John Williams'
Shadow Government Statistics
Analysis Behind and Beyond Government Economic Reporting

HYPERINFLATION SPECIAL REPORT (2011)

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United States Nears Hyperinflationary Great Depression

Federal Reserve and Government Have Exploded the U.S. Fiscal Crisis, Shattered Global Confidence in the U.S. Dollar but Not Resolved Ongoing Economic and Systemic-Solvency Crises

High Risk of Ultimate Dollar Disaster Beginning to Unfold in Months Ahead
2014 Remains the Outside Timing for Same

Contracting Money Supply Can Be Inflationary When Real Economy Contracts Even Faster

Major Economic Series Suggest Formal Depression in Place

Hyperinflation Special Report (2011) *is the fourth in a series of related writings going back to 2006. It updates and replaces the* Hyperinflation Special Report (2010 Update) *of December 2, 2009, which preceded: the Fed's formal monetization of U.S. Treasury debt aimed at debasing the U.S. dollar; the sharpest post-World War II annual decline in broad money growth; the pronouncement of an official end to the 2007 recession despite no meaningful recovery; passage of the Administration's health insurance legislation; and the mid-term election. Nonetheless, the outlook has changed little. With the passage of 15 months since the last report (updated circumstances have been covered regularly in*

weekly Commentaries*), events just have moved this pending ultimate financial crisis into much closer time proximity.*

In turn, the 2010 report updated and replaced the Hyperinflation Special Report *version of April 8, 2008, which was published post-Bear Stearns, but pre-Lehman, pre-TARP, pre-recession recognition and pre-2008 presidential election. The April 2008 report updated and expanded upon the three-part* Hyperinflation Series *that began with the* December 2006 SGS Newsletter*, which predated public recognition of the 2007 economic and systemic-solvency crises.*

This missive includes new material in addition to much of the same text that was in the 2010 edition, with revisions and updates reflecting the still-unfolding economic and systemic-solvency crises. It expands upon some areas in previous reports; and answers to questions and issues raised by subscribers have been incorporated into the text. Subscriber questions not directly answered here will be addressed in personal correspondence.

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Section 1—Overview

Great Collapse Nears

The U.S. economic and systemic-solvency crises of the last four years only have been precursors to the coming Great Collapse: a hyperinflationary great depression. Such will encompass a complete collapse in the purchasing power of the U.S. dollar; a collapse in the normal stream of U.S. commercial and economic activity; a collapse in the U.S. financial system as we know it; and a likely realignment of the U.S. political environment. Outside timing on the hyperinflation remains 2014, but there is strong risk of the currency catastrophe beginning to unfold in the months ahead. It may be starting to unfold as we go to press in March 2011, but moving into a full blown hyperinflation could take months to a year, beyond the onset, depending on the developing global view of the dollar and reactions of the U.S. government and the Federal Reserve.

Prerequisites to the crisis unfolding include: the Federal Reserve moving to monetize U.S. Treasury debt; the U.S. dollar losing its traditional safe-haven status; the U.S. dollar losing its reserve status; the federal budget deficit and Treasury funding needs spiraling out of control. The Fed moved to monetize Treasury debt in November 2010. A much-diminished U.S. dollar safe-haven status has become evident in early March 2011, along with serious calls for a new global reserve currency. The economy is not in recovery and should display significant new weakness in the months ahead, with severely expansive implications for the federal deficit, Treasury funding needs and requisite Fed monetization of debt.

As the advance squalls from this great financial tempest come ashore, the government could be expected to launch a variety of efforts at forestalling the hyperinflation's landfall, but such efforts will buy little time and ultimately will fail in preventing the dollar's collapse. The timing of the onset of full blown hyperinflation likely will be coincident with a broad global rejection/repudiation of the U.S. dollar.

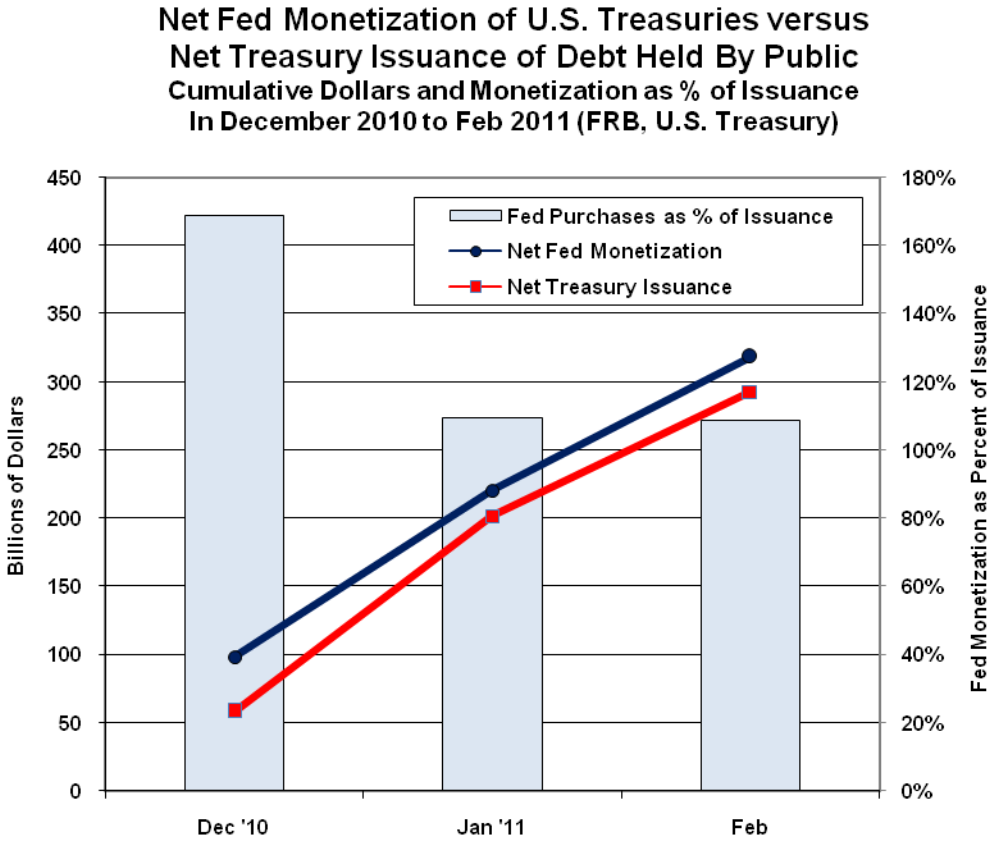
With no viable or politically-practical way of balancing U.S. fiscal conditions and avoiding this financial economic Armageddon, the best that individuals can do at this point is to protect themselves, both as to meeting short-range survival needs as well as to preserving current wealth and assets over the longer term. Efforts there, respectively, would encompass building a store of key consumables, such as food and water, and moving assets into physical precious metals and outside of the U.S. dollar.

Background

By 2004, fiscal malfeasance of successive U.S. Administrations and Congresses had pushed the federal government into effective long-term insolvency (likely to have triggered hyperinflation by 2018). GAAP-based (generally accepted accounting principles) accounting then showed total federal obligations at $50 trillion—more than four-times the level of U.S. GDP—that were increasing each year by GAAP-based annual deficits in the uncontainable four- to five-trillion dollar range. Those extreme operating shortfalls continue unabated, with total federal obligations at $76 trillion—more than five-times U.S. GDP—at the end of the 2010 fiscal year. Taxes cannot be raised enough to bring the GAAP-based deficit into balance, and the political will in Washington is lacking to cut government spending severely, particularly in terms of the necessary slashing of unfunded liabilities in government social programs such as Social Security and Medicare.

Bankrupt governments—unable to raise adequate cash to cover obligations—invariably crank up the currency printing presses to do so, creating a hyperinflation. The federal government and Federal Reserve's actions in response to, and in conjunction with, the economic and financial crises of 2007, however, accelerated the ultimate process—both in terms of fiscal deterioration and global perception of the issues—moving the outside horizon for hyperinflation from 2018 to 2014. Even so, over the last year or two, the government and Fed's actions and policies, and economic and financial-market developments have continued to exacerbate the circumstance, such that there is significant chance of the early stages of the hyperinflation breaking in the months ahead. Key to the near-term timing remains a sharp break in the exchange rate value of the U.S. dollar, with the rest of the world effectively moving to dump the U.S. currency and dollar-denominated paper assets.

The current U.S. financial markets, financial system and economy remain highly unstable and increasingly vulnerable to unexpected shocks. At the same time, the Federal Reserve and the federal government are dedicated to preventing systemic collapse and broad price deflation. To prevent any imminent collapse—as has been seen in official activities of the last several years—they will create and spend whatever money is needed, including the deliberate debasement of the U.S. dollar with the intent of increasing domestic inflation. As shown in the following graph, those efforts include effective full monetization of recent net Treasury debt issuance. During the three full calendar months since the November 3, 2010 announcement of its purchase program of U.S. Treasury debt, the Federal Reserve more than fully monetized (109%) net Treasury issuance in the same period.



The efforts to stave off systemic collapse also have resulted in uncontrolled fiscal excesses by the federal government. The deliberate monetary and fiscal abuses have resulted in de-stabilizing selling pressures against the U.S. currency, in rising gold and silver prices, and in a nascent pickup in reported U.S. consumer inflation. That inflation has been driven by unhealthy monetary policy instead of healthy economic demand, and it should continue to increase in the months ahead.

The damage to U.S. dollar credibility has spread at an accelerating pace. Not only have major powers such as China, Russia and France, and institutions such as the IMF, recently called for the abandonment of the U.S. dollar as the global reserve currency, but also the dollar appears to have lost much of its traditional safe-haven status in the last month. With the current spate of political shocks in the Middle East and North Africa (a circumstance much more likely to deteriorate than to disappear in the year ahead), those seeking to protect their assets have been fleeing to other traditional safe-havens, such as precious metals and the Swiss franc, at the expense of the U.S. currency. The Swiss franc and gold price both have hit historic highs against the dollar in early-March 2011, with the silver price at its highest level in decades, rapidly closing in on its speculative historic peak of January 1980.

Crises Brewed by Federal Government and Federal Reserve Malfeasance

The economic and systemic crises, triggered by the collapse of debt excesses that had been encouraged actively by the Greenspan Federal Reserve, have been centered on the U.S. financial system. Recognizing that the U.S. economy was sagging under the weight of structural income impairment created by government trade, regulatory and social policies—policies that limited real (inflation-adjusted) consumer income growth, where the average U.S. household could not stay ahead of inflation or make ends meet—then-Federal Reserve Chairman Alan Greenspan played along with the political and banking systems. He made policy decisions to steal economic activity from the future, fueling economic growth of the last decade largely through debt expansion. (See *Structural Consumer Liquidity Problems*.)

The Greenspan Fed pushed for ever-greater systemic leverage, including the happy acceptance of new financial products—instruments of mispackaged lending risks—designed for consumption by global entities that openly did not understand the nature of the risks being taken. Spreading the credit risks of banks among other industries, for example, was encouraged actively by the Fed as healthy and stabilizing for both the domestic and global financial systems. Also complicit in this broad malfeasance was the U.S. government, including both major political parties in successive Administrations and Congresses.

As with consumers, though, the federal government could not make ends meet. Driven by self-serving politics aimed at appeasing that portion of the electorate that could be kept docile through ever-expanding government programs and spending, political Washington became dependent on ever-expanding federal deficit spending, unfunded obligations and debt.

Purportedly, it was Arthur Burns, Fed Chairman under Richard Nixon, who first offered the advice that helped to guide Alan Greenspan and a number of Administrations. The gist of the imparted wisdom was that if the Fed or federal government ran into economic or financial-system difficulties, the federal budget deficit and the U.S. dollar simply could be ignored—or sacrificed. Ignoring them would not matter, it was argued, because doing so would not cost the incumbent powers any votes.

Back in 2005, I raised the issue of an inevitable U.S. hyperinflation with an advisor to both the Bush Administration and Fed Chairman Greenspan. I was told simply that "It's too far into the future to worry about."

Indeed, attempting to push the big problems further into the future continues to be the working strategy for both the Fed, under Chairman Ben Bernanke, and the current Administration and Congress.

In a February 25, 2011 speech, Federal Reserve Vice Chairman Janet Yellen examined the results of the recent use of "unconventional policy tools" by the Fed: "Each of these policy tools tends to generate spillovers to other financial markets, such as boosting stock prices and putting moderate downward pressure on the foreign exchange value of the dollar."

While Wall Street may hail any artificial propping it can get from the Fed's efforts to support the markets, more than "moderate" related declines in the U.S. dollar's exchange rate destroy any illusions of stock gains and savage the U.S. consumers' dollar purchasing power. A declining dollar can turn U.S. stock profits into losses for those living outside the dollar-denominated world, as funds are converted back to the strengthening currency domestic to the investor. Inflation driven by dollar weakness will do the same for those in a U.S. dollar-denominated environment, where, eventually, inflation can turn U.S. stock profits into real (inflation-adjusted) losses (see *Financial Hedges and Investments*).

Indeed, the U.S. dollar and the budget deficit do matter, and the future is at hand. As the federal budget deficit spirals well beyond sustainability and containment at an accelerating pace, and as the Fed moves with great deliberation to debase and to impair the purchasing power of the U.S. dollar, to generate rising consumer inflation, the day of ultimate financial reckoning appears to be breaking.

Saving the System at Any Cost

The Federal Reserve and the U.S. Treasury moved early in the current solvency crisis to prevent a collapse of the banking system, at any cost. It was the collapse of the banking system and loss of depositor assets in the early-1930s that intensified the Great Depression and its attendant deflation. A somewhat parallel risk was envisioned in 2008 as the system passed over the brink. The decision was made to avoid a deflationary great depression.

Effective financial impairments and at least partial nationalizations or orchestrated bailouts/takeovers resulted for institutions such as Bear Stearns, Citigroup, Washington Mutual, AIG, General Motors, Chrysler, Fannie Mae and Freddie Mac, along with a number of further troubled financial institutions. The Fed moved to provide whatever systemic liquidity would be needed, while the federal government moved to finance corporate bailouts, to guarantee any instruments or entities it had to, and to introduce large amounts of short-lived stimulus spending.

Curiously, though, the Fed and the Treasury let Lehman Brothers fail outright, which triggered a foreseeable run on the system and markedly intensified the systemic solvency crisis in September 2008. Whether someone was trying to play naive political games, with the public and Congress increasingly raising questions of moral hazard issues, or whether the U.S. financial wizards missed what would happen or simply moved to bring the crisis to a head, still remains to be seen.

