# A LONG HARD SLOG: DEBT AND ECONOMIC RECOVERY

**H. Scott Wallace, University of Wisconsin-Stevens Point**
**Randy F. Cray, University of Wisconsin-Stevens Point**

## ABSTRACT

*This article reviews both the historical record and economic theory in exploring the impact of debt on economic recovery. It is hoped that this paper can provide a context to better understand our current economic difficulties. It begins by describing the forces that drove the rapid expansion of household debt in the 1920s and its role in contributing to the depth and duration of the Great Depression. Then it reviews the economic literature on the relationship between debt and macroeconomic performance. From there, the article considers the effects of the debt build up during the 2000s and the resulting financial crisis on our current levels of economic activity. Lastly, our paper investigates several policy responses that the United States can pursue in addressing our economic challenges.*

## INTRODUCTION

Over the last several years, the United States economy has faced the deepest reduction in real GDP and the slowest recovery since the Great Depression. Though the economy has experienced twenty five consecutive months of net job growth, economic growth has been sluggish and unemployment remains stubbornly high. Why was the drop off in economic activity so steep? What accounts for the slow pace of recovery?

In their ambitious book *This Time is Different*, economists Kenneth Rogoff and Carmen Reinhart have empirically investigated a wide variety of financial crises endured by sixty-six countries over the last eight centuries (Reinhart and Rogoff, 2009). Their research indicates that economic downturns that follow financial crises are more severe and persist much longer than typical recessions. It "typically takes an economy more than four years just to reach the same *per-capita* income level that it had attained at the pre-crisis peak" (Rogoff, 2011). They argue that our current economic miseries are largely the result of the recent housing crisis and the large fiscal imbalances that have built up over the last decade. While many economists have portrayed the economic crisis as "The Great Recession," Rogoff and Reinhart have called it the "Second Great Contraction" (with the Great Depression being the First Great Contraction). The authors contend that this "contraction applies not only to output and employment, as in a normal recession, but to debt and credit, and the deleveraging that typically takes many years to complete" (Rogoff, 2011). Deleveraging refers to the process of paying down of private and

public debt by households, businesses, and taxpayers. The housing crisis which precipitated our current economic woes was preceded by dramatic increases in both private and public debt. The painful process of deleveraging that has followed this crisis has both inhibited and delayed a return to robust economic expansion. This report explores the impact of debt on economic activity and the implications for our current situation.

We begin by taking a historical perspective, looking back at the period that preceded the "First Great Contraction," a time of rapidly expanding household debt. Next, our report reviews several theoretical explanations that describe how debt contributes to the depth and duration of economic slumps. Then, we analyze the effects of the debt build up during the 2000s on the recent recession and on current economic recovery. Lastly, our paper discusses economic strategies that United States can take in addressing the enduring consequences of the financial crisis.

## A TALE OF TWO CONTRACTIONS

The Armistice that brought World War I to a close in 1918 triggered a rapid demobilization from the war effort in the United States. The abrupt cancellation of military contracts, the cessation of war production, and the return of hundreds of thousands of soldiers to the labor force precipitated a brief downturn in the economy during the first half of the following year. Despite this hiccup, the economy roared back by the second half of the year. The robust economic rebound combined with the maintenance of low discount rates by the Federal Reserve, however, fueled inflationary pressures. In response, the Federal Reserve in late 1919 initiated a series of discount rate increases such that, by June 1920, rates had climbed from 4.75% to 7.0%, a 47% increase (Walton and Rockoff, 2010, 390-1)!

These rate increases set off a sharp but relatively short economic downturn, a classic V-shaped recession. From 1920-21, nominal net national product declined by 18% leading to a jump of 7.9% in the unemployment rate. The same period witnessed a dramatic deflation in the overall price level with the wholesale price index falling by 37%. The simultaneous reduction in both nominal output and the overall price level accounted for a relatively modest 4% decline in the real net national product (Walton and Rockoff, 2010, 391; Hughes, 1990, 448). The tremendous amount of wage and price flexibility in the economy meant that actual purchasing power by consumers was not greatly affected. If wages and overall prices fall at similar rates, the amount of goods and services that consumers can afford will be approximately the same. It is this flexibility that largely accounted for the quick recovery. By 1922, the stage was set for a period of sustained and robust economic growth known as the "Roaring Twenties."

By contrast, the Great Depression was both severe and protracted. While many associate the Great Depression with the 1929 Stock Market crash, the economy really didn't hit bottom until several years later. Below, business historian John Steele Gordon described the state of the economy in 1932:

Gross national product that year was $58 billion, a mere 56 percent of what it had been three years earlier. Unemployment stood at an entirely unprecedented 23.6 percent. But that did not tell the whole story, for millions more were working part-time or at much reduced wages. The number of hours of labor worked in 1932 was fully 40 percent below the level of 1929. Another 1,453 banks had failed, bringing the depression total to a staggering 5,096. In 1929 Americans had held about $11 in bank deposits for every dollar in currency and coin in circulation. By 1932 the ratio was five to one, because so many banks had failed and so many more were distrusted. The Dow-Jones Industrial Average fell as low as 41.22, down 90 percent from its high of three years earlier and less than a point above where it had stood the first day it had been calculated in 1896 (Gordon, 2004, 328).

In addition to its severity, the length of the Great Depression distinguished it from all other slumps experienced by the United States. The "real GNP did not return to its pre-Depression level until 1937 and real GNP did not catch up to its pre-Depression secular trend until 1942. Indeed, the unemployment rate, peaking at 25 percent in March 1933, continued to dwell near or above the double-digit range until 1940. It is in this sense that most economists attribute the ending of the Depression to the onset of World War II" (Parker, 2010).

Why did the Great Depression last so long? What unique impediments slowed the pace of economic recovery? Economic historians continue to try to tackle these questions to this day. Some of the causes that economists still debate include the tight monetary posture of the Federal Reserve; state laws prohibiting branch banking which left many banks unable to diversify their holdings; the absence of sufficient fiscal stimulus by states and the federal government (until WWII); the Smoot-Hawley Tariff which initiated devastating trade wars leading to a large drop in US exports; and the unintended consequences of numerous New Deal policies. While there certainly is no single explanation for the duration of the Great Depression, the dramatic structural changes that occurred in the American economy between the two downturns that bookend the 1920s has largely been overlooked by most economists.

The "Roaring Twenties" truly marked the beginning of today's modern consumer economy. Financial innovations like installment credit fueled rapid growth in the demand for consumer durables like homes, automobiles, appliances, radios, and furniture (Parker, 2010). Before 1920, consumers typically relied on their savings to buy these items. Though some households borrowed to finance the purchase of their homes, down payments usually exceeded fifty percent of a home's value and home mortgages had to be repaid within five years. In the 1920s, banks extended the terms of home mortgages to twenty years while down payments declined to 33% of a home's sale price (Lebergott, 1984, 436-438). Throughout this time period, households increasingly were relying on credit in supporting home purchases. "In 1912 some 47 percent of expenditure for new homes was financed by credit. By 1920-22 the figure had risen to 55 percent. By 1925-29, to 66 percent" (Lebergott, 1984, 437-438). These changes increased rates of homeownership and contributed to the housing boom of the 1920s. In the early 1920s,

the "number of housing starts rose each year (including the depression of 1920-21) until it peaked in 1925 at 937,000 units…" (Atack and Passell, 1994, 580).

