Sovereign Rating List; November 29, 2012

<sup>33</sup> See: Announcement on Dagong Downgrading the Credit Rating of the USA; August 2, 2011

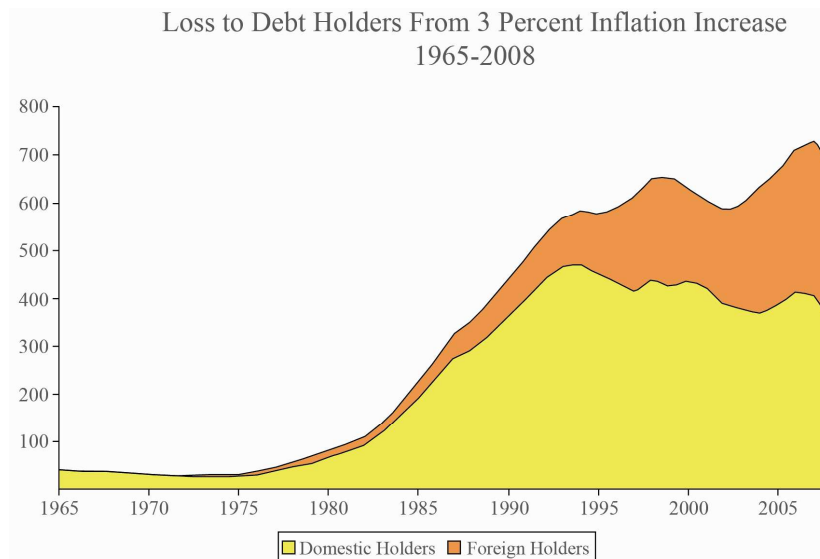


forced to constantly increase the interest it pays on its bonds further worsening the debt crisis it faces.

A higher interest rate in a trillion dollar debt complicates the situation in ways that make the process of solving this problem immensely challenging. Therefore, the piling up of the debt will not manifest with consequences only on the future generations, but if it has not started already, will start to damage even current American taxpayers, who will find an accelerating portion of their taxes being expropriated from interest payments. By increasing the debt, continuous deficit spending will cause further rating downgrades.

#### 5.4. Money Base Increase

As an alternative to the previously mentioned scenarios, the US could increase its money base which would automatically reduce the debt to GDP ratio making the debt repayment cheaper. Such a reduction is by no means without consequences. Though it could help to reduce the debt by inflating the dollar, this particular move would cause losses on the creditors. In the 1960s, foreigners held so little debt that essentially the entire burden of higher inflation would fall on US creditors. By the end of 2008, foreigners held almost half of the debt, so higher inflation would be shared about equally between domestic and foreign creditors<sup>34</sup>. The figure below shows how a 3% increase in inflation would be shared between domestic and foreign holders of US federal debt.



It may be that the cost of inflation is higher today as financial globalization and the greater ease of foreign direct investment provide new options for producers to move activities away from countries with greater uncertainty, which could be generated when inflation reaches a particular threshold. This further reduces the attractiveness of using

<sup>34</sup> See: Carmen M.Reinhart, Kenneth S.Rogoff; From Financial Crash to Debt Crisis; National Bureau of Economic Research; Massachusetts Avenue-Cambridge; March 2010



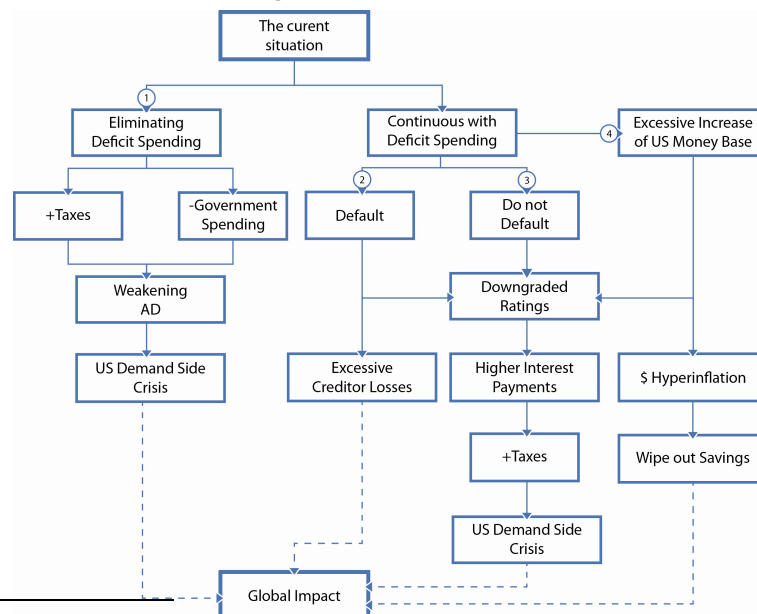
inflation to erode the debt<sup>35</sup>. An additional important difference, when compared to previous periods such as the 1940s, is that today's debt maturity is only around 3.9 years, roughly less than half what it has been. As a result, investors that would perceive an inflationary tendency could quite quickly move their investments in different bonds<sup>36</sup>.

Considering the high debt that the US faces, a steady low inflation would not approximate to a significant debt reduction. If the US intends on using inflationary policies to ease its debt, it would have to increase its money base excessively. This, in return, would eventually translate into excessive inflation, also known as hyperinflation. Historically, inflation has been widely used to reduce, or in some attempts, to almost eliminate public debt, such as the case of Germany of the 1920s which suffered from hyperinflation due to its government's inability to pay the national debt deriving from the costs of World War I. In that period, hyperinflation wiped out savings and hence led the country to a depressive state.