In the still-early days of the crises, the Obama Administration pushed ahead with its social agenda, introducing major new government programs such as federal government control of healthcare and health insurance. Irrespective of stated goals of not increasing the federal deficit further, the resulting healthcare/insurance legislation will have severely negative impact on the federal deficit—as will most other new legislation and "stimulus" efforts, either from massive net expenses, or from losses in tax revenues in an ever-weakening economy.

While the U.S. Government's 2010 GAAP-based financial statements (see *GAAP-Based U.S. Government Finances*) suggested a one-time large improvement in Medicare unfunded liabilities, due to the healthcare legislation, the GAO viewed the Administration's claims there skeptically, offering an alternative accounting that showed net fiscal damage, not a one-time improvement, from the legislation.

Efforts to save the system at any cost likely will continue as long as possible, with the government spending whatever money it and the Federal Reserve need to create, until such time as the global financial markets rebel. The ultimate cost here, though, will be in inflation and the increasing debasement of the purchasing power of the U.S. Dollar, and an eventual dollar collapse beyond any government or Federal Reserve control.

U.S. Economy Is Not Recovering

Economic activity in the United States began to decline in 2006 or early-2007, and it plunged from late-2007 into 2009 at a pace not seen since the Great Depression. Subsequently, economic activity has been bottom-bouncing with some boosts from short-lived stimulus effects. Without any fundamental turnaround in structural consumer-income problems that have been driving the downturn, and with contracting, inflation-adjusted systemic liquidity, the economy has started to slow anew. Popularly followed economic series should be showing convincing renewed contractions in the months ahead.

Despite pronouncements of an end to the 2007 recession and the onset of an economic recovery, the U.S. economy still is mired in a deepening structural contraction, which eventually will be recognized as a double- or multiple-dip recession. Beyond the politically- and market-hyped GDP reporting, key underlying economic series show patterns of activity that are consistent with a peak-to-trough (so far) contraction in inflation-adjusted activity in excess of 10%, a formal depression (see *Recession, Depression and Great Depression*). The apparent gains of the last year, reported in series such as retail sales and industrial production, should soften meaningfully in upcoming benchmark revisions. The revised patterns should tend to parallel the recent downside benchmark revision to payroll employment, while the July 2011 annual GDP revisions also are an almost certain bet to show a much weaker economy in recent years than currently is recognized in the markets. (See *Section 4—Current Economic and Inflation Conditions in the United States*.)

Existing formal projections for the federal budget deficit, banking system solvency, etc. all are based on assumptions of positive economic growth, going forward. That growth will not happen, and continued economic contraction will exacerbate fiscal conditions and banking-system liquidity problems terribly.

Hyperinflation Nears

As previously noted, before the systemic-solvency crisis began to unfold in 2007, the U.S. government already had condemned the U.S. dollar to a hyperinflationary grave by taking on debt and obligations that never could be covered through raising taxes and/or by severely slashing government spending that

had become politically untouchable. Also, the U.S. economy already had entered a severe structural downturn, which helped to trigger the systemic-solvency crisis.

Bankrupt sovereign states most commonly use the currency printing press as a solution to not having enough money to cover obligations. The alternative here would be for the U.S. eventually to renege on its existing debt and obligations, a solution for modern sovereign states rarely seen outside of governments overthrown in revolution, and a solution with no happier ending than simply printing the needed money. With the creation of massive amounts of new fiat dollars (not backed by gold or silver) comes the eventual full destruction of the value of the U.S. dollar and related dollar-denominated paper assets.

The U.S. government and the Federal Reserve have committed the system to its ultimate insolvency, through the easy politics of a bottomless pocketbook, the servicing of big-moneyed special interests, gross mismanagement, and a deliberate and ongoing effort to debase the U.S. currency. Yet, the particularly egregious fiscal and monetary responses to economic and solvency crises of the last four years have exacerbated the government's solvency issues, bringing the great financial tempest close enough to making landfall that the hairs on the backs of investors necks should be standing on end.

Numerous foreign governments/central banks have offered unusually blunt criticism of U.S. fiscal and Federal Reserve policies as the crisis has expanded, but the perceived self-interests of the U.S. government and Fed always will come first in setting domestic policy. Where both private and official demand for U.S. Treasuries had been increasingly unenthusiastic, the Fed—the U.S. central bank—effectively has been fully funding Treasury needs since December 2010, with its latest version of "quantitative easing," a euphemism for Fed monetization of U.S. Treasury debt.

The so-called "QE2" likely will be expanded, or supplemented by "QE3," in the months ahead, as the ongoing economic turmoil triggers significant further fiscal deterioration. Those actions should pummel heavily the U.S. dollar's exchange rate against other major currencies. Looming with uncertain timing is a panicked dollar dumping and dumping of dollar-denominated paper assets, which remains the most likely event as proximal trigger for the onset of hyperinflation in the near-term.

The early stages of the hyperinflation would be marked simply by an accelerating upturn in consumer prices, a pattern that already has begun to unfold in response to QE2. Also, money supply velocity (see *Inflation and Slowing/Contracting Money Growth*) will spike, as the U.S. dollar, again, comes under heavy and even disorderly selling pressure, with both domestic and foreign holders getting rid of their dollar holdings as quickly as possible.

Although the U.S. has no way of avoiding a financial Armageddon, various government intervention tactics might slow the process for brief periods, and the system always is vulnerable to external shocks, such as wars and natural disasters. Government actions could include supportive dollar intervention, restrictions on international capital flows, wage and price controls, etc. (see *Equities. While equities do provide something* of a traditional inflation hedge—revenues and profits get expressed in current dollars—they also tend to reflect underlying economic and political fundamentals. I still look for U.S. stocks to take an ultimate 90% hit, peak-to-trough, net of inflation, during this period. Where all stocks are tied to a certain extent to the broad market—to the way investors are valuing equities—such a large hit on the broad market would tend to have a dampening effect on nearly all equity prices, irrespective of the quality of a given company or a given industry.

The preceding graphs show the year-end Dow Jones Industrial Average (DJIA) in current terms, as well as adjusted for the CPI-U and the SGS-Alternate Consumer Inflation. While stocks may rally based on high inflation, in inflation-adjusted terms, a bear market remains a good shot. An early-hyperinflation DJIA at 100,000 could be worth 1,500 in today's terms.

Possible Official Actions and Responses/External Risks). Effects of any such moves in delaying the onset of full hyperinflation, though, would be limited and short-lived. There is no obvious course of action or external force at this point of the process that meaningfully would put off the nearing day of reckoning.

What lies ahead will be extremely difficult, painful and unhappy times for many in the United States. The functioning and adaptation of the U.S. economy and financial markets to a hyperinflation likely will be particularly disruptive. Trouble could range from turmoil in the food distribution chain and electronic cash and credit systems unable to handle rapidly changing circumstances, to political instability. The situation quickly would devolve from a deepening depression, to an intensifying hyperinflationary great depression.

While resulting U.S. economic difficulties would have broad global impact, the initial hyperinflation should be largely a U.S. problem, albeit with major implications for the global currency system.

For those living in the United States, long-range strategies should look to assure safety and survival, which from a financial standpoint means preserving wealth and assets. Also directly impacted, of course, are those holding or dependent upon U.S. dollars or dollar-denominated assets, and those living in "dollarized" countries.

Physical gold (sovereign coins priced near bullion prices) remains the primary hedge in terms of preserving the purchasing power of current dollars. In like manner, silver is in this category. Also, holding stronger major currencies such as the Swiss franc, Canadian dollar and the Australian dollar, likely are good hedges (see *Financial Hedges and Investments*).

In terms of survival on a day-to-day basis, U.S.-based individuals should be building a store of goods in preparation for a manmade disaster, much as they would for a natural disaster such as an earthquake. Economic activity probably would devolve to a barter system, but such could take months to become fully functional (see *Barter System*).

Section 2—Defining the Components of a Hyperinflationary Great Depression

Deflation, Inflation and Hyperinflation

Inflation broadly is defined in terms of a rise in general prices usually due to an increase in the amount of money in circulation. The inflation/deflation issues defined and discussed here are as applied to consumer goods and services, not to the pricing of financial assets, unless specified otherwise.

In terms of hyperinflation, there have been a variety of definitions used over time. The circumstance envisioned ahead is not one of double- or triple- digit annual inflation, but more along the lines of seven- to 10-digit inflation seen in other circumstances during the last century. Under such circumstances, the currency in question becomes worthless, as seen in Germany (Weimar Republic) in the early 1920s, in Hungary after World War II, in the dismembered Yugoslavia of the early 1990s and most recently in Zimbabwe, where the pace of hyperinflation likely was the most extreme ever seen.

The historical culprit generally has been the use of fiat currencies—currencies with no hard-asset backing such as gold—and the resulting massive printing of currency that the issuing authority needed to support its spending, when it did not have the ability, otherwise, to raise enough money for its perceived needs, through taxes or other means.

Ralph T. Foster (hereinafter cited as *Foster*) in *Fiat Paper Money, The History and Evolution of Our Currency* (see *Recommended Further Reading*) details the history of fiat paper currencies from 11th century Szechwan, China, to date, and the consistent collapse of those currencies, time-after-time, due to what appears to be the inevitable, irresistible urge of issuing authorities to print too much of a good thing. The United States is no exception, already having obligated itself to liabilities well beyond its ability ever to pay off, and the currency printing presses already are running overtime.

Here are the definitions:

Deflation: A decrease in the prices of consumer goods and services, usually tied to a contraction of money in circulation. Formal deflation is measured in terms of year-to-year change.

Inflation: An increase in the prices of consumer goods and services, usually tied to an increase of money in circulation.

Hyperinflation: Extreme inflation, minimally in excess of four-digit annual percent change, where the involved currency becomes worthless. A fairly crude definition of hyperinflation is a circumstance, where, due to extremely rapid price increases, the largest pre-hyperinflation bank note ($100 bill in the United States) becomes worth more as functional toilet paper/tissue than as currency.

As discussed in *Section 5—Historical U.S. Inflation: Why Hyperinflation Instead of Deflation*, the domestic economy has been through periods of both major inflation and deflation, usually tied to wars and their aftermaths. Such, however, preceded the U.S. going off the domestic gold standard in 1933 and abandoning international gold convertibility in 1971. The era of the modern fiat dollar generally has been one of persistent and slowly debilitating inflation.

As to the reporting of inflation, the following notes detail the various measures of consumer systemic prices referenced in this report:

***The Consumer Price Index (CPI)*:** The CPI is the primary consumer inflation measure published by U.S. Government, through the Bureau of Labor Statistics (BLS), Department of Labor:

CPI-U (Consumer Price Index for All Urban Consumers): The CPI-U is the monthly headline inflation number (seasonally adjusted) and is the broadest in its coverage, representing the buying patterns of all urban consumers. Its standard measure is not seasonally adjusted, and it never is revised on that basis except for outright errors.

CPI-W (CPI for Urban Wage Earners and Clerical Workers): The CPI-W covers the more-narrow universe of urban wage earners and clerical workers and is used in determining cost-of-living adjustments in government programs such as Social Security. Otherwise its background is the same as the CPI-U.

CPI-U-RS (Current Methods CPI): The CPI-U-RS is the current CPI-U with its history restated as if all the new methodologies introduced since the 1980s had been in place from day one. The involved changes have moved the CPI away from being a measure of inflation for a fixed basket of goods and services, away from being a measure of the cost of living of maintaining a constant standard of living.

SGS Alternate CPI-U Measure: The SGS Alternate CPI Measure (based on 1980 reporting methodologies) is an attempt to reverse methodological changes to CPI inflation since 1980 that have changed the CPI concept from being a measure of the cost of living needed to maintain a constant standard of living, to a measure of a cost of living that reflects a declining standard of living. It is based primarily on a reverse engineering of the CPI-U-RS. (See *Response to BLS Article on CPI Misperceptions* for further details).

GNP/GDP Implicit Price Deflator (IPD): The IPD is the rate of inflation for the aggregate economy (including consumer, business, housing, government and trade sectors) that is used in deflating nominal or current-dollar Gross National Product (GNP), Gross Domestic Product (GDP) and components of same, to "real," constant-dollar or inflation-adjusted levels.

Recession, Depression and Great Depression

A couple of decades back, I tried to tie down the definitional differences between a recession, depression and a great depression with the Bureau of Economic Analysis (BEA), the National Bureau of Economic Research (NBER) and a number of private economists. I found that there was no consensus on the matter, where popular usage of the term "depression" had taken on the meaning of a severe recession, so I set some definitions that the various parties (neither formally nor officially) thought were within reason.

If you look at the plot of the level of economic activity during a downturn, you will see something that looks like a bowl, with activity recessing on the downside and recovering on the upside. The term used to describe this bowl-shaped circumstance before World War II was "depression," while the downside portion of the cycle was called "recession," and the upside was called "recovery." Before World War II, all downturns simply were referred to as depressions. In the wake of the Great Depression of the 1930s, however, a euphemism was sought for describing future economic contractions, so as to avoid evoking memories of that earlier, financially painful time.

Accordingly, a post-World War II downturn was called "recession." Officially, now, the deepest post-World War II recession was from December 2007 through June 2009, with a peak-to-trough contraction in the inflation-adjusted quarterly GDP activity level of 4.1%. That was somewhat worse than the 3.7% contraction from August 1957 through April 1958, which involved a steel strike, and a 3.2% contraction in the November 1973 to March 1975, which more commonly is viewed as the worst post-World War II recession prior to 2007. The 2007 recession also has been declared the longest since the first downleg of the Great Depression. I'll contend, though, that the 2007 downturn is ongoing and much deeper than is indicated officially (see *Section 4—Current Economic and Inflation Conditions in the United States*). Here are the definitions:

Recession: Two or more consecutive quarters of contracting real (inflation-adjusted) GDP, where the downturn is not triggered by an exogenous factor such as a truckers' strike. The NBER, which is the official arbiter of when the United States economy is in recession, attempts to refine its timing calls, on a monthly basis, through the use of economic series such as payroll employment and industrial production, and it no longer relies on the two quarters of contracting GDP rule.

Depression: A recession, where the peak-to-trough contraction in real growth exceeds 10%.

Great Depression: A depression, where the peak-to-trough contraction in real growth exceeds 25%.