The availability of credit for other consumer durables had a significant impact on households' spending patterns. As economic historian Jonathan Hughes explains, instead "of saving in interest-earning assets to finance ultimate purchases, a down payment and an initial installment contract transferred ownership of the assets – with a lien – and consumers used the assets while their payments reduced consumption expenditures from other commodities" (Hughes, 1990, 446). The change in spending patterns by households accounted for expenditure increases of 8.3% per annum on consumer durables during the 1920s. Consumers largely relied on installment credit in financing well over 70 percent of expenditures made on autos, furniture, pianos, phonographs, radios and household appliances that were sold during this period (Hughes, 1990, 446). "Outstanding nonmortgage consumer debt more than doubled in the 1920s, reaching a 1929 peak of $7.6 million – 9.3 percent of income – that was not surpassed until 1939" (Olney, 1999, 43). The wide availability of credit also played a central role in fuelling the stock market bubble of the late twenties. The practice of "margin trading" became widespread as investors financed the purchase of stock, only having to provide a relatively small percentage of the value of equity to the bank as a down payment. From 1928 to 1929, household liabilities had increased by 12%, largely driven by this kind of speculation (Mishkin, 1978).

## DEBT AND CONTRACTION: ECONOMIC THEORY

Economic crises are often events that stimulate new developments in economic theory. Keynesian economic analysis emerged out of the depths of the Great Depression while the stagflation of the 1970s sparked the rise of the monetarist and new classical schools in macroeconomics. Keynesian economics focuses on the role of governmental fiscal policy in stabilizing the economy. The monetarist school emphasizes the role of money supply on macroeconomic performance. The new classical school has been extremely skeptical of active fiscal policy, arguing that the rational responses to any policy measure would undermine the effectiveness of such policy.

The tendency for one school to dominate economic theory after an economic crisis often obscures important contributions from economists who offer alternative perspectives. One interesting example is the work of economist Irving Fisher. During the first two decades of the twentieth century, Fisher played a prominent role in developing a modern economic theory of interest and in updating the "quantity theory of money" (Nasar, 2011). Despite these major contributions, Fisher's influence on economics and the public at large had waned by the 1930s. One reason for this decline was Fisher's unfortunate declaration that "stock prices had reached a permanently high plateau" just before the Great Crash in October 1929 (The Economist, 2009).

In 1933, Irving Fisher published "The Debt-Deflation Theory of Great Depressions" in *Econometrica*, a highly respected economic journal. In that paper, Fisher describes how high levels of debt combined with deflation can cause the economy to descend into a downward spiral, leading to an economic depression. According to Fisher, such episodes are typically preceded by periods of rising indebtedness fueled by easy money and speculative borrowing. "When an investor thinks he can make over 100 percent per annum by borrowing at 6 percent, he will be tempted to borrow, and to invest or speculate with borrowed money. This was a prime cause leading to the over-indebtedness of 1929" (Fisher, 1933, 348). It is the inevitable bursting of the speculative bubble that sets off the debt-deflationary spiral.

And just as a bad cold leads to pneumonia, so over-indebtedness leads to deflation. And, vice versa, deflation caused by the debt reacts on the debt. Each dollar of debt still unpaid becomes a bigger dollar, and if the over-indebtedness with which we started was great enough, the liquidation of debts cannot keep up with the fall of prices which it causes. In that case, the liquidation defeats itself. While it diminishes the number of dollars owed, it may not do so as fast as it increases the value of each dollar owed. Thus, the very effort of individuals to lessen their burden of debts increases it, because of the mass effect of the stampede to liquidate the swelling of each dollar owed. Then we have the great paradox which, I submit, is the chief secret of most, if not all, great depressions: The more the debtors pay, the more they owe. The more the economic boat tips, the more it tends to tip. It is not tending to right itself, but is capsizing (Fisher, 1933, 344).

In simpler language, deflation in the form of falling asset prices and wages has the effect of increasing the debt burdens of households and businesses (which do not fall in value). While household incomes and asset prices decline during deflationary periods, loan payments on homes, consumer durables, and equity do not fall. In order to reduce their debt burdens, households and businesses attempt to sell their assets to pay off their loans. The rush to sell assets by many households and businesses contributes to declining asset prices thereby increasing indebtedness and leading to another round of falling prices. The feedback effects between debt and deflation can plunge the economy into a deep depression by decreasing consumers' purchasing power thereby reducing their demand for goods and services.

Building on Fisher's debt-deflation theory, Frederic Mishkin (1978) in "The Household Balance Sheet and the Great Depression" introduced the "liquidity hypothesis theory" to describe the negative effect of indebtedness and deflation on aggregate demand during the Great Depression. In his paper, Mishkin points out that the level of household indebtedness from borrowing to purchase consumer durables and common stock during the 1920s dramatically increased in real, inflation adjusted terms as prices fell from 1929 to 1933. "When indebtedness is high, the consumer has large contractual debt service payments that increase the likelihood of financial distress" (Mishkin, 1978, 925). The resulting financial distress "leads to consumers to prefer holding highly liquid financial assets rather than illiquid tangible assets which are costly to sell in an emergency" (Mishkin, 1978, 925). This preference for liquid assets that do not lose

value reduced the aggregate demand for more illiquid, durable assets. In 1930 alone, household spending on consumer durables fell by over twenty percent while expenditures on residential housing declined by 40 percent (Mishkin, 1978, 931). This reduction in aggregate demand, according to Mishkin, greatly contributed to the severity of the downturn (Mishkin, 1978).

Long before he became the Chairman of the Federal Reserve, Ben Bernanke focused much of his early research efforts as an academic economist in analyzing the Great Depression. Ben Bernanke has contended that to "understand the Great Depression is the Holy Grail of macroeconomics" (Bernanke, 2004). Like Fisher and Mishkin, Bernanke (1983) emphasized the effects of debt deflationary spiral on U.S. macroeconomic performance in the 1930s. Critics of the debt-deflation explanation pointed out that the net effect of rising real debt should be close to zero because the losses suffered by debtors represent gains to creditors (The Economist, 2009). Bernanke, however, concentrated on the adverse consequences of debt-deflation on the allocation of credit which he argued led to significant reductions in the level of consumption and investment. In his analysis, he describes "a central function of banks is to screen and monitor borrowers, thereby overcoming information and incentive problems. By developing expertise in gathering relevant information, as well as by maintaining ongoing relationships with customers, banks and similar intermediaries develop 'informational capital.'" (Bernanke, 2007). The banking failures that dominated the early 1930s decreased the amount of informational capital available in the economy needed to support the provision of credit. The reduction in the availability of credit, according to Bernanke, was responsible for the much of decline in business investment and expenditures on consumer durables.

The early 1930s also was a period of rapidly rising indebtedness as the "ratio of debt service to national income went from 9% in 1929 to 19.5% in 1932-33" (Bernanke, 1983, 261). This increase largely was the result of falling output and incomes which reduced the disposable incomes of households. "Nominal GDP fell by 46% between 1929 and 1933" (The Economist, 2009). These factors in combination with asset price deflation increased the real debt burden borne by borrowers. The reduction in the net worth of borrowers in the form of lower asset prices increased the cost of financial intermediation by inhibiting the use of collateral as insurance against default. Bernanke explains:

In general, the availability of collateral facilitates credit extension. The ability of a financially healthy borrower to post collateral reduces the lender's risks and aligns the borrower's incentives with those of the lender. However, in the 1930s, declining output and falling prices led to widespread financial distress among borrowers, lessening their capacity to pledge collateral or to otherwise retain significant equity interests in their proposed investments. Borrowers' cash flows and liquidity were also impaired, which likewise increased the risks to lenders. Overall, the decline in the financial health of potential borrowers during the Depression decade further impeded the efficient allocation of credit (Bernanke, 2007).