The inflationary politics would initially damage US and Global Creditors that would result in a lower demand of US bonds facilitated by the globalized financial market and the short maturity of debt, which allows a rather quick reinvesting of capital. To add to all this, rating agencies would quickly react by decreasing US bond ratings, further complicating the circumstances.

### 6. The Global Impact

The phenomenon we are studying is by no means a national phenomenon, it is a global one. Though the debt ceiling has been increased, the US deficit still persists and will most likely do so in the foreseeable future. This will inevitably bring a future debt ceiling crisis, which will either cause the US to face its debt crises, have its vengeance on the US governments bond ratings or cause the US to inflate the dollar. Either way, this phenomenon will be manifested in a global scale.



<sup>35</sup> See: Joshua Aizenman, Nancy Marion; Using Inflation to erode the US Public Debt; Journal of Macroeconomics; September 2011

<sup>36</sup> See: Joshua Aizenman, Nancy Marion; Using Inflation to erode the US Public Debt; Journal of Macroeconomics; September 2011

The figure above represents the possible paths that face the United States. Although the different scenarios are not mutually exclusive, they follow a logical trail. What we gather from the observations of current and future policies discussed in this paper is that the third scenario, Continuing Deficit Spending, is the most feasible one. The first one, Eliminating Deficit Spending, is unlikely to happen in such a government depended market and the second scenario, Defaulting, seems unlikely as the US leaders and the Congress would rather change their laws, as they did with the Debt Limit, than to allow a default to occur. Inflating the dollar, the fourth scenario, does not seem like a probable path since predictions from institutions such as the IMF are that inflation will be even lower in the following years, near 2%.

Thus, we are left with the third scenario in which the US will continue its deficit spending and it will use every possible policy to continue paying its creditors. However, the continuous debt will eventually make the US bonds seem unstable, which will lower its bond ratings leading to a larger portion of US taxes going to pay interest as a result of increasing debt and higher interest rates. This most likely will harass the US economy and as history has shown, it will almost immediately translate into global consequences. It must be noted that the situation which the United States faces is not unique; many countries around the world such as Greece, Italy, Ireland, France, Spain, Japan, Germany, United Kingdom, Portugal, etc. face tremendous debt obligations, the natural reduction of which is unlikely to happen. On December 2011, S&P put 15 members of the euro zone on a negative watchlist.

According to this rating agency, this was due to "systemic stresses from five interrelated factors" one of which was: "High levels of government and household indebtedness across a large area of the euro zone"<sup>37</sup>. From the aforementioned countries, Greece, Ireland, Italy, Portugal and Spain are considered as having a high risk of defaults<sup>38</sup>. Public debt has already started to cause serious problems. Though not the main cause, it is considered as one of the factors that led to the European sovereign-debt crisis. Moreover, this problem has made it difficult, if not impossible, for a number of countries in the euro zone to finance their public debt. A key difference between the United States and countries that are part of the Euro zone is that, though it would have major consequences, if needed the US could inflate the dollar to reduce its debt. The same cannot be done by the Euro zone countries. For these countries, the euro is the local currency, but no single state can trigger inflation by increasing the euro money base. Therefore, the countries that are part of the Euro zone have less tools to deal with debt crises.

A further worrisome concern appears when we view the long line of data, dating from the early 1800. We can see that public debt follows a lengthy and repeated boom-

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<sup>37</sup> See: Standard & Poor's Puts Ratings on Eurozone Sovereigns on CreditWatch with Negative Implications; 5 December, 2011

<sup>38</sup> See: Theoharry Grammatikos, Robert Vermeulen; Transmission of the financial and sovereign debt crises to the EMU: Stock prices, CDS spreads and exchange rates; Jurnal of International Money and Finance; April 2012

bust cycle. The bust phase involves a markedly higher incidence of sovereign debt crises, where the public sector borrowing surges as the crisis nears<sup>39</sup>.

## 7. Conclusions

In this paper, we strived to illustrate how the aftermath of the crisis continues to paint a dim picture for the recovery. Although we seem to have learned from history and mastered to an extent the tools of economic policy at hand, immediate effective response in such situations are still limited. Regardless of the slightly improved results in economic statistical data, the road to complete recovery remains long and tough. The shattered confidence harms consumption, which in return haunts the economy and the labor market specifically. Temporary tax reliefs alone cannot tackle the problems arising from the perceptions of an uncertain future. A labor market that is struggling to provide what the demand is ordering cannot be remedied solely by short-term demand stimulations. The complexity of the situation requires for more than expansionary monetary and fiscal policies. A more innovative approach perhaps could bring better unexpected results. While this paper does not propose alternatives, it does stimulate further inquest on structural and specifically debt issues in the last part. Both from a positive and normative point of view, there is still relatively little theoretical understanding of public debt. Though economic models go through the neo-classical 'tax smoothing' principle and the Keynesian argument of fiscal stabilization to justify a positive level of public debt, Economic theorists have yet to come up with a general guidance regarding public debt. It is clear that a larger concentration on the subject is necessary considering the global scope of impact that such issues have. It is not the aim of this paper to provoke uncertainty of the future. By highlighting structural issues and the need for long-term oriented policies, it intends on informing and stimulating initiatives for more adequate policies. It seeks to increase the awareness for a global problem that if not tackled with the necessary attention has the potential to cause an economic crisis, which may be very difficult to predict, but the kinds of it we have probably never witnessed before. The importance of understanding these structural issues and the debt problem specifically cannot be overemphasized.

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<sup>39</sup> See: Carmen M.Reinhart, Kenneth S.Rogoff; From Financial Crash to Debt Crisis; National Bureau of Economic Research; Massachusetts Avenue-Cambridge; January 2010

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