On the basis of the preceding, there has been the one Great Depression, in the 1930s. Most of the economic contractions before that would be classified as depressions. All business downturns since World War II—as officially reported —have been recessions. Using a the somewhat narrower "great depression" definition of a contraction in excess of 20% (instead of 25%), the depression of 1837 to 1843 would be considered "great," as would be the war-time production shut-down in 1945.

As explored in *Section 4—Current Economic and Inflation Conditions in the United States*, the current downturn would qualify as a "depression" per the above definitions, and it should evolve into a "great depression," as normal commercial activity grinds to a halt in a hyperinflation. Nonetheless, the term "Great Recession" has entered the popular lexicon for the current downturn. Given the financial pain that will be attributed to the Great Recession—if that terminology holds—those naming future such events likely will be looking to come up with a different descriptor for a "recession" in the post-collapse period.

Section 3—Two Examples of Hyperinflation

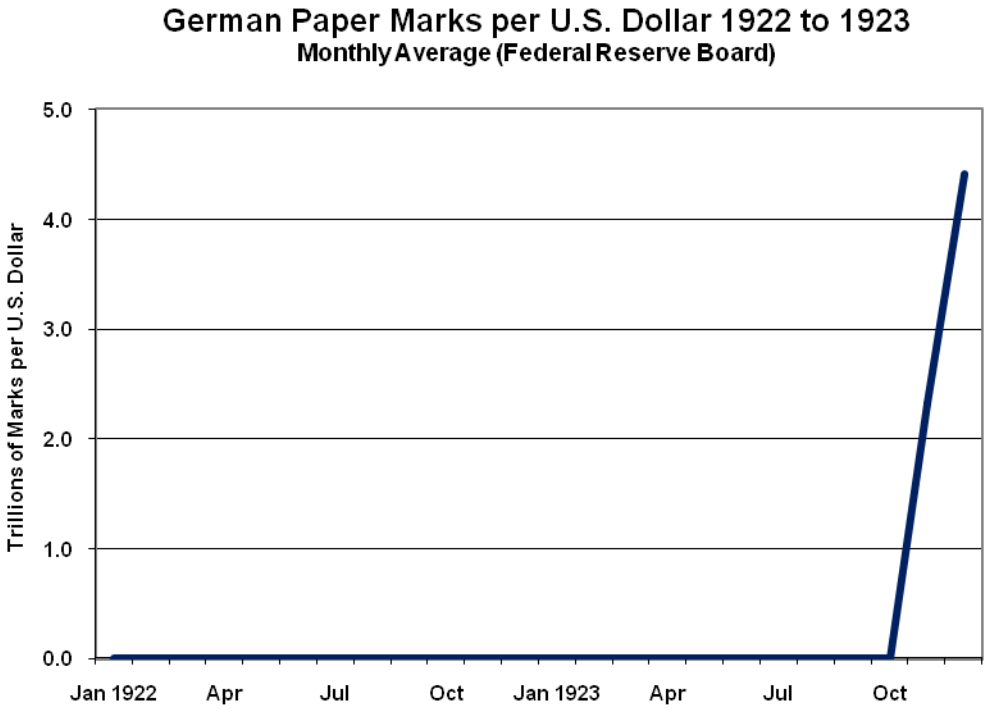
Weimar Republic

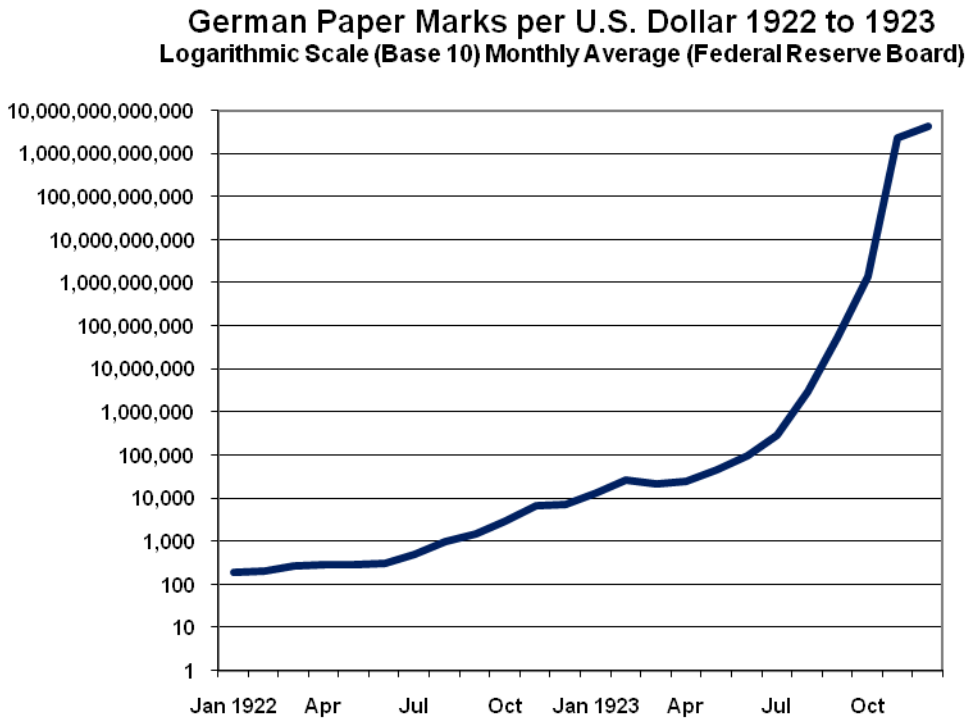
Ralph Foster closes his book's preface with a particularly poignant quote from a 1993 interview of Friedrich Kessler, a law professor whose university affiliations included, among others, Yale and University of California Berkeley. From firsthand experience, Kessler described the Weimar Republic hyperinflation:

"It was horrible. Horrible! Like lightning it struck. No one was prepared. You cannot imagine the rapidity with which the whole thing happened. The shelves in the grocery stores were empty. You could buy nothing with your paper money."

The hyperinflation in Germany's Weimar Republic is along the lines of what likely will unfold in the United States. The following two graphs plot the same numbers, but on different scales. The data are the monthly averages of the number of paper German marks that equaled one dollar (gold-backed) in 1922 and 1923, with that number acting as something of a surrogate for the pace of inflation.

The first plot is a simple arithmetic plot, but the earlier detail is masked by the extreme numbers of the last several months, suggestive of an extraordinarily rapid and large rise in the pace of inflation. The second plot is on a logarithmic scale, where each successive power of ten represents the next tick mark on the vertical scale.





While the hyperinflation did hit rapidly, annual inflation in January 1922 already was more than 200%, up from as low as 6% in April 1921. The existing currency was abandoned at the end of 1923.

Milton Friedman and Anna Jacobson Schwartz noted in their classic *A Monetary History of the United States* that the early stages of the Weimar Republic hyperinflation was accompanied by a huge influx of foreign capital, much as had happened during the U.S. Civil War. The speculative influx of capital into the U.S. at the time of the Civil War inflation helped to stabilize the system, as the foreign capital influx into the U.S. in recent years has helped to provide relative stability and strength to the equity and credit markets. Following the Civil War, however, the underlying U.S. economy had significant untapped potential and was able to generate strong, real economic activity that covered the war's spending excesses.

Post-World War I Germany was a different matter, where the country was financially and economically depleted as a penalty for losing the war. Here, after initial benefit, the influx of foreign capital helped to destabilize the system. "As the mark depreciated, foreigners at first were persuaded that it would subsequently appreciate and so bought a large volume of mark assets..." Such boosted the foreign exchange value of the German mark and the value of German assets. "As the German inflation went on, expectations were reversed, the inflow of capital was replaced by an outflow, and the mark depreciated more rapidly... (Friedman p. 76)."

Indeed, in the wake of its defeat in the Great War, Germany was forced to make debilitating reparations to the victors—particularly France—as well as to face loss of territory. From *Foster* (Chapter 11):

"By late 1922, the German government could no longer afford to make reparations payments. Indignant, the French invaded the Ruhr Valley to take over the production of iron and coal (commodities used for reparations). In response, the German government encouraged its workers to go on strike. An additional issue of paper money was authorized to sustain the economy during the crisis. Sensing trouble, foreign investors abruptly withdrew their investments.

"During the first few months of 1923, prices climbed astronomically higher, with no end in sight... The nation was effectively shut down by currency collapse. Mailing a letter in late 1923 cost 21,500,000,000 marks."

The worthless German mark became useful as wall paper and toilet paper, as well as for stoking fires.

The Weimar circumstance, and its heavy reliance on foreign investment, was closer to the current U.S. situation than it was to the U.S. Civil War experience. In certain aspects, the current U.S. situation is even worse than the Weimar situation. It certainly is worse than the Civil war circumstance.

Unlike the still largely untapped economic potential of the United States 146 years ago, today's U.S. economy is languishing in the structural problems of the loss of its manufacturing base and a shift of domestic wealth offshore; it is mired in an economic contraction that is immune to traditional economic stimuli. As the U.S. government has attempted in recent decades to assuage electorate discontent with ever more expensive social programs; as the Federal Reserve has moved to encourage debt expansion as a remedy for lack of real, inflation-adjusted, income growth; the eventual bankruptcy of the U.S. dollar was locked in. The problem here was taken on and created willingly by U.S. government officials—embraced by both major political parties—not imposed by a victorious and vengeful enemy of war.

In the early 1920s, foreign investors in Germany were not propping up the world's reserve currency in an effort to prevent a global financial collapse, and they did not know in advance that they were doomed to take a large hit on their German investments. In today's environment, both central banks and major private investors know that the U.S. dollar will be a losing proposition. They either expect and/or hope that they can get out of the dollar in time to avoid losses, or, in the case of the central banks, that they can forestall the ultimate global economic crisis. Such expectations and hopes have dimmed markedly in the last several years, as the untenable U.S. fiscal condition has gained more public and global recognition.

Zimbabwe

Hyperinflation in Zimbabwe, the former Rhodesia, was a quadrillion times worse than it was in Weimar Germany. Zimbabwe went through a number of years of high inflation, with an accelerating hyperinflation from 2006 to 2009, when the currency was abandoned. Through three devaluations, excess zeros repeatedly were lopped off notes as high as 100 trillion Zimbabwe dollars.

The cumulative devaluation of the Zimbabwe dollar was such that a stack of 100,000,000,000,000,000,000,000,000 (26 zeros) two dollar bills (if they were printed) in the peak hyperinflation would have be needed to equal in value what a single original Zimbabwe two-dollar bill of 1978 had been worth. Such a pile of bills literally would be light years high, stretching from the Earth to the Andromeda Galaxy.

In early-2009, the governor of the Zimbabwe Reserve Bank indicated he felt his actions in printing money were vindicated by the recent actions of the U.S. Federal Reserve. If the U.S. went through a hyperinflation like that of Zimbabwe's, total U.S. federal debt and obligations (roughly $76 trillion with unfunded liabilities) could be paid off for much less than a current penny.

This sign in a restroom facility at a South African border station with Zimbabwe speaks for itself.

What helped to enable the evolution of the Zimbabwe monetary excesses over the years, while still having something of a functioning economy, was the back-up of a well-functioning black market in U.S. dollars. The United States has no such backup system, however, with implications for a more rapid and disruptive hyperinflation than seen in Zimbabwe, when it hits. This will be discussed later.

Section 4—Current Economic and Inflation Conditions in the United States

Economic Activity and Inflation

Before examining how the current circumstance can evolve into a hyperinflationary great depression, it is worth assessing the nature of the present economic and inflation conditions in the United States, along with likely near-term developments in those areas.

As heavily touted on Wall Street, the official version of the current U.S. economic circumstance is that business activity is enjoying normal growth, having recovered to levels last seen before the severe recession of 2007-2009. Reported consumer inflation is below two percent, with "core" inflation holding near zero. Such follows a short but shallow bout with formal deflation.

If this happy picture were real, the Federal Reserve would not be panicking, printing new money and attempting to liquefy the system at an unprecedented pace. If the economy were recovering and on a positive track, the Administration and Congress would not be panicking with extreme fiscal reactions, hoping to assuage an economically- and financially-impaired electorate in advance of a likely tumultuous 2012 election.

Indeed, anecdotally, Main Street U.S.A. is not seeing this near-perfect economic environment, either. Common perception remains that the economy and labor conditions are much worse than the happy news in GDP and jobs reporting, and that inflation is running well above the price increases indicated by the government's consumer inflation estimates.

The SGS assessment of the current circumstance generally is in line with the common experience. The economy still is in broad contraction, with consumer inflation—viewed from the standpoint of the cost of maintaining a constant standard of living (as the CPI initially was intended)—running well above official inflation. Irrespective of the measure, consumer inflation has started to spike in response to Federal Reserve efforts to create inflation.

Suffering from a deteriorating structural shift in consumer liquidity, the U.S. economy went into a severe contraction, starting slowly in late-2006, but plunging by the end of 2007 through early-2009. Since then the broad economy has been bottom-bouncing at a low-level plateau of activity, with spikes seen in the activity of several important series such as retail sales and industrial production from short-lived stimulus effects, and from distortions in a post-World War II economic reporting system that never was designed to handle a downturn of the present nature and severity.

Broad economic activity is slowing anew, and such should painfully evident in the months ahead. Since the National Bureau of Economic Research (NBER)—official arbiter of U.S. recessions—has formally timed the recession, peak-to-trough, from December 2007 to June 2009, the renewed downturn eventually should gain official recognition as the second downleg of a multiple-dip recession, with its onset likely timed from third-quarter 2010.