Banks recognized that raising interest rates to compensate for added risk was self-defeating because doing so increases the probability of default (Bernanke, 1983, 265-266). The

higher verification cost involved in extending credit represents a true financial friction "because it has to be charged to the borrower but is not a benefit to the lender" (Hall, 2010, 7). By making it difficult for banks to determine the creditworthiness of borrowers, these frictions fundamentally reduced the amount of credit available for businesses to invest in new ventures and for households to finance purchases of homes and other consumer durables, thus negatively impacting demand. According to economist Robert Hall, Bernanke's contribution to economic theory has had an enormous impact on current economic thinking. "The dominant view among macroeconomists today is that a financial crisis causes real economic activity to collapse by raising financial frictions" (Hall, 2010, 7).

In addition to increases in private indebtedness, financial crises are often associated with rapidly rising public debt. The marked increase in public debt after a financial crisis is often a result of increasing governmental expenditures on financial bailouts, automatic stabilizer programs and stimulus packages combined with declining government revenues that results from a fall in overall economic activity. If public debt is high before the financial crisis, the rising debt that follows may have negative effects on economic growth and thus delay recovery. Empirical studies of advanced countries show a negative correlation between public debt as percentage of GDP and rates of economic growth. "Over the past two centuries, debt in excess of 90 percent has typically been associated with mean growth of 1.7 percent versus 3.7 percent when debt is low (under 30 percent of GDP), and compared with growth rates of over 3 percent for the middle categories (debt between 30 and 90 percent of GDP)" (Rogoff and Reinhart, 2010, 3). A recent 30 year study of 18 OECD countries confirms these results, showing that governmental debt exceeding 85% of GDP has negative effects on economic growth (Cecchetti, Mohanty, and Zampolli, 2011).

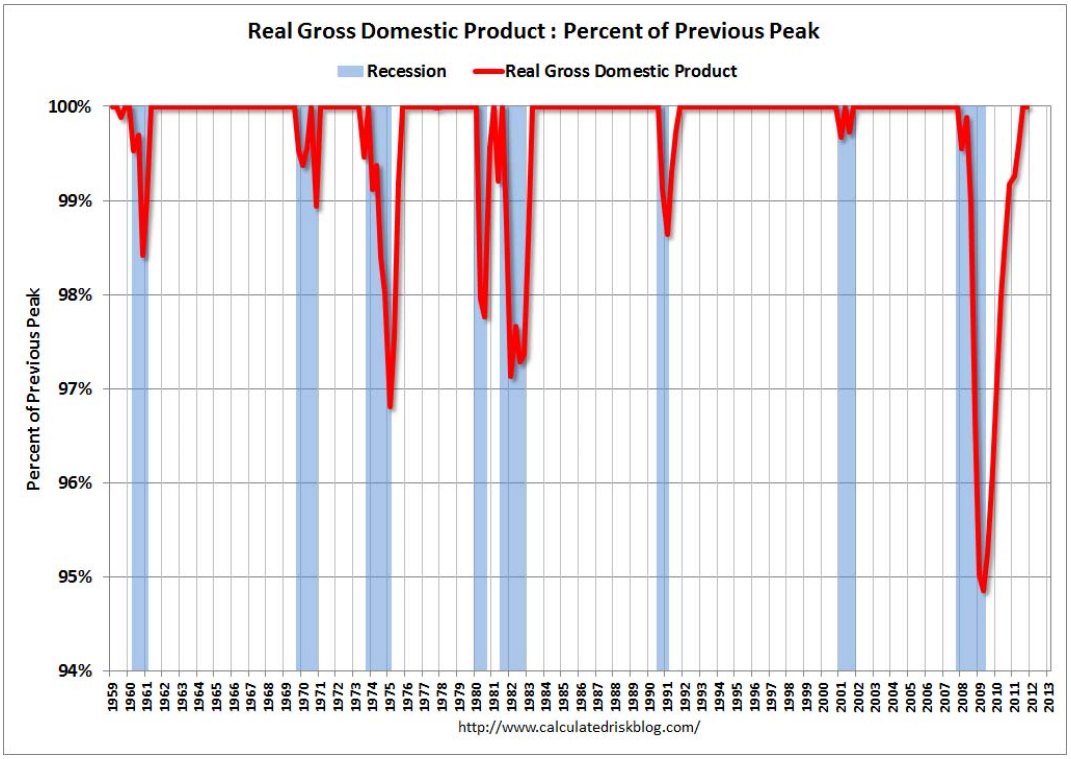
Reinhart and Rogoff contend that rising levels of public debt at some point induce "debt intolerance" on the part of investors. Investors look at government debt to GDP ratios to assess the ability of nations to make future payments. Governments with high ratios may be forced to raise interest rates to induce wary investors to buy debt. "Sharply rising interest rates, in turn, force painful fiscal adjustment in the form of tax hikes and spending cuts, or, in some cases outright default" (Rogoff and Reinhart, 2010, 2). The combined effects of tax hikes and spending cuts to address the debt have negative effects on aggregate demand and economic growth. In addition, high public debt significantly hampers the ability of government to respond to financial crises. "When a crisis strikes, the ability of the government to intervene depends upon the amount of debt that it has already accumulated as well as what its creditors perceive to be its fiscal capacity – that is, the capacity to raise tax revenues to service and repay the debt. Fiscal authorities may become constrained both in their attempt to engage in countercyclical stabilization policies and in their role as lender of last resort during a financial crisis" (Cecchetti, Mohanty, and Zampolli, 2011, 4). The diminished capability of governments facing heavy debt burdens contributes to the delay in economic recovery.

## DEBT AND THE SECOND GREAT CONTRACTION

As discussed in the introduction, our current economic difficulties are not the result of a normal cyclical downturn that economies experience on a periodic basis but stem from the recent financial crisis that continues to have long lasting negative effects on macroeconomic performance.

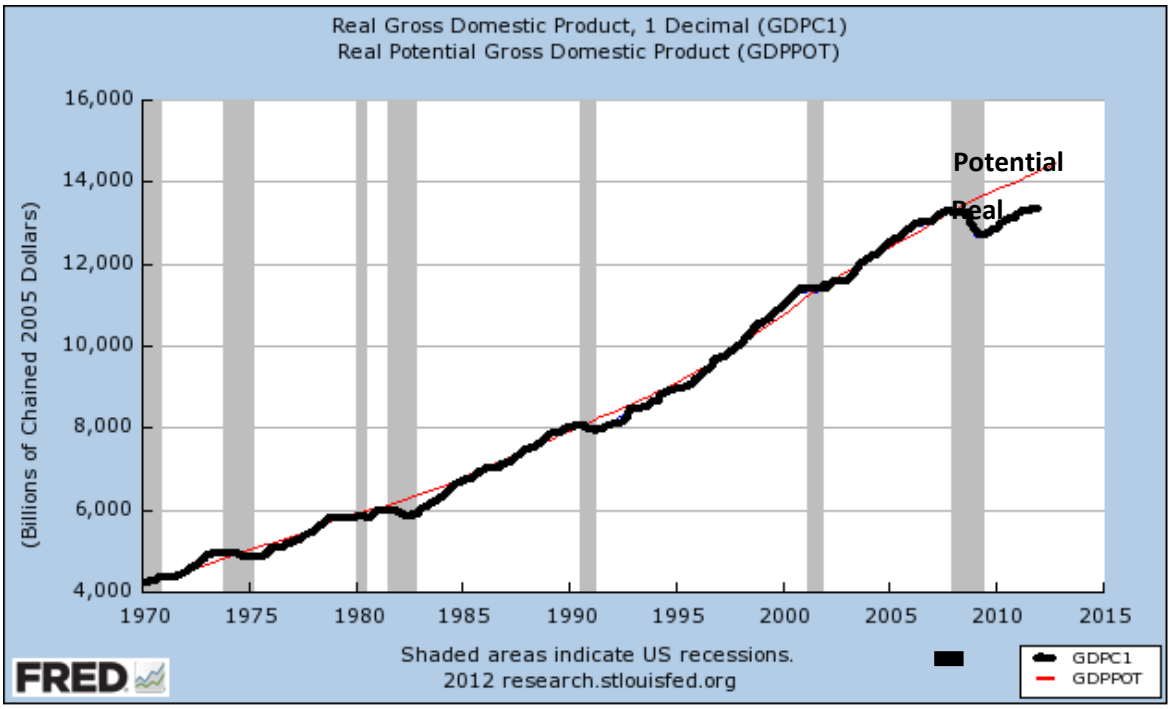
Figure 1 shows *Real Gross Domestic Product as a Percent of Previous Peak* for years 1959 to the present with the shaded areas representing periods of recession. This figure clearly demonstrates that the economic slump that began in early 2008 was not your garden variety recession. The decline in real GDP relative to previous peak was far greater and persisted far longer than any other downturn over this time period.

**FIGURE 1**




The fact that real GDP has rebounded and is now at the previous peak by no means implies that economy overall is doing well. As figure 2 shows, there is a significant gap between actual real GDP and potential real GDP, indicating that the economy still has a long way to go before if fully recovers from the effects of the financial crisis.

**FIGURE 2**




Evidence of a lack of a full recovery in employment is also provided in Figure 3 which presents *Employment as a Percent of Previous Peak*. It shows that total employment had fallen over 6% by the end of the recession in 2009. While there have been gains since this period, the numbers are still well off those of the previous peak, strongly suggesting that the productivity increases of workers who avoided job losses made up for the lost output of those who had been laid off.

The first decade of the 21st century witnessed dramatic increases in private debt. Much of the increase in private debt can be attributed to the housing boom. Housing prices skyrocketed as the housing bubble continued to inflate during the boom years from 2000 to 2006. Figure 4 presents the *CoreLogic House Price Index*. Using January 2000 as the base year (2000 = 100), the index shows that prices effectively doubled over this six year period. Higher prices in the housing market fuelled increases in private debt as households secured larger mortgages to finance their purchases.

**FIGURE 3**

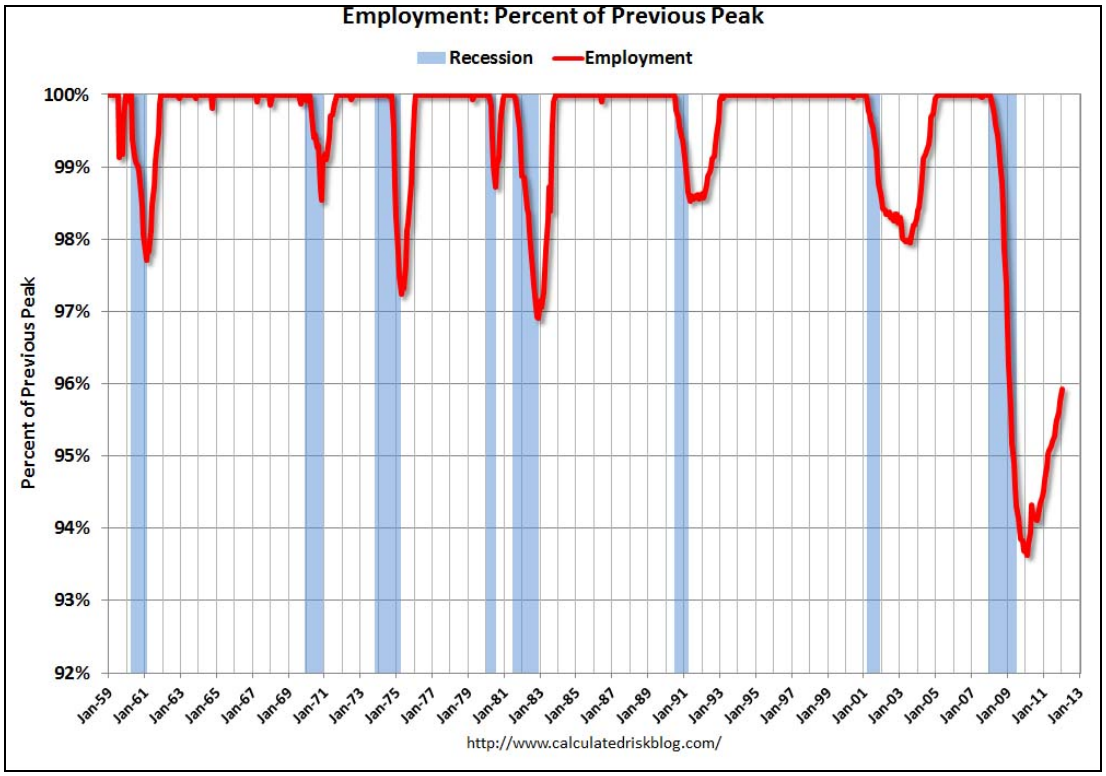



**FIGURE 4**

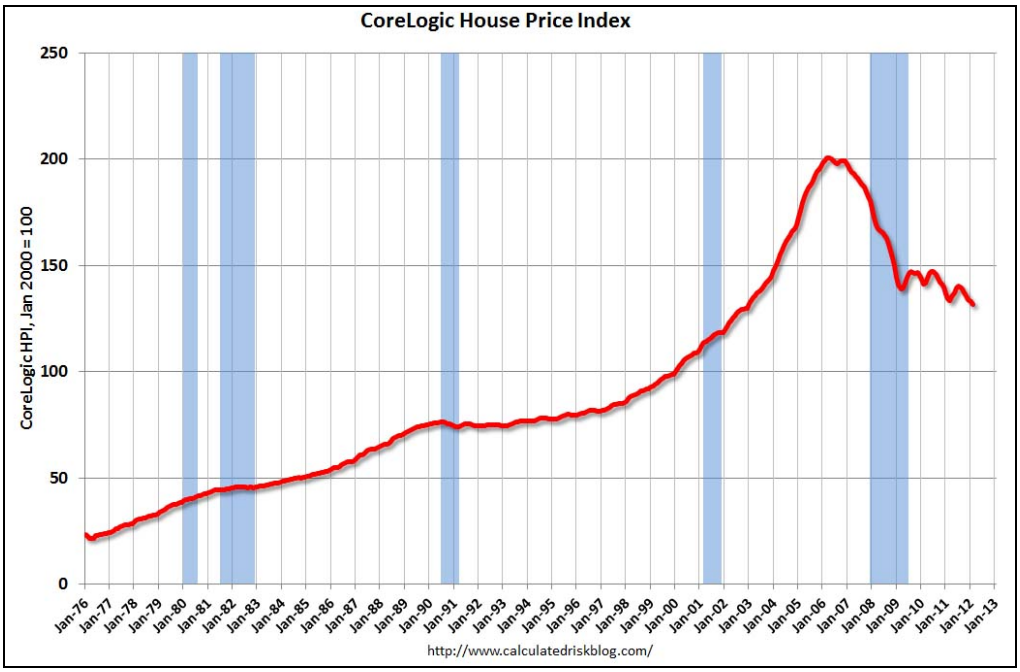


Figure 5 shows the *Total Debt Balance and its Composition* from 1999 to 2011 on a quarterly basis. From first quarter 1999 to the third quarter 2008, total household debt nearly tripled with the bulk of the increase come from rising mortgage debt.