Considered in the pages ahead is the nature of the structural consumer-income problems driving the downturn; economic reporting quality issues that have arisen from an unprecedented downturn in the era of modern economic reporting; an assessment of recent GDP reporting against what can be supported by

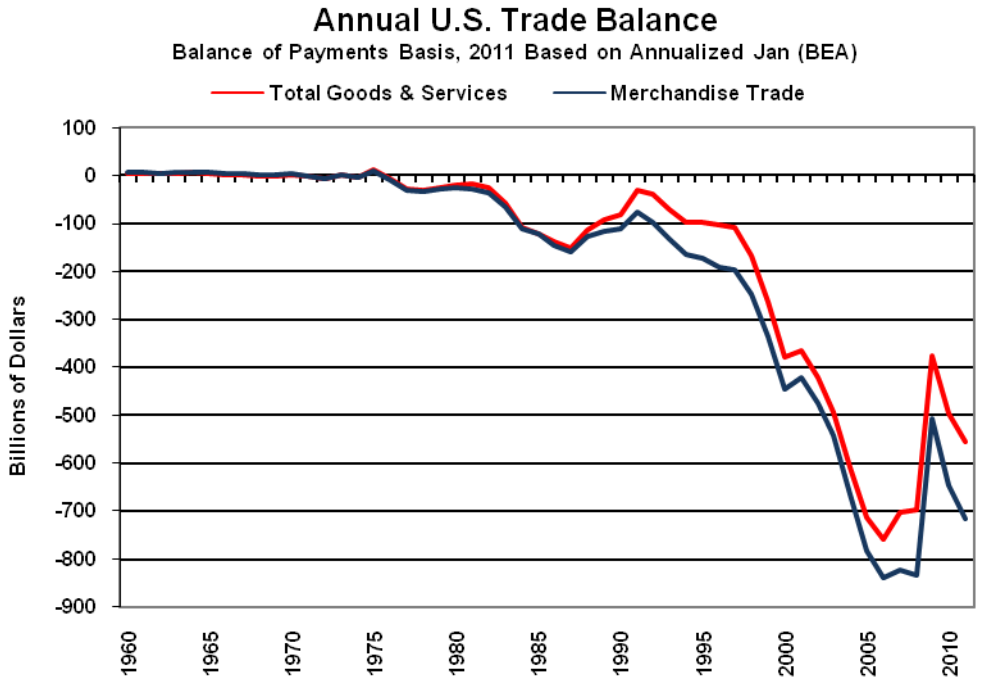
reporting in the underlying employment, retail sales, industrial production and housing series; pending revisions to economic series; political implications; and the near-term outlook for the economy and inflation.

Structural Consumer Liquidity Problems

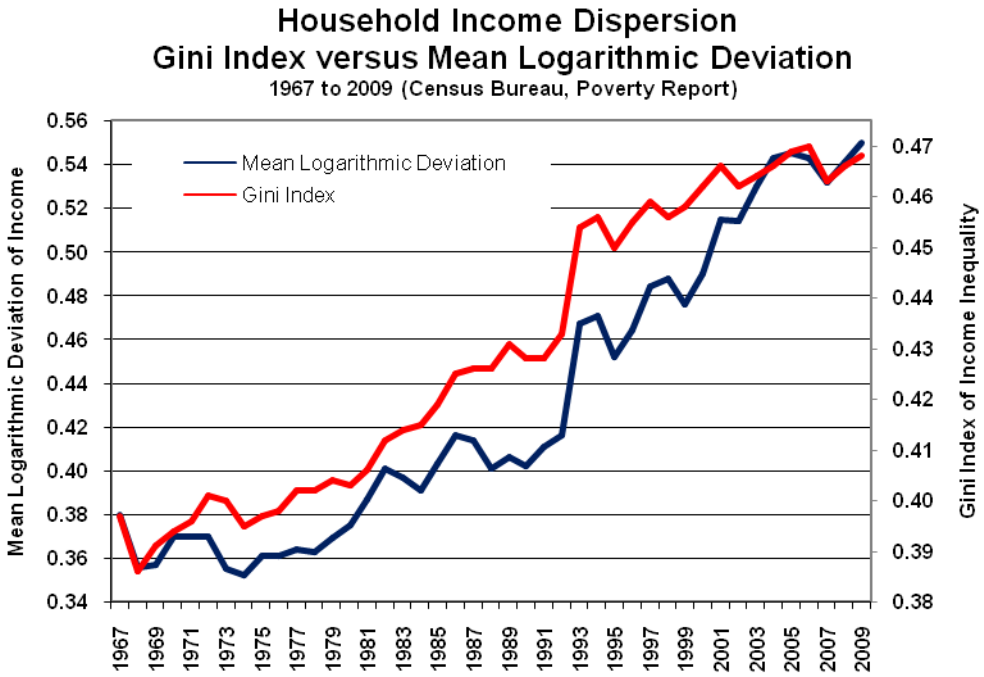
Until structurally-impaired real (or inflation-adjusted) household income and liquidity fundamentally turn around, there can be no sustainable recovery in U.S. economic activity. The consumer accounted for 73% of reported fourth-quarter 2010 U.S. GDP.

The U.S. economy is in a deepening structural change that has resulted from U.S. trade, social and regulatory policies driving a goodly portion of the U.S. manufacturing and technology base offshore. As a result, a large number of related, high paying jobs have disappeared for U.S. workers. Accordingly, U.S. consumers have found increasingly that their household incomes fail to keep up with inflation. Without real growth in income, there cannot be sustained economic growth. Growth driven solely by debt expansion, as encouraged by the Fed in recent years, ultimately is not sustainable; it is temporary, as has become painfully obvious to many in the still-evolving systemic-solvency crisis.

Shown in the following graph, the U.S. trade deficit—in general deterioration since the early-1970s—initially narrowed in the current downturn, with weaker U.S. consumption and with a short-lived collapse in oil prices. Yet, the trade shortfall resumed its net deterioration in the last year or so. The brief period of deficit narrowing reflected no fundamental shift in circumstances, no healthy move in U.S. economic activity towards a basic improvement in the trade balance, or in a shift towards reinvigorating the U.S. manufacturing base.



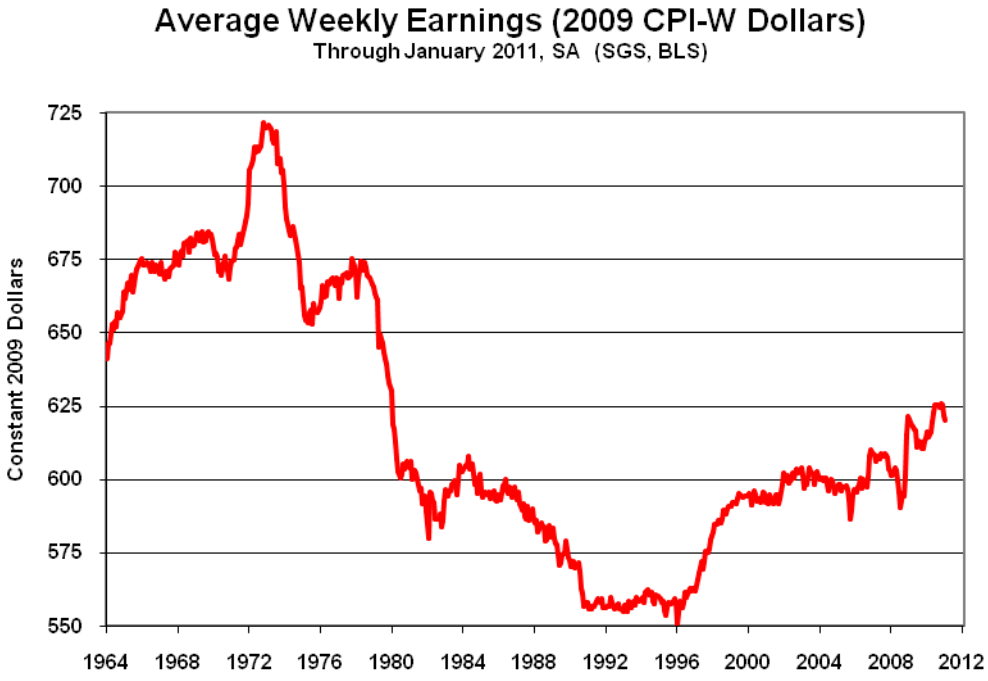
The gradual deterioration in inflation-adjusted wages and household income has resulted in a record level of the variance or dispersion in household income, as shown in the next graph, and that has negative longer term economic implications. Variance in income is low when the distribution of income levels is heavily concentrated in the middle, and it is high when more of the income distribution is pushed into the extremes of high- and low-income levels, with a weaker middle-income range.

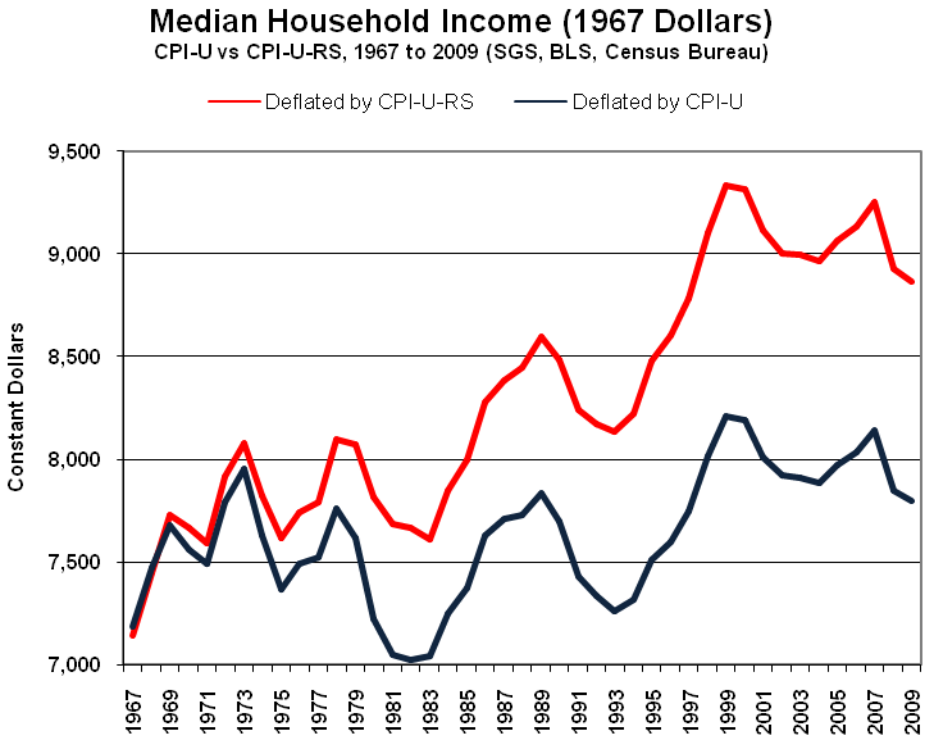


A person earning $100,000,000 per year is not going to buy that many more automobiles than someone earning $100,000 per year. The stronger the middle class is, generally the stronger will be consumption and the economy.

Historically, extremes in income variance have been followed by financial panics and economic depressions, which then tend to redistribute income towards the middle. Income variance today is higher than it was coming into 1929 and 1987, and it is nearly double that of any other "advanced" economy. At a peak in 2006, the measure dipped as systemic crises broke in 2007. Yet, U.S. income dispersion moved higher again in 2008 and 2009 (the most recent reporting) setting a new historic high.

The next two graphs show officially-reported weakness in inflation-adjusted income. The first graph shows real average weekly earnings (production and supervisory workers), as reported and deflated by the Bureau of Labor Statistics (BLS) using the regular CPI-W. Real wages never have recovered their pre-1973 recession peak. As wages dropped through the decades, the number of people in an average household that had to work—in order to make ends meet—increased. If the shown wages were deflated using the SGS-Alternate CPI Measure (discussed later in this section), the wage line would continue sloping downward, subsequent to 1996.


Average Weekly Earnings (2009 CPI-W Dollars)
Through January 2011, SA (SGS, BLS)
Constant 2009 Dollars
725
700
675
650
625
600
575
550
1964
1968
1972
1976
1980
1984
1988
1992
1996
2000
2004
2008
2012


Median Household Income (1967 Dollars)
CPI-U vs CPI-U-RS, 1967 to 2009 (SGS, BLS, Census Bureau)
Deflated by CPI-U-RS
Deflated by CPI-U
Constant Dollars
9,500
9,000
8,500
8,000
7,500
7,000
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009

The second graph reflects median (the middle measure instead of average) U.S. household income over the years. The bottom dark-blue line shows income deflated by the regular CPI-U, a measure somewhat broader than the CPI-W used in the wage plot. Those inflation-adjusted numbers show that median household income never recovered its pre-2001 recession peak and stood below its level of 1973, as of 2009. Even deflated by the CPI-U-RS (current methods) used in Census Bureau reporting—discussed below—the pre-2001 recession peak also has not been recovered. The BLS uses the CPI-U or CPI-W for deflating its official income series; the Census Bureau has been playing games with the CPI-U-RS.

For average or mean household income (not graphed), the same patterns hold in terms the latest real income level falling and remaining below the pre-2001 peak, irrespective of the inflation measure used to adjust the numbers. Due to the sharp rise in income variance from shifts to extreme high income levels, however, the average number for 2009 is above 1973, based on the CPI-U but would be below 1973 using the SGS-Alternate measure for deflation (see CPI *No Longer Reflects Costs of Maintaining Constant Standard of Living*).

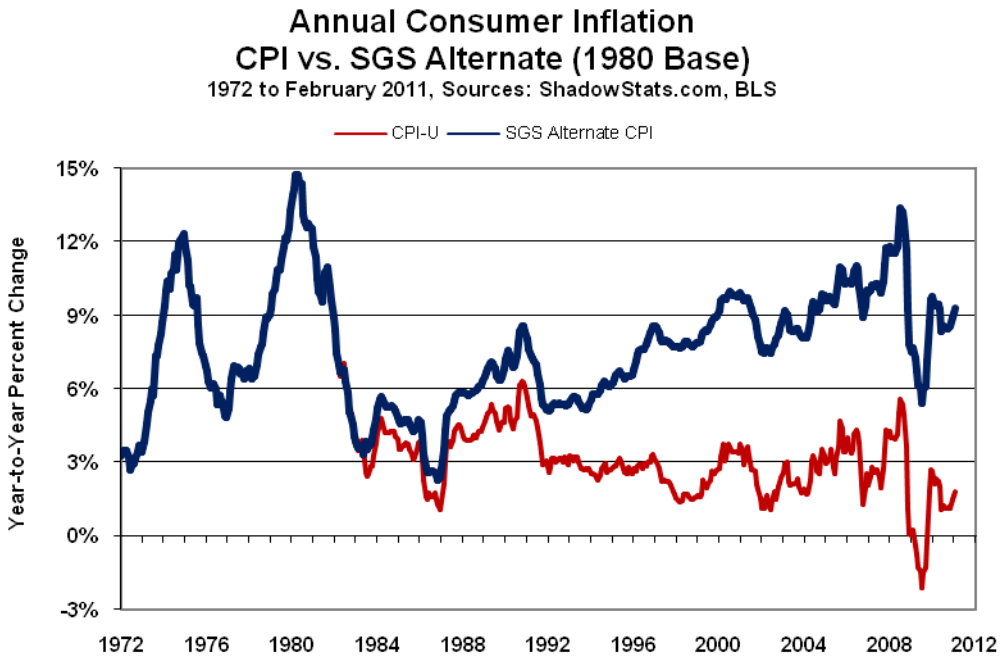
The broad point on U.S. consumer income is that it is inadequate to sustain growing, inflation-adjusted economic activity. In the absence of income growth, debt expansion can act as a short-term prop for the economy, but that is not available at present. The system is in the throes of a solvency crisis, with banks having reduced lending to consumers.