**FIGURE 5**

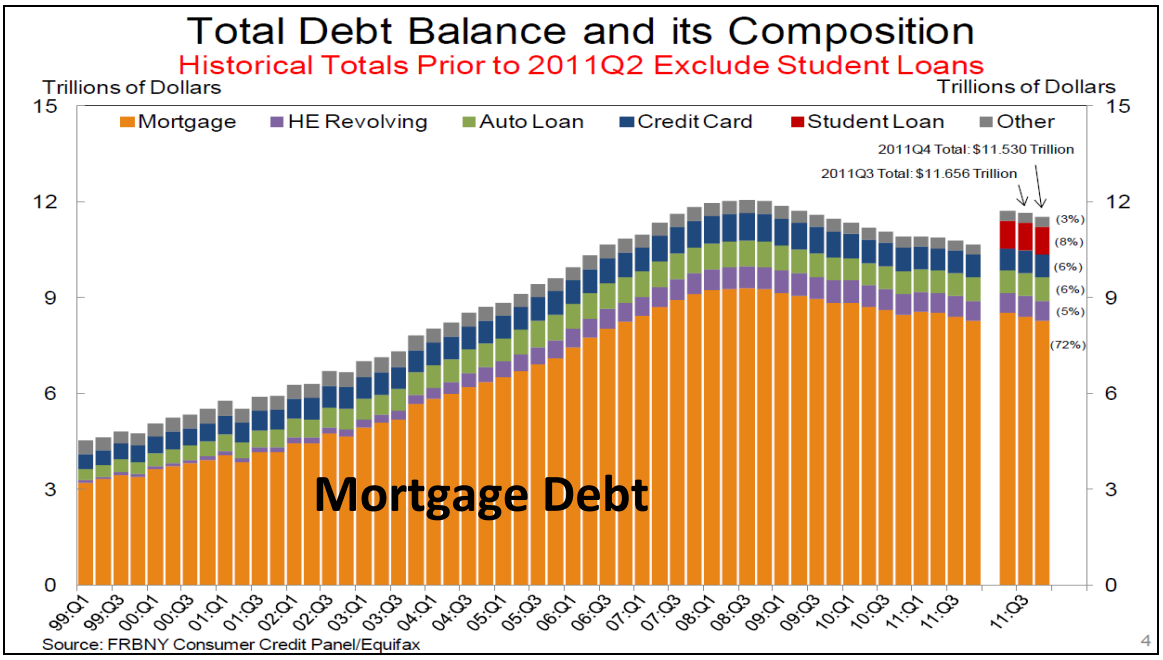
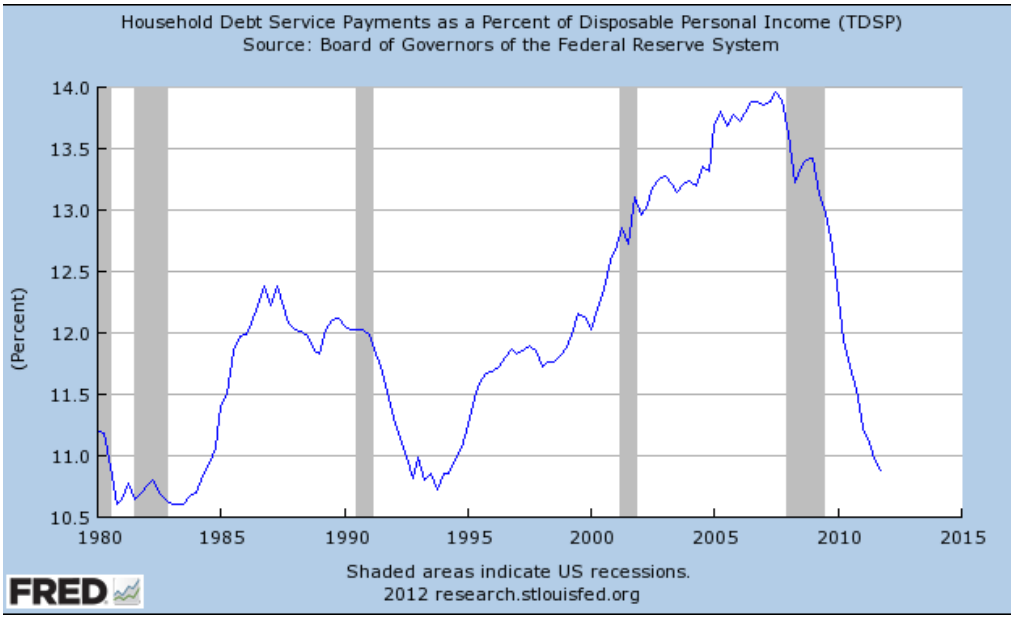



Figure 6 presents the *Household Debt Service Payments as a Percent of Disposable Personal Income*. This figure also indicates a considerable increase in private leveraging during this time period as debt service payments rise from about 12 percent of disposable income in 2000 to 14 percent by the fall of 2007 (Norris, 2012). Economists Reuven Glick and Kevin Lansing have found that much of the economic expansion during the 2000s was financed through increases in private debt. "During the boom years of the mid-2000s the combination of declining savings rates and rapidly rising household debt allowed consumer spending to grow much faster than disposable income, providing a significant boost to the economy" (Glick and Lansing, 2011, 1). Since the beginning of the crisis, debt service payments have fallen dramatically as households have focused their efforts on reducing their debt burdens. Currently, debt service payments are approximately 10.8 percent of disposable income, the lowest level since 1994 (Norris, 2012).

**FIGURE 6**




U.S. government debt has also risen dramatically since the beginning of the economic crisis. Figure 7 presents the *Government Debt as a Percent of GDP*. Government debt represents the amount of money the federal government owes its creditors including government bonds. The debt to GDP ratio currently stands at 93.2 percent which is over the 90 percent threshold that Reinhart and Rogoff (2010) have found to correlate with falling rates of economic growth.

**FIGURE 7**

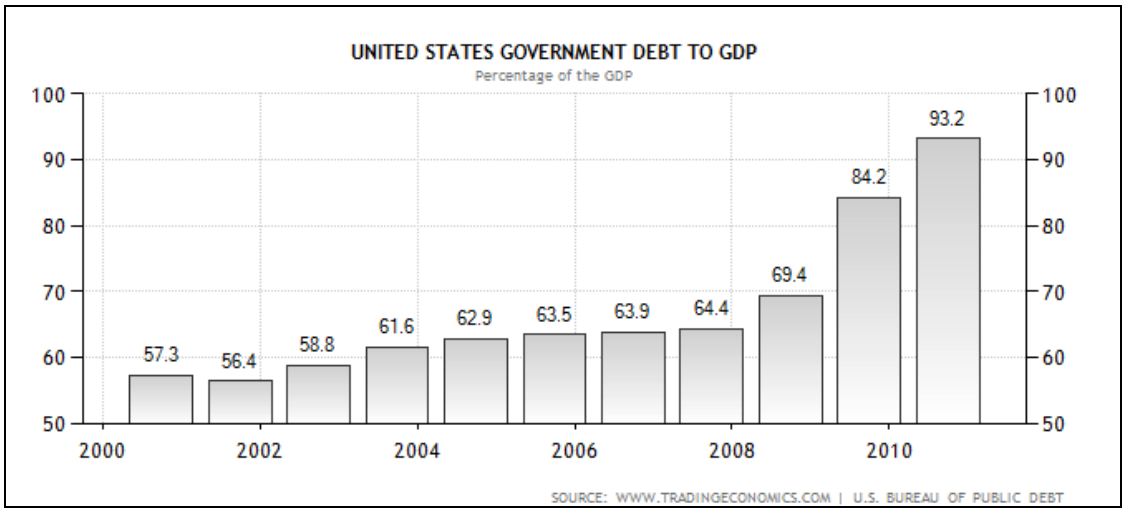
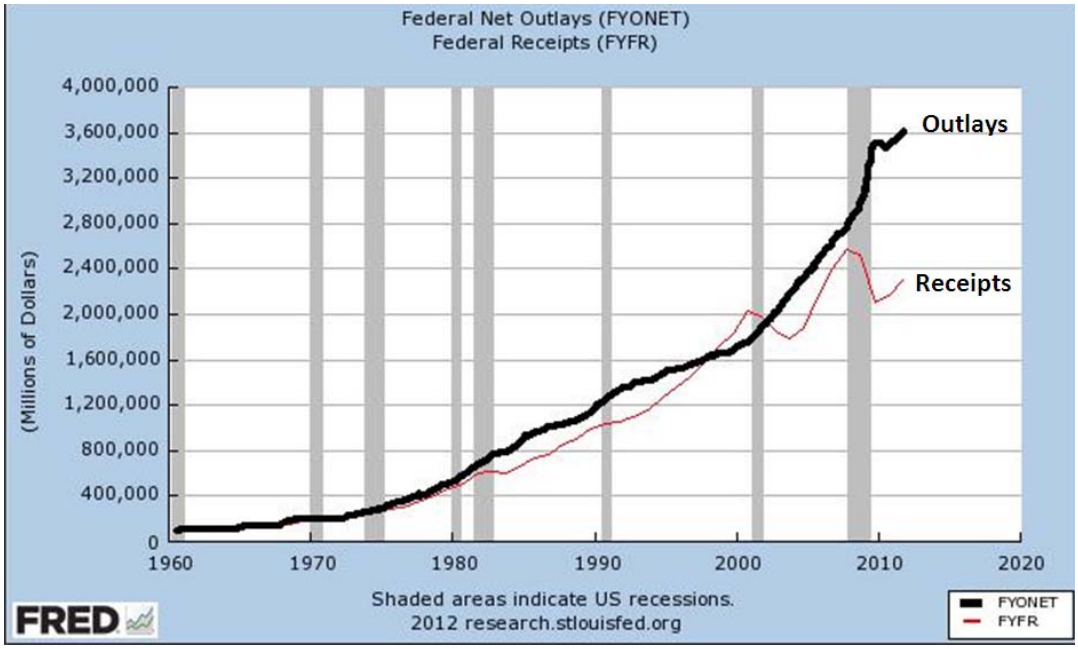


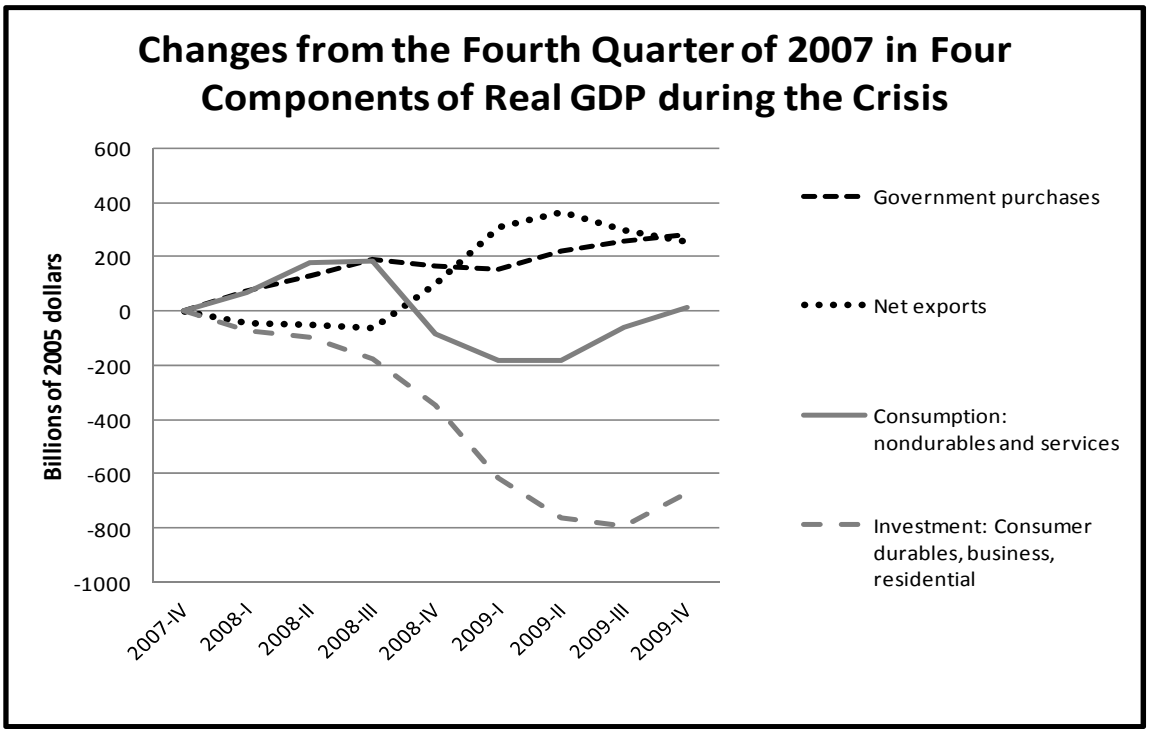
Figure 8 provides greater context for the rising debt by showing both *Federal Net Outlays and Federal Receipts*. Federal net outlays represent disbursements by government for purchases, transfer payments, and interest on the debt minus payments that governmental agencies make to other governmental agencies (Hall and Lieberman, 2013). Increases in the federal debt are often associated with economic downturns as federal expenditures rise (from fiscal stimulus, financial bailouts, and automatic stabilizers) while revenues fall as economic activity declines. Here, we can see that the financial crisis led to increasing levels of federal expenditure and falling revenues.

**FIGURE 8**




In our review of the economic theory on debt and depression, Fisher, Mishkin and Bernanke, despite their different emphases, found that high levels of private debt exacerbated downturns by effectively reducing household expenditures on consumer durables and by reducing business investment. Recent economic evidence about changes in economic activity following the financial crisis seems to bear out these hypotheses. Figure 9 presents *Changes from the Fourth Quarter of 2007 in Four Components of Real GDP during the Crisis*. These four components include net exports, government purchases, consumption of nondurables and services, and investment, broadly conceived. The investment component "includes investment-type purchases by consumers, business investment in plant, equipment, and inventories, and residential investment. The crisis did not cause a general contraction in spending. Rather, the contraction is essentially entirely in investment" (Hall, 2010, 4).