CPI No Longer Reflects Costs of Maintaining Constant Standard of Living

In the last several decades, the BLS introduced a variety of new methodologies into the calculation of the CPI, with the effect of reducing the level of reported CPI inflation. The general approach was to move the CPI away from its traditional measuring of the cost of living of maintaining a constant standard of living. The lower the rate of inflation that is used in deflating a number, the stronger will be the resulting inflation-adjusted level or growth. The CPI-U-RS is the CPI with its history restated as if all the new methodologies had been in place from day one. The impact of the methodological changes in calculating inflation is evident in the two lines in the Median Household Income graph, with the upper, red CPI-U-RS line showing stronger relative growth.

By reverse-engineering the CPI-U-RS, current inflation reporting can be estimated as though it were free of the inflation-dampening methodologies. Such has been done with the SGS-Alternate Consumer Inflation Measure. The SGS measure adjusts on an additive basis for the cumulative impact on the annual inflation rate of various methodological changes made by the BLS (the series is not recalculated). Over the decades, the BLS has altered the meaning of the CPI from being a measure of the cost of living needed to maintain a constant standard of living, to something that no longer reflects the constant-standard-of-living concept. Roughly five percentage points of the additive SGS adjustment reflect the BLS's formal estimate of the annual impact of methodological changes; roughly two percentage points reflect changes by the BLS, where SGS has estimated the impact not otherwise published by the BLS.

As plotted in following graph, the gap between the SGS measure (blue line) and the CPI-U (thinner red line) effectively is the shortfall in official inflation reporting that otherwise would have offset declining standards of living. This is one reason why individuals who have their income tied to the CPI find it increasingly difficult to make ends meet (see *Response to BLS Article on CPI Misperceptions* for further details).



Income, Credit and Willingness to Spend

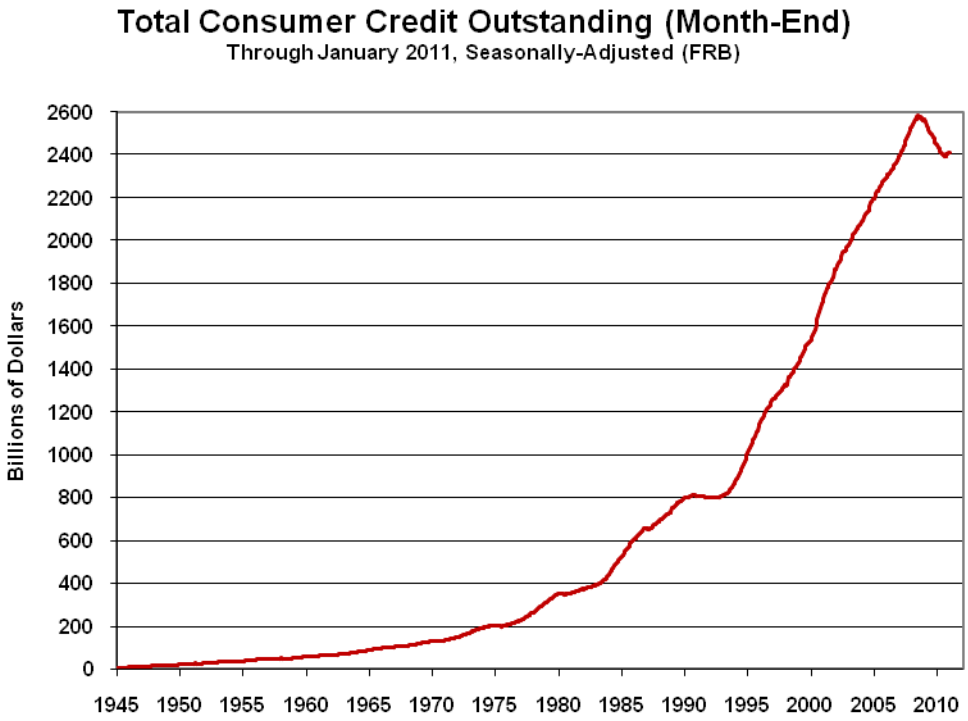
The income shortfalls experienced by many individuals and households—in terms of being able to maintain or to improve standards of living—often were met by consumer debt expansion. Such was encouraged by a Federal Reserve that recognized the U.S. economy would face stagnation or a slowdown without a surge in consumer credit.

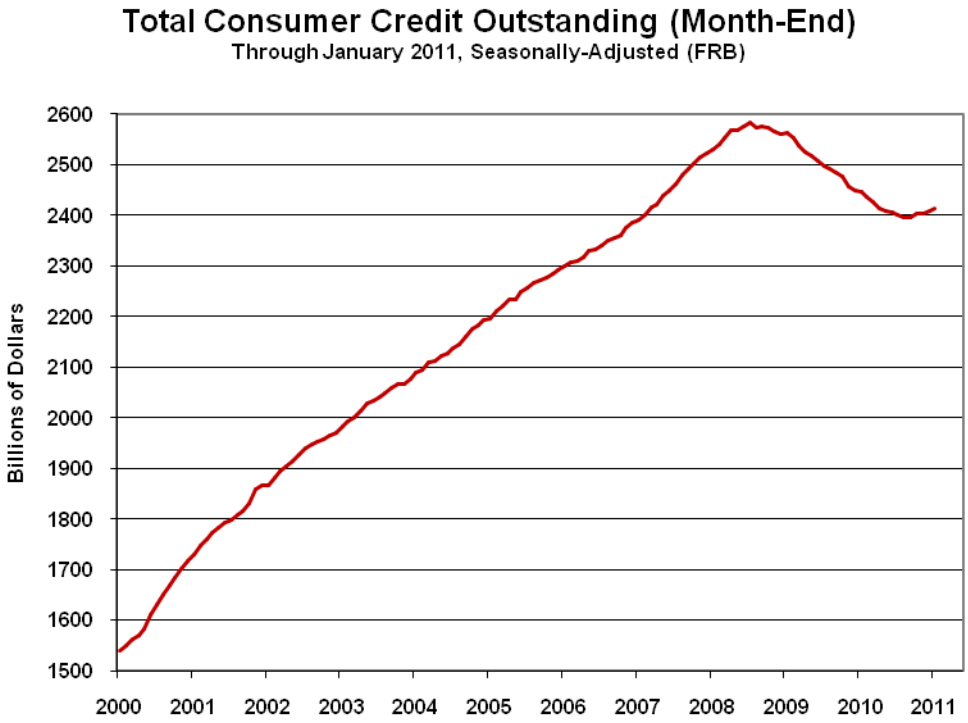
Keep in mind that the Federal Reserve is not a government entity, but rather a private corporation owned by private banking interests. Irrespective of federal government mandates that the Fed pursue polices to maintain stable economic growth and to contain inflation, the Fed's primary mission has been to protect the banking system, to keep that system solvent and profitable.

Explosive growth in the use of credit cards and the expansion of home equity loans as sources of consumer liquidity, fueled consumer liquidity, fueled consumer spending, gave consumers a false sense of financial security and helped banking-system profitability.

As housing activity began to fall off in 2006, and as the recession and the financial and bank solvency crises became apparent to authorities in 2007 and 2008, lending to consumers dried up by mid-2008. Impaired bank balance sheets limited banks' lending abilities. Income problems, which had been masked by excessive consumer debt growth, suddenly were exacerbated by collapsing credit.

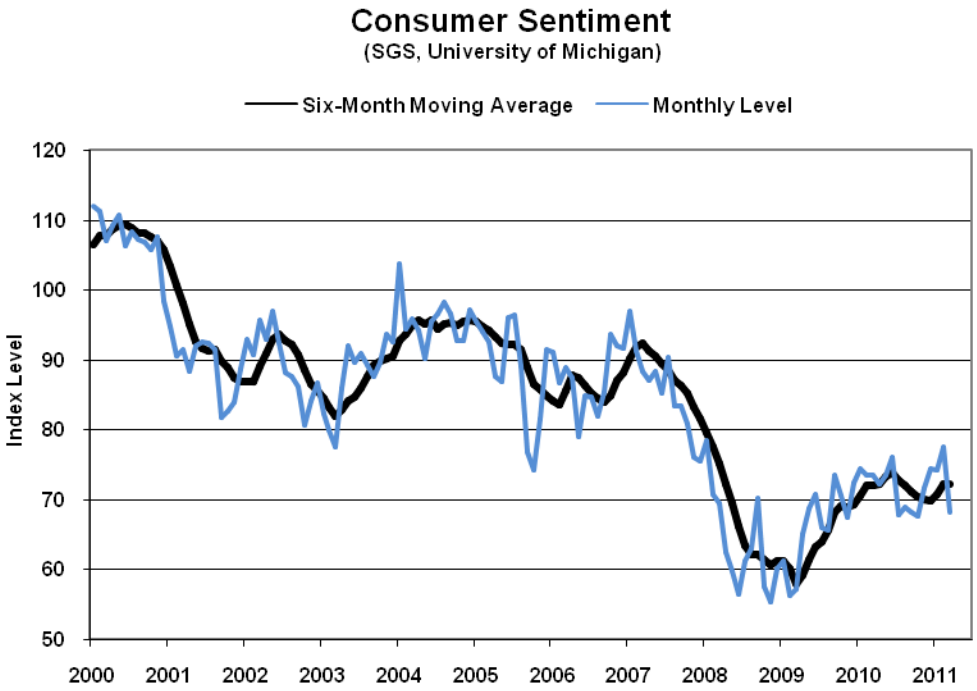
The following two graphs show total consumer credit outstanding (excluding mortgages). The first graph shows historical perspective since World War II; the second shows detail since 2000.


Total Consumer Credit Outstanding (Month-End)
Through January 2011, Seasonally-Adjusted (FRB)
Billions of Dollars
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010


Total Consumer Credit Outstanding (Month-End)
Through January 2011, Seasonally-Adjusted (FRB)
Billions of Dollars
2600
2500
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

In the first graph, it is visually obvious that the recent downturn in consumer credit was the most severe of the post-World War II era. In the second graph, the levels of consumer credit have followed the general pattern of the economy in the ongoing downturn, a plunge in activity followed by a period of bottom-bouncing. The recent slight gains in consumer credit are somewhat deceiving, in that they are accounted for more than fully by recent increases in federal lending for student loans. Otherwise, consumer credit still is contracting on a month-to-month basis.

Beyond having the income and/or credit, however, consumers also need the willingness to spend. There is something of surrogate measure for this willingness in the University of Michigan's Consumer Sentiment Index.



Though off the downturn's lows, the sentiment level not only still is recession territory, but also still is more than 30% below the levels seen in the halcyon days of the late-1990s, when debt excesses were not viewed by most as a particular problem. At present, consumers have neither the physical ability nor the willingness to prop up the U.S. economy in the manner to which the Federal Reserve and the big-deficit spenders in Washington, D.C. have become accustomed.

Neither the federal government nor the Federal Reserve can address easily the fundamental structural problems tied to consumer liquidity. Stimulus efforts have been limited to one-time or otherwise short-lived efforts to provide temporary boosts to consumer disposable income. Until income growth gains sustainably relative to inflation, and/or credit is flowing freely enough to boost willing consumption, there is no chance for sustained economic growth or economic recovery in the United States.

Markets Are Flying Blind with Distorted Economic Reporting

Seasonal-Factor Warping. A note of caution is offered here as to the quality of current and recent economic reporting. The significance of month-to-month data has been heavily impaired by the extraordinary severity of the current economic downturn, both in terms of duration and depth. Most modern economic reporting was put in place after World War II, designed to handle generally positive growth in the broad economy, with occasional downturns in the business cycle.

Reporting of month-to-month and quarter-to-quarter data usually were based on seasonal adjustments, where repetitive patterns tied to holiday, school year, etc. activity was removed statistically from the numbers, theoretically leaving patterns due to just shifting economic activity. Seasonal adjustments were based on patterns of activity over a number of years, with the most-recent year receiving the heaviest weighting. In recent years, key series such as nonfarm payrolls and retail sales have been reported using "concurrent" seasonal-factor adjustments, where the adjustments are recalculated each month, using the latest month's data.

When the seasonal factors are meaningful, they tend to remain stable over time, with little variation in the distribution of monthly patterns from the year-to-year or even month-to-month re-estimations. Extreme volatility of economic activity in the last several years has outweighed and distorted regular seasonal factor patterns. As result, annual and monthly recalculations of the seasonals have been showing highly unstable patterns, which, in turn, have thrown off the significance of reported monthly and quarterly changes, well beyond previously recognized reporting error confidence intervals. Greater detail and examples can be found in *SGS Commentaries* *No. 349* and *No. 355*.

Of particular concern with the "concurrent" adjustments made to payrolls and retail sales, for example, is that the monthly revisions from the unstable seasonal-factor recalculations have been significant. While those revisions effect data going back for years, the government only shows revisions to the last two months (with retail sales they also show the last two months from one year ago), freezing all the other data in place.

The problem in terms of analyzing these data is that reported monthly gains or losses often reflect no more than the unstable seasonal factors shifting activity patterns around during the year, not changes in economic activity. Those analyzing the numbers, though, cannot see what is happening. The historical data are inconsistent with the latest reporting, since the fully revised history simply is not published.

Year-to-Year Change Becomes Less Meaningful after the First Year of Ongoing Decline. In a normal business cycle, looking at year-to-year change is useful in terms of signaling shifting economic activity. In the current business cycle, though, where the severe plunge in activity went beyond one year and was followed by a period of bottom-bouncing, looking at the relative level of business activity may offer a clearer picture of current activity.

Other comparisons of period-to-period levels activity also lose some significance, such as seen with the purchasing managers series. Those series measure whether various indicators of business activity are up or down from the prior month. A generally up month in a period of bottom-bouncing can look as strong as an up month during an economic boom.

Loss of Survey Base Inflates Reported Activity / Distorts Rules of Thumb. In a deep and protracted downturn, companies go out business. If a company fails to report its payrolls, sales or orders, however,

the government generally assumes that the company still is active and estimates what that company should be reporting.

Also, economic activity has sunk to such low levels, that regular measures of change followed closely by the financial markets—such as new claims for unemployment insurance—are not signaling economic recovery, as they turn less negative. Some analysts look at historical patterns and conclude that when new claims drop below a certain level that the economy is improving. In the current circumstance, layoffs have been so severe that the universe of potential further layoffs has been meaningfully reduced. Under such circumstances, rules of thumb may not work well.

Corporate Revenues and Profits. Unusually severe economic times also can affect reported corporate performance. The current downturn has not hit all sectors or all companies with equal vigor, and, as often is the case, downturn and recovery will vary sharply across the commercial spectrum. Nonetheless, company financials are always worth a close look.

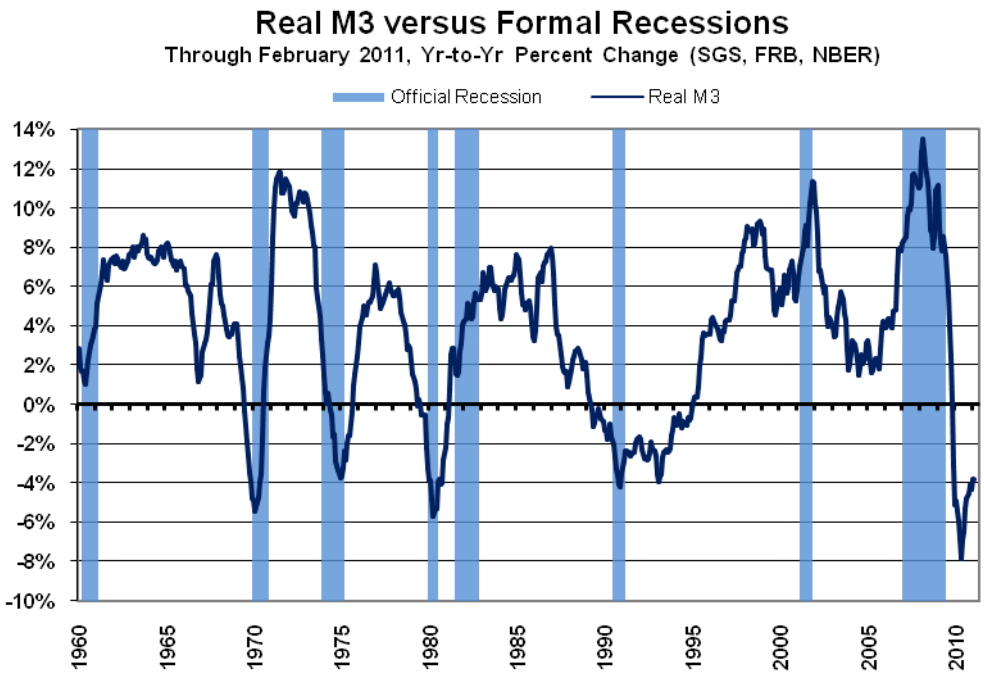
Publicly held corporations usually enjoy the flexibility and creativity needed to show strong financial results even when the economy is down; or least they can help guide market expectations in terms of earnings, etc. Creative accounting—often involving throwing future losses into one-time charges for downsizing or such—usually is well accepted by investors, even when that cutting of productive assets has gone beyond the fat, through the muscle and into the bone. Companies holding assets outside the U.S. dollar can boost their dollar-based picture, when the U.S. currency is under pressure. Further, against extremely weak prior-year profits or revenues, impressive year-to-year growth rates can help paint a happy picture for investors.

Already in Depression, Economy is Declining Anew as Inflation Spikes

Near-Term Economic Activity. As discussed in the regular *SGS Commentaries*, the U.S. economy remains in a structural recession/depression that is going to get a great deal worse. Due to the NBER calling a formal end to the 2007 recession, however, the ongoing difficulties here will be recognized as a double- or multiple-dip downturn. As will be discussed shortly, the contraction in business activity so far in the extreme downturn since 2006/2007 likely would qualify as a "depression" per SGS definitions (see *Recession, Depression and Great Depression*).

Shown in the next graph, inflation-adjusted, year-to-year change in broad money supply (M3) generates a reliable signal in advance of recessions, or, in the case where a recession already is underway (as in the 1973 and 2007 recessions), a pending intensification of the downturn. The lead time usually is six-to-nine months. Some recessions start without a money contraction, and upturns in money do not always lead economic upturns, but whenever real, broad systemic liquidity is in contraction, the economy always will follow. The downturn signal is generated when the inflation-adjusted annual money growth (which adjusted for the velocity of money is the theoretical equivalent of real GDP) first turns negative. (See *Inflation and Slowing/Contracting Money Growth*).

In the current circumstance, a downside signal was generated in December 2009. After protracted bottom-bouncing, the housing market appears to have turned down anew around September/October 2010. After major downside benchmark revisions, nonfarm payrolls and household employment have been bottom-bouncing and should show downside movement shortly. Recent gains in real retail sales and industrial production appear to be topping out.



One subscriber queried why I continued to use "bottom-bouncing" in my language describing series such as industrial production and retail sales, where activity levels have been increasing on average for some months. I keep using the term bottom-bouncing, because I believe that is what is happening, what the "upturns" will prove to be when the revised data are in, and what will be seen after a couple of months of further reporting.

If there were, or at such time as I believe there is, meaningful evidence of a turn in activity, I would not hesitate to indicate same. There just is nothing there, yet, within the reporting accuracy of the up series, or within the scope of underlying fundamentals, to suggest any meaningful move to the upside.

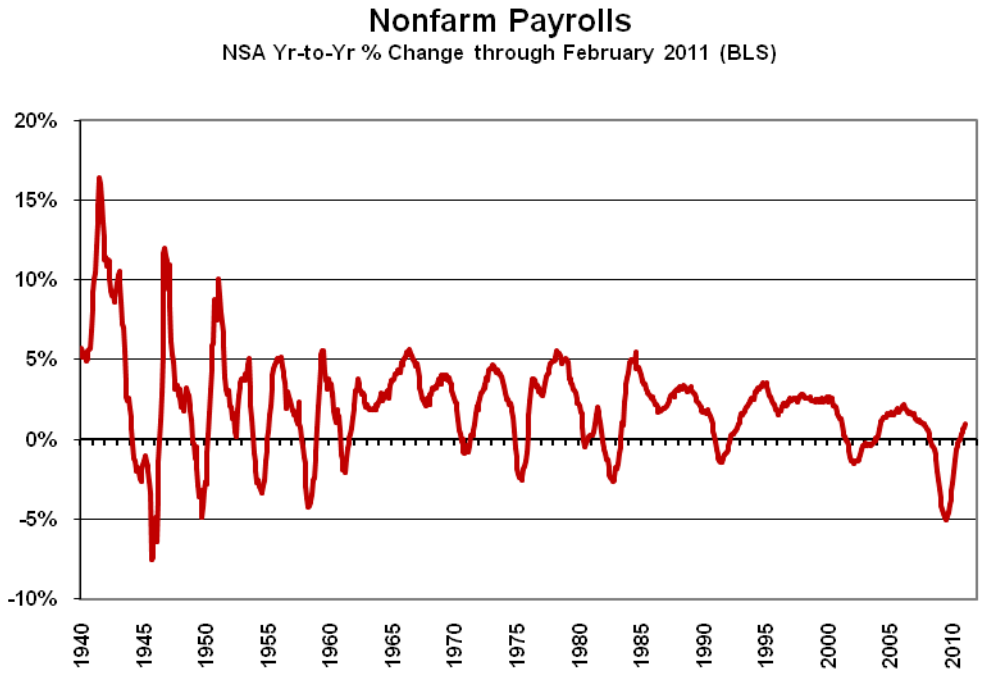
But for the reported improvement in the fourth-quarter trade deficit, fourth-quarter 2010 GDP would have shown an annualized real quarterly contraction of 0.56%, instead of the reported 2.79% gain. Based on the reporting of January 2011's trade deficit, however, deterioration in the first-quarter 2011 could offset fully the GDP impact from the trade gain seen in fourth-quarter 2010.

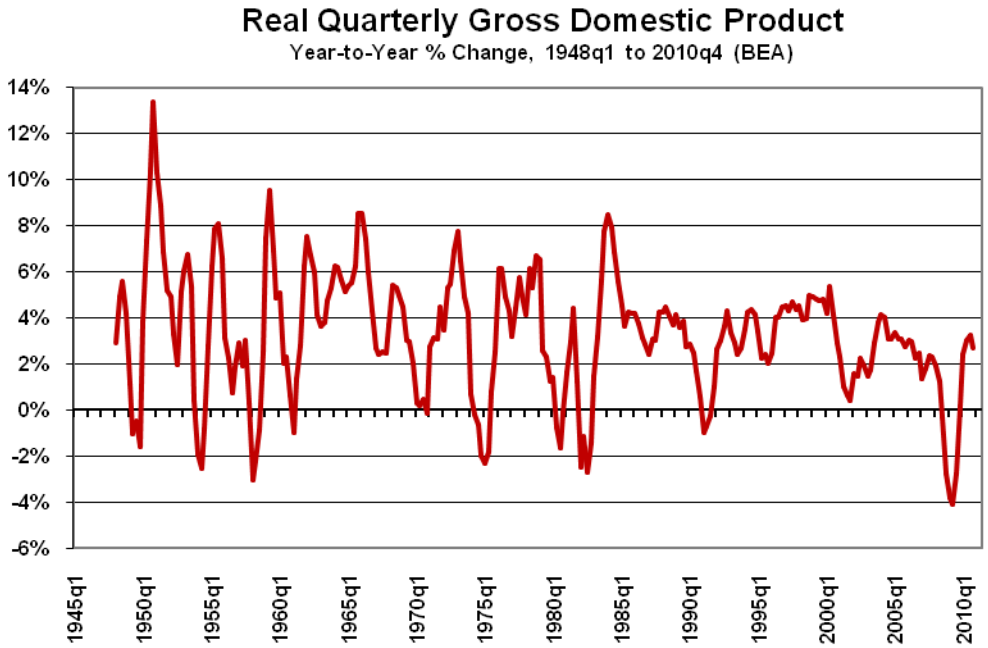
The GDP series has heavy upside biases built in to its reported growth, but with recent downside benchmark revision to payrolls, and with likely parallel downside revisions pending in industrial production on March 25th and retail sales on April 29th, the annual revisions to the GDP on July 29th should show that the GDP has been significantly weaker in recent years than indicated in current official estimates.

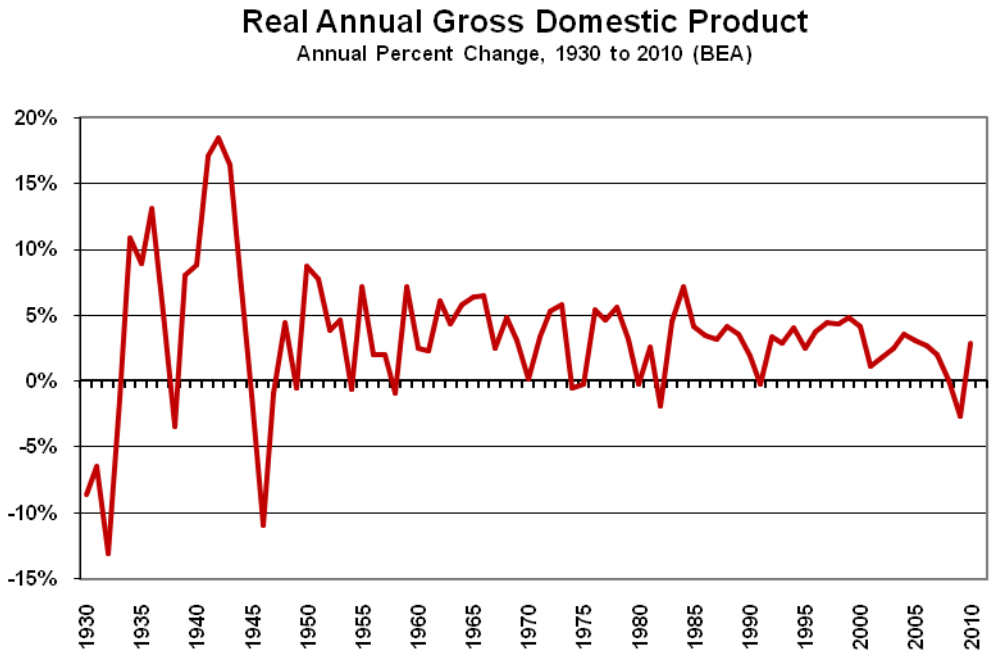
Historical Perspective on the Economic Data

Traditional Year-to-Year View. The current downturn, as reported, already is the longest and the deepest business contraction since the first downleg of the Great Depression in the early 1930s. Such is reflected in payroll employment and GDP growth plotted in the following graphs. The quarterly GDP numbers are available only back to 1947. If one counts the war-production shutdown at the end of World War II as a normal business cycle, then the current downturn is the deepest since then, but still

the longest since the early 1930s. The respective depths of the Great Depression and post-war production contractions are based on annual data available back to 1929.