**FIGURE 4**




The economic fallout of the financial crisis has not been uniformly borne by all regions of the country. Those areas for which household debt burdens were the highest (mainly as the result of the housing bubble), experienced the greatest declines in economic activity. Using county-level data on household debt and automobile sales, economists Atif Mian and Amir Sufi (2011) have found a strong negative relationship between household debt levels and expenditures on consumer durables during both the recession and recovery time periods. Automobile sales, for example, fell sharply for both high household debt counties and low household debt counties during the recession. While low debt household counties experienced a strong rebound in sales after the recession, auto sales continued to languish in high debt counties during the recovery. The authors argue that overleveraged households have been responsible for sustained, weak demand for consumer durables. This weak demand, according to the authors, also helps explain the large cash balances held by corporations who are reticent to invest if the household sector is encumbered with high levels of debt (Mian and Sufi, 2011).

## WHICH WAY FORWARD?

What policy measures should the United States take to help reduce its debt burdens and facilitate the economic recovery process? Unlike the United States, a number of European nations like the United Kingdom, Spain, and Italy have increased taxes and aggressively reduced government spending to address their large fiscal imbalances. Should the United States implement similar austerity measures in tackling its public debt problem? How would such a strategy affect economic growth and the deleveraging of private debt?

In their report, *Debt and Deleveraging: Uneven Progress on the Path to Growth*, the McKinsey Global Institute examines the progress of the "world's ten largest mature economies" in reducing their levels of public and private debt. The report also looks "at the relevant lessons from history about how governments can support economic recovery amid deleveraging" (McKinsey Global Institute, 2012, 1). Their analysis finds that the United States has the opportunity to follow a deleveraging process that consists of two distinct phases. "In the first, households, corporations, and financial institutions reduce debt significantly over several years while economic growth is negative or minimal and government debt rises. In the second phase, growth rebounds and government debt is reduced gradually over many years" (McKinsey Global Institute, 2012, 1). The success of this strategy crucially depends upon the willingness of the United States to credibly commit to implementing structural reforms that bolster economic growth and that address its fiscal imbalances in the medium and long term.

The McKinsey group bases much of its conclusions on the historical experience of Finland and Sweden in the 1980s and 1990s. Both nations during this time period experienced housing bubbles and busts that left their economies reeling and mired in debt. Each country pursued a deleveraging process that comprised of the two phases described above. The first phase involved several years of significant deleveraging in the private sector as households, corporations, and financial institutions worked on repairing their balance sheets. During this time, the "ratio of private sector debt to GDP declined by about one-fourth…. This was also a time of negligible economic growth, in which tax revenues fell and public expenditures grew to support the economy. As a result, government debt rose sharply, growing from 46 percent of GDP to 83 percent in Sweden from 1990 to 1994, and from 14 percent to 57 percent of GDP in Finland over the same time period" (McKinsey Global Institute, 2012, 15).

For Sweden, the decline in the level of private debt during these years and the adoption of structural reforms by the Swedish government were important prerequisites for addressing the public debt problem. By 1994, the reduction of debt burdens on businesses and households set the stage for a period of economic growth and public sector deleveraging. The excerpt below explains:

In Sweden, the Social Democratic Party came to power on a platform that promised to bring government finances under control. Sweden reduced its annual deficit from 7 percent of GDP in 1993 to zero in 1998, and then gradually began to reduce the level of outstanding public

sector debt relative to GDP. Sweden's ratio of government debt to GDP fell from 84 percent at its peak in 1996 to 45 percent by 2008. Reviving nominal GDP growth was essential to this process: the absolute amount of government debt actually remained the same over this period. Of the 39 percentage-point drop in the ratio of government debt to GDP, about 28 points were the result of real GDP growth. Inflation – which some observers suggest may be an easier way to reduce government debt than cutting expenditures – contributed almost 11 percentage points" (McKinsey Global Institute, 2012, 16).

The McKinsey Global Institute contends that the United States is in a position to follow a similar two phase strategy. Their analysis shows that United States' total debt to GDP ratio is significantly lower than many other mature economies and that the US is also further along in the private debt deleveraging (phase 1) process.

Figure 10 below shows the composition and total debt of these mature economies as a percentage of GDP at the end of the second quarter in 2011. It breaks total debt into the following categories: household, nonfinancial corporations, financial institutions, and government debt. There is significant variation in the composition of total debt across these countries. As a percentage of GDP, the United States has significantly lower total debt levels (as a percent of GDP) than European countries like U.K, Spain, France, and Italy. The exception here is Germany which has total debt levels that are almost identical to the United States.

**Figure 10: Total Debt of Ten Largest Mature Economies, Q2 2011 % of GDP**

| *Nation* | *Households* | *Nonfinancial Corporations* | *Financial Institutions* | *Government* | *Total* |
|---|---|---|---|---|---|
| Japan | 67 | 99 | 120 | 226 | 512 |
| U.K. | 98 | 109 | 219 | 81 | 507 |
| Spain | 82 | 134 | 76 | 71 | 363 |
| France | 48 | 111 | 97 | 90 | 346 |
| Italy | 45 | 82 | 76 | 111 | 314 |
| S. Korea | 81 | 107 | 93 | 33 | 314 |
| *U.S.A.* | *87* | *72* | *40* | *80* | *279* |
| Germany | 60 | 49 | 87 | 83 | 278 |
| Australia | 105 | 59 | 91 | 21 | 277 |
| Canada | 91 | 53 | 63 | 69 | 276 |

McKinsey Global Institute

Though the decline so far has been modest, the United States has made greater progress in reducing its total debt burdens as a percentage of GDP relative to the other nations. Figure 11 shows the *Change in Total Debt of the Ten Largest Mature Economies* as a percentage of GDP in the pre-crisis time period (2000 to 2008) and the period since the financial crisis (2008 – Q2 2011). During the pre-crisis period, total debt as a percentage of GDP increased 75.2 percentage points for the United States. From 2008 to the second quarter of 2011, total debt as a percentage of GDP decreased 16.1 percentage points. Since government debt as a percentage of GDP had

increased during this period, the net reduction in total debt as a percentage of GDP is the result of private deleveraging. Two-thirds of the decline in U.S. household debt since 2008 was the result of defaults on home mortgages and other consumer debt (McKinsey Global Institute, 2012, 3). Using 2000 as a target year for household debt to GDP ratios, McKinsey estimates that households "are a bit more than one-third of the way through deleveraging" (McKinsey, 2012, 20). McKinsey estimates that, for the United States, phase 1 deleveraging could be completed by 2014, setting the stage for a rebound in economic growth and public sector deleveraging. Until then, economic growth is likely to be weak.

**Figure 11: Change in Total Debt of Ten Largest Mature Economies, % of GDP (Percentage Points)**

| ***Nation*** | ***2000 - 2008*** | ***2008 – Q2 2011*** |
|---|---|---|
| Japan | 36.5 | 38.9 |
| United Kingdom | 177.2 | 20.3 |
| Spain | 145.2 | 25.6 |
| France | 88.8 | 35.4 |
| Italy | 67.8 | 11.5 |
| South Korea | 91.4 | -15.5 |
| *United States* | *75.2* | *-16.1* |
| Germany | 7.2 | 1.2 |
| Australia | 77.0 | -14.0 |
| Canada | 39.0 | 17.0 |
| McKinsey Global Institute/The Economist (01/21/12) | | |

European nations (except Germany) have seen significant increases in total debt as a percentage of GDP during both periods. "The transatlantic differences stem from the trajectory of private debt. Government borrowing soared everywhere after 2008 as government deficits ballooned. But in America the swelling of the public balance sheet has mirrored a shrinking of private ones. Every category of private debt – financial, corporate, and household – has fallen as a share of GDP since 2008…. In Europe private debt has fallen by less and in some cases has grown" (The Economist, 2012).