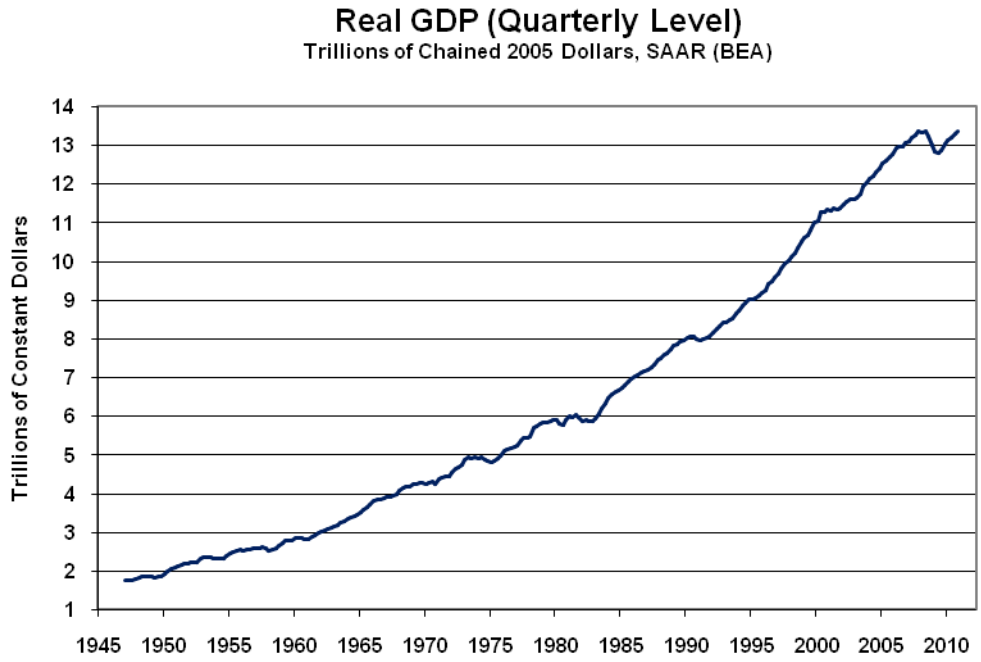


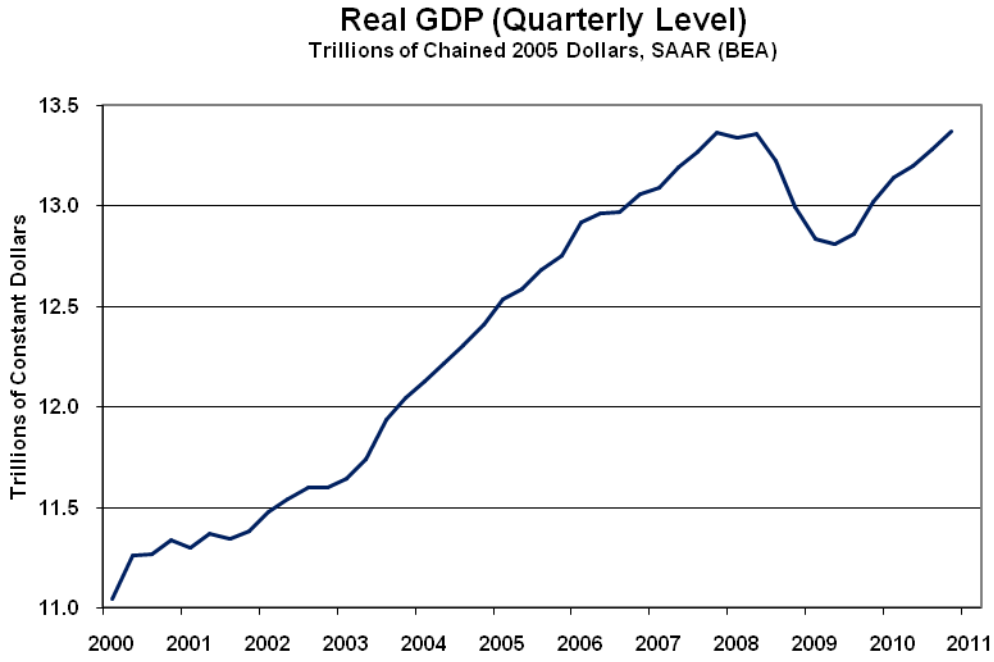
While the official peak-to-trough contraction in the downturn since fourth-quarter 2007 GDP is 4.1% (second-quarter 2009 trough), most of the better economic series are showing or have shown contractions that are more consistent with a peak-to-trough GDP contraction in excess of 10% (depression range), as indicated by payroll employment, retail sales and industrial production, while others such as housing starts showing contractions of greater than 25% (great-depression range).

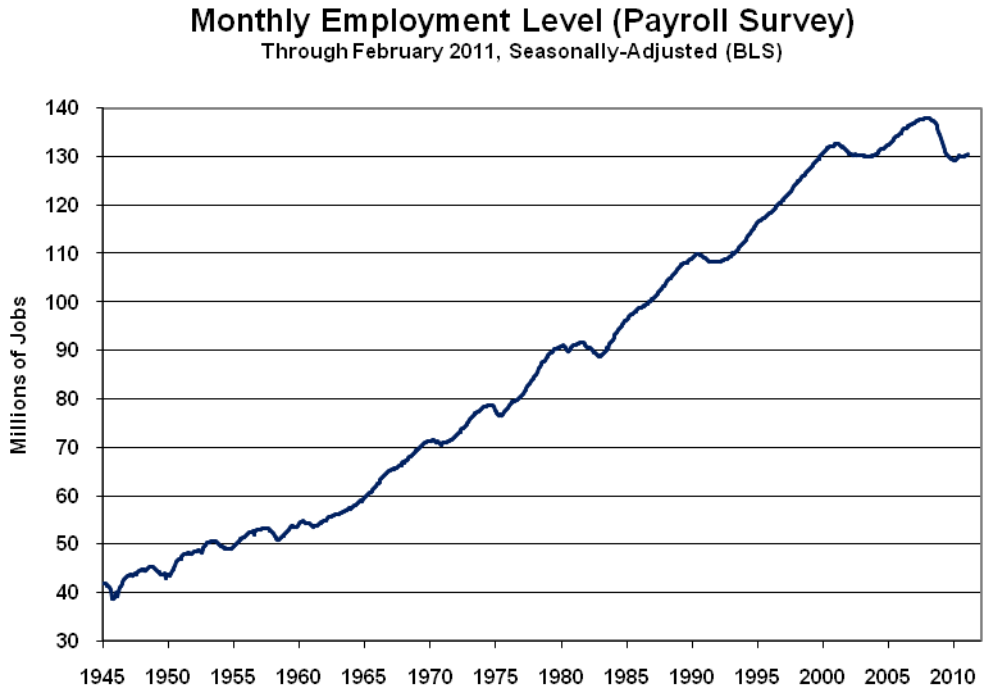
Historical Level of Activity. Following is series of six sets of graphs (two graphs per set) for key economic series: GDP, Payroll Survey Employment, Household Survey Employment, Real Retail Sales, Housing Starts and Industrial Production. In each set, the first graph plots the level of activity since World War II, and the second graph shows detail in the period since 2000.

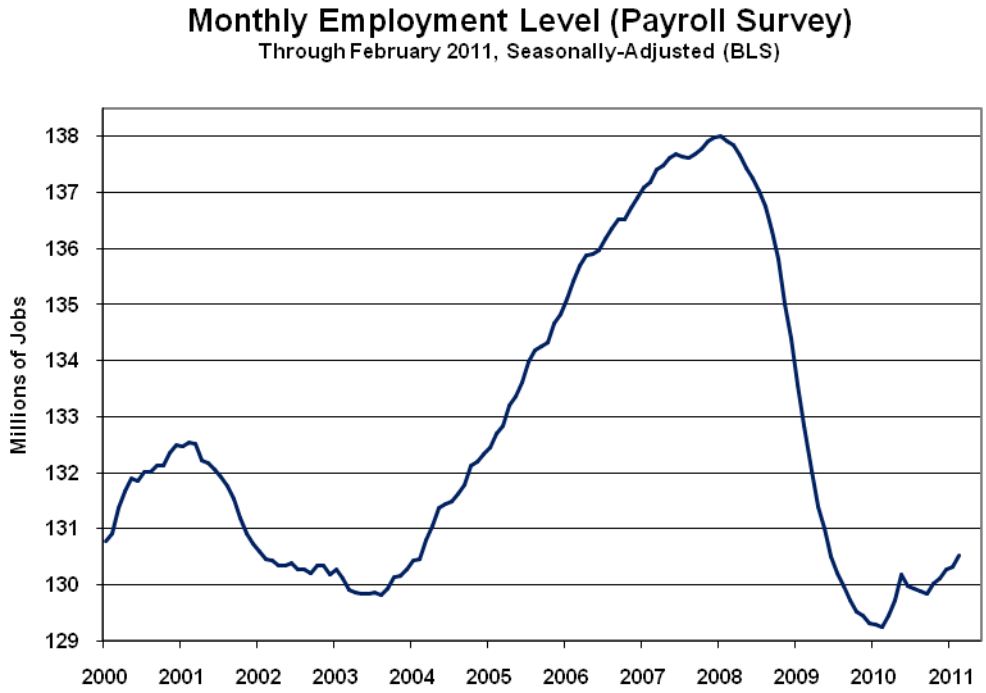
Per the official inflation-adjusted GDP reporting, the recent downturn was the most severe since World War II, but the fourth-quarter 2010 number shows the series having just recovered its pre-recession high. There is no other major series that shows that, which suggests major downside GDP revisions in the upcoming benchmark. Even with the "recoveries" seen in retail sales and industrial production (also subject to downside benchmark revisions), the best the underlying economic series are suggesting is that real GDP is still about 5% below its pre-recession peak, and that the peak-to-trough contraction was in excess of 10%.

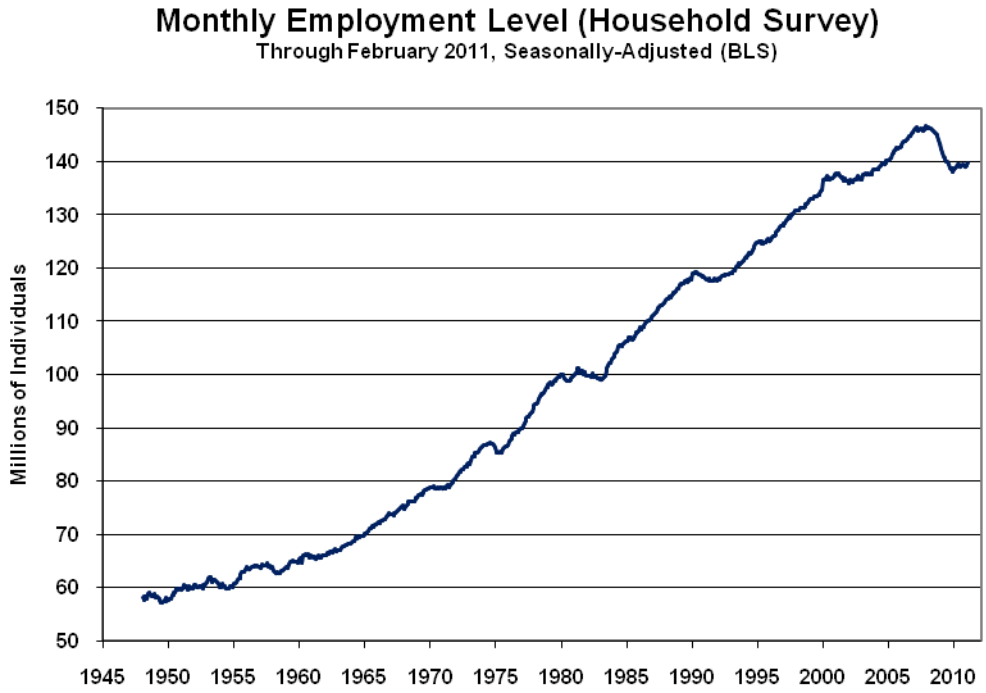
All underlying series show the current downturn to be the most severe one of the post-World War II era, and most of the series have bottom-bounced after their initial plunges. Payroll employment had a brief 2010 spike from the hiring of temporary census workers, and remains below levels of 10 years ago, despite 10% growth in the population in that period. Retail sales and industrial production show signs of topping out. All the underlying series suggest the downturn started before December 2007, with housing starts having started to decline in early-2006, leading into (not following) the financial crises.

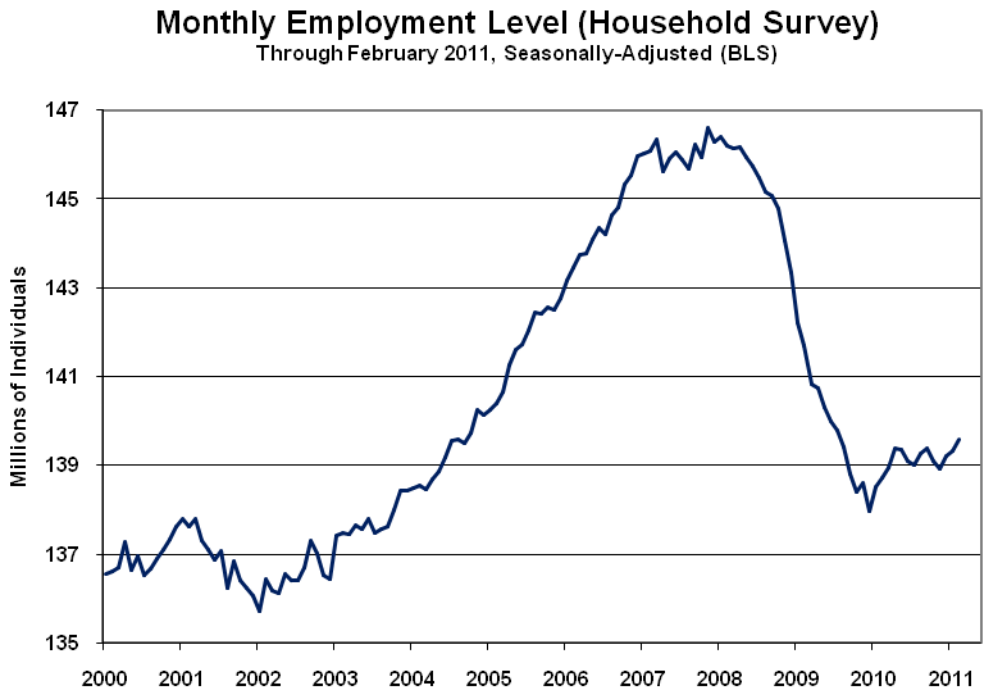

Real GDP (Quarterly Level)
Trillions of Chained 2005 Dollars, SAAR (BEA)
Trillions of Constant Dollars
14
13
12
11
10
9
8
7
6
5
4
3
2
1
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010