In addition to a cyclical return to economic growth, the McKinsey report lists six markers that need to be evaluated in order to assess the progress nations have made as they head into the second phase of deleveraging. They include:

Marker 1: Is the banking system stable?
Marker 2: Is there a credible plan for long-term fiscal sustainability?
Marker 3: Are structural reforms in place to unleash private-sector growth?
Marker 4: Are there conditions set for strong export growth?
Marker 5: Is private investment rising?
Marker 6: Has the housing market stabilized?

Markers 2, 3 and 6, in particular, represent major challenges for the United States. Though private debt has fallen, government "debt has risen rapidly in the United States since the crisis due to the sharp decline in tax revenue and increases in automatic spending for such items as unemployment benefits. Because the United States entered the financial crisis with growing deficits, government debt – including that of federal, state, and local government – has reached the highest level as a percent of GDP since World War II" (McKinsey Global Institute, 2012, 21). The government debt levels for the United States will be significantly higher than those faced by Sweden and Finland when they began to enter phase two of the process. Given these higher levels, it is critical that the United States implement a credible medium and long-term plan to address its fiscal imbalances.

In addition, the US needs to put into effect structural reforms that will increase economic productivity. "The United States should encourage business expansion by speeding up regulatory approvals for business investment, particularly by foreign companies, and by simplifying the corporate tax code and lowering marginal tax rates in a revenue-neutral way. Business leaders also say that the United States can improve infrastructure and the skills of its workforce and do more to encourage innovation" (McKinsey Global Institute, 2012, 34). Much of the lack of progress in these two areas stems from the political gridlock that dominates Washington D.C.

Though the rate of price decreases has fallen, the housing market has not fully stabilized. "New housing starts in the United States remain at roughly one-third of their long-term average levels and in 2011 home prices continued to decline in many parts of the country. Without price stabilization and an uptick in new housing starts, a stronger recovery of GDP growth will be difficult. In the United States, residential real estate construction alone equaled 4 to 5 percent of GDP before the bubble and can do so again, once the market is cleared of excess inventory and there is demand for new construction" (McKinsey Global Institute, 2012, 39).

## CONCLUSION

This report has argued that the "Second Great Contraction" did not represent a typical cyclical downturn but was the result of the inevitable bursting of the housing bubble after a boom period that saw rapid increases in both housing prices and household debt. Downturns that follow financial crises are much more severe and persist for longer periods of time. A skeptic of this line of reasoning might argue that the recession in 2000-01 was largely the result of the bursting of the stock market bubble of the 1990s. Despite this, the economy rebounded reasonably quickly and robustly from that recession. The major difference between the two episodes is the amount of leverage that was used in purchasing assets during the boom period. Economist Robert Hall explains that in 2000-01 recession, "the assets in decline in that episode were business assets, mainly in a sector, high tech, that uses little debt finance and thus has little

leverage….. Business equity resides in large portfolios of rich families, in mutual funds, and in endowments, and these entities rarely borrow against their holdings" (Hall, 2010, 18).

That certainly is not the case with real estate which relies heavily on leverage. Again, Hall elaborates: "Most homeowners borrow as much as they can when buying a house; they become unlevered only if they remain in the house and pay down the mortgage. In the 2000s, borrowing as much as you could meant borrowing close to the entire price of the house. The story of the multiple added levels of leverage among financial institutions holding real-estate-related assets has now been told many times. Thus the economy is severely at risk from even a small decline in real estate values…" (Hall, 2012, 18).

While times ahead will not be easy, the United States has an opportunity to address its debt problems without being forced to implement the types of short-run, austerity measures that we see in Europe. Such an opportunity, however, requires the necessary political will to address difficult medium and long-run imbalances that threaten economic growth and the standard of living in the decades ahead. Our current political system, however, seems unwilling or incapable of tackling such issues.

## REFERENCES


Atack, Jeremy and Peter Passell. 1994. *A New Economic View of American History*, Second Edition, New York: W.W. Norton & Company.

Bernanke, Ben. 1983. "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *American Economic Review*, 73(3): pp. 257-276.

Bernanke, Ben . 2007. "Speech at the Credit Channel of Monetary Policy in the Twenty-first Century Conference," Federal Reserve Bank of Atlanta, Georgia. June 15, 2007.

Cecchetti, Stephen, M.S. Mohanty and Fabrizio Zampolli. 2011. "The real effects of debt," *Bank for International Settlements, Working Papers*, No. 352, September.

The Economist. 2009. "Irving Fisher: Out of Keynes's Shadow," February 12th.

The Economist. 2012. "The Hangover: America is recovering from the debt bust faster than European countries. Why?" January 21st, Retrieved from http://www.economist.com/node/21543139/print

Fisher, Irving. 1933. "The Debt-Deflation Theory of Great Depressions," *Econometrica*, pp. 337-357.

Glick, Reuven and Kevin Lansing. 2011. "Consumers and the Economy, Part I: Household Credit and Personal Saving," *FRBSF Economic Letter*, January 10th.

Hall, Robert. 2010. "Why Does the Economy Fall to Pieces after a Financial Crisis?" *Journal of Economic Perspectives*, 24(1), Fall, pp. 3-30.

Hall, Robert and Marc Lieberman. 2013. *Macroeconomics: Principles and Applications*, USA: Southwestern and Cengage Learning.

Jayakumar, Vivekanand. 2012. "The Global Financial Crisis and the Underwhelming Economic Recovery," Keynote Address – Business Economics, MBAA International Conference, March 29th.

Lebergott, Stanley. 1984. *The Americans: An Economic Record*, New York: W.W. Norton & Company.

McKinsey Global Institute. 2012. "Debt and Deleveraging: Uneven Progress on the Path to Growth," *McKinsey & Company*, January.

Mian, Atif and Amir Sufi. 2011. "Consumers and the Economy, Part II: Household Debt and the Weak U.S. Recovery," *FRBSF Economic Letter*, January 18th.

Mishkin, Frederic. 1978. "The Household Balance Sheet and the Great Depression," *Journal of Economic History*, 38, pp. 918-937.

Nasar, Sylvia. 2011. *Grand Pursuit: The Story of Economic Genius*, First Edition, Simon & Schuster.

Norris, Floyd. April 19, 2012. "Don't Look Now but Debt Levels are Falling," *New York Times*.

Olney, Martha L. 1999. "Avoiding Default: The Role of Credit in the Consumption Collapse of 1930," *Quarterly Journal of Economics*, February, 114(1): 319-335.

Parker, Randall. 2010. "An Overview of the Great Depression," EH.Net Encyclopedia, Retrieved from http://eh.net/encyclopedia/article/parker.depression

Reinhart, Carmen and Kenneth Rogoff. 2009. This Time is Different: Eight Centuries of Financial Folly, Princeton and Oxford: Princeton University Press.

Reinhart, Carmen and Kenneth Rogoff. 2010. "Growth in a Time of Debt," *American Economic Review: Papers & Proceedings*, 100(2): 1-9.

Rogoff, Kenneth. 2011. "The Second Great Contraction," The Unbound Economy, Project Syndicate, Retrieved from http://www.project-syndicate.org/commentary/rogoff83/English