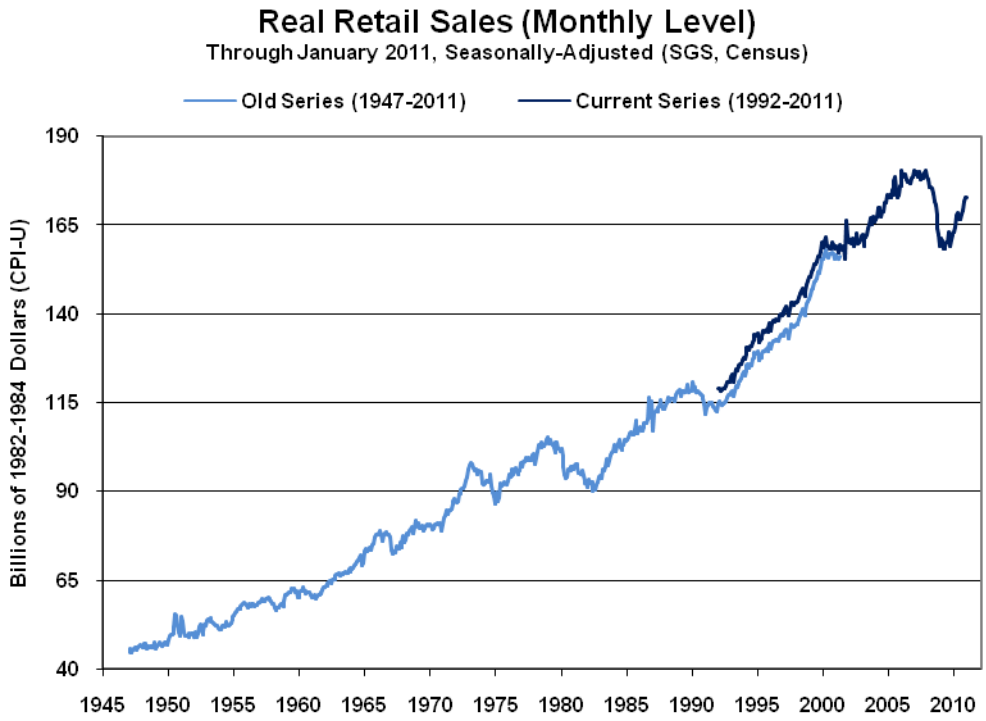

Real GDP (Quarterly Level)
Trillions of Chained 2005 Dollars, SAAR (BEA)
Trillions of Constant Dollars
13.5
13.0
12.5
12.0
11.5
11.0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

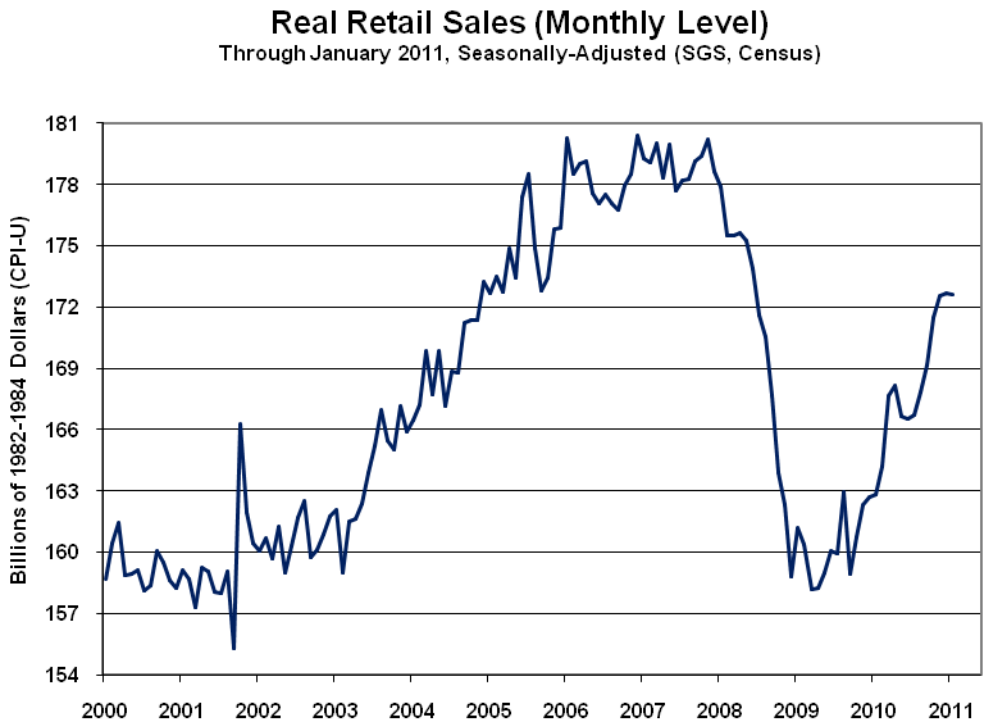

Monthly Employment Level (Payroll Survey)
Through February 2011, Seasonally-Adjusted (BLS)
Millions of Jobs
140
130
120
110
100
90
80
70
60
50
40
30
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010

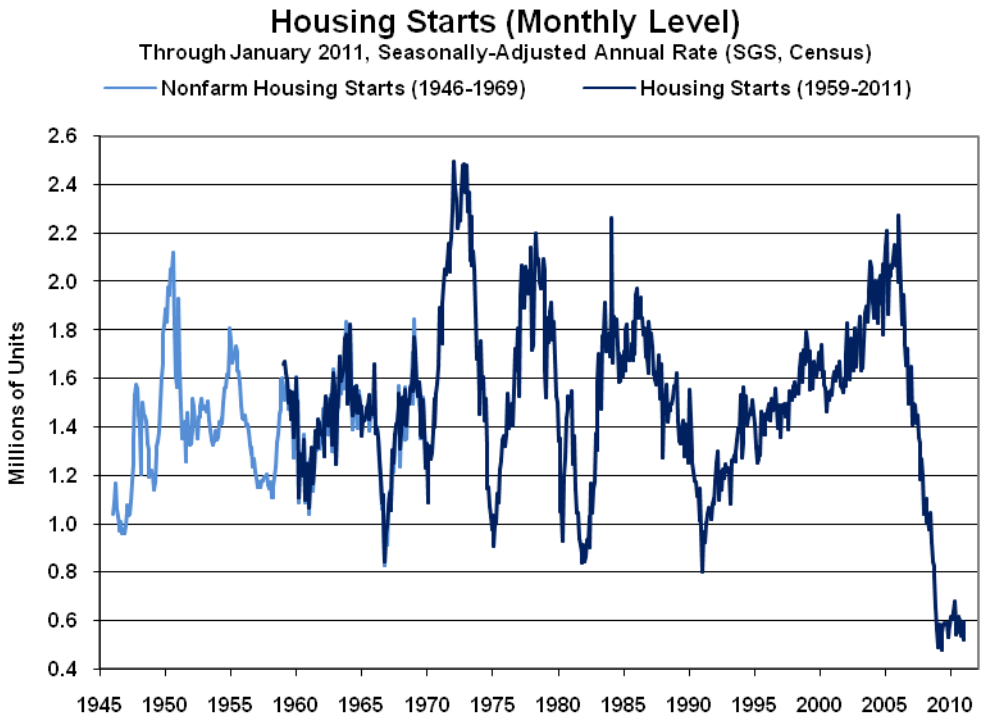

Monthly Employment Level (Payroll Survey)
Through February 2011, Seasonally-Adjusted (BLS)
Millions of Jobs
138
137
136
135
134
133
132
131
130
129
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

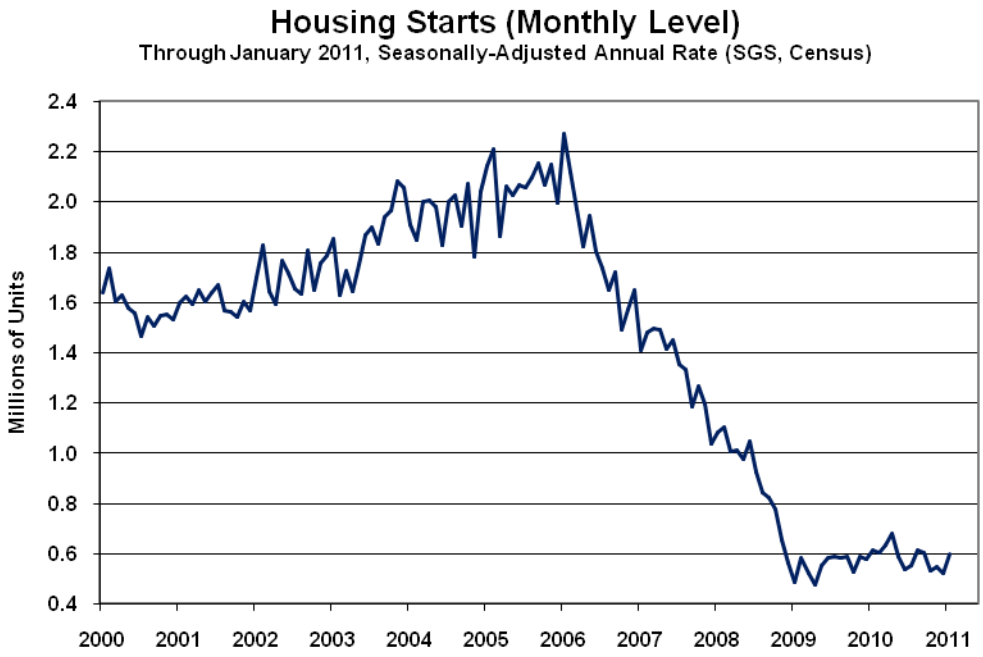

Monthly Employment Level (Household Survey)
Through February 2011, Seasonally-Adjusted (BLS)
Millions of Individuals
150
140
130
120
110
100
90
80
70
60
50
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010

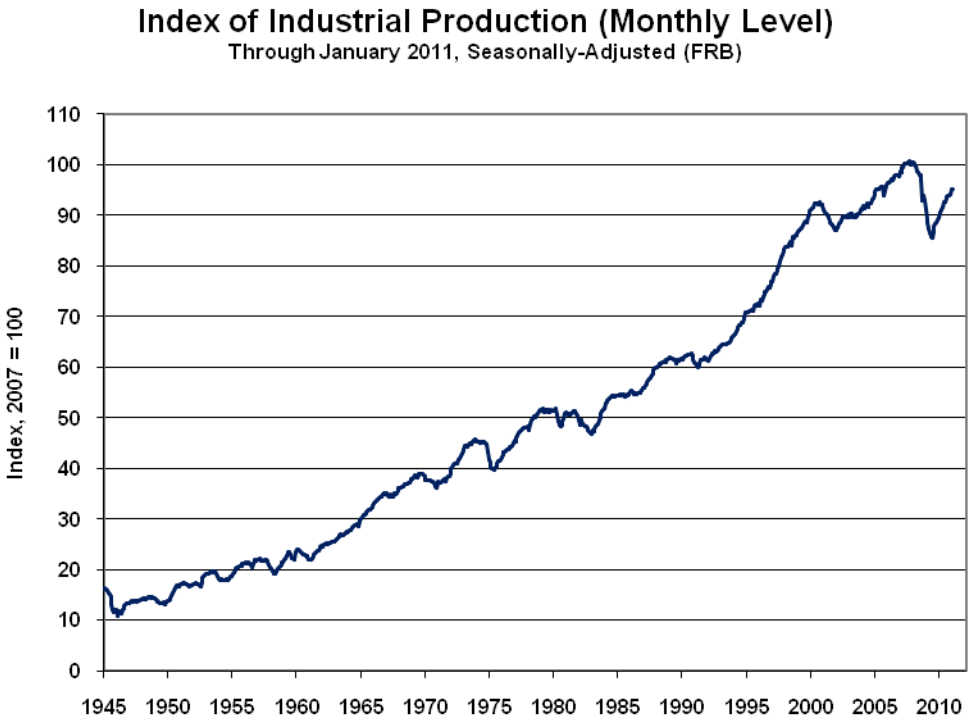

Monthly Employment Level (Household Survey)
Through February 2011, Seasonally-Adjusted (BLS)
Millions of Individuals
147
145
143
141
139
137
135
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011

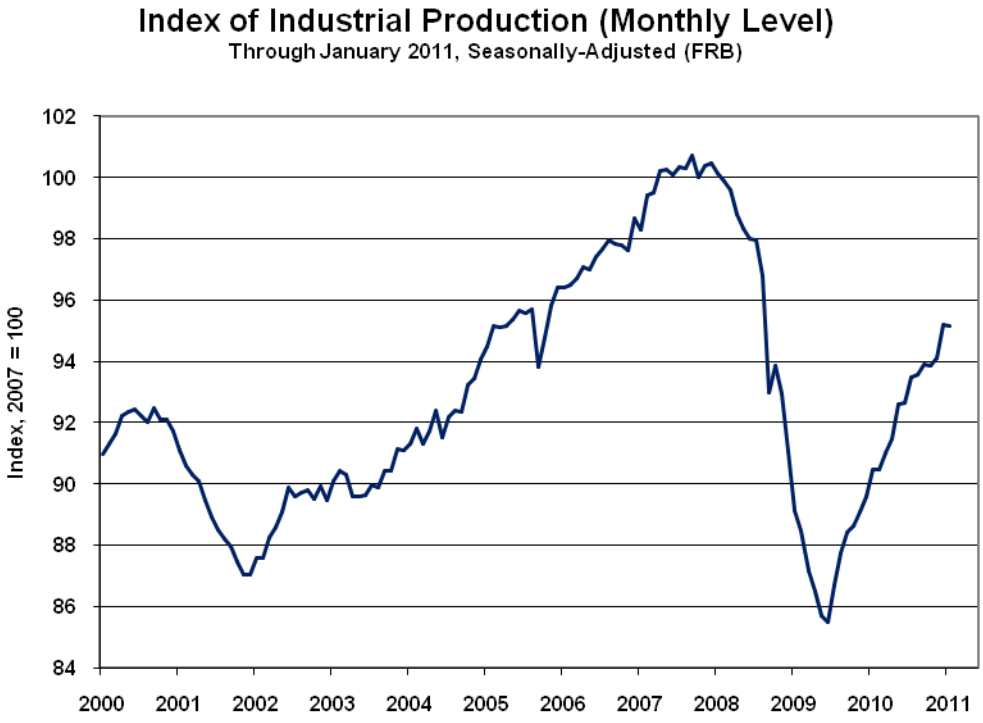

Real Retail Sales (Monthly Level)
Through January 2011, Seasonally-Adjusted (SGS, Census)
Old Series (1947-2011)
Current Series (1992-2011)
Billions of 1982-1984 Dollars (CPI-U)
190
165
140
115
90
65
40
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010


Real Retail Sales (Monthly Level)
Through January 2011, Seasonally-Adjusted (SGS, Census)
Billions of 1982-1984 Dollars (CPI-U)
181
178
175
172
169
166
163
160
157
154
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011


Housing Starts (Monthly Level)
Through January 2011, Seasonally-Adjusted Annual Rate (SGS, Census)
Nonfarm Housing Starts (1946-1969)
Housing Starts (1959-2011)
Millions of Units
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010


Housing Starts (Monthly Level)
Through January 2011, Seasonally-Adjusted Annual Rate (SGS, Census)
Millions of Units
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011


Index of Industrial Production (Monthly Level)
Through January 2011, Seasonally-Adjusted (FRB)
Index, 2007 = 100
110
100
90
80
70
60
50
40
30
20
10
0
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010


Index of Industrial Production (Monthly Level)
Through January 2011, Seasonally-Adjusted (FRB)
Index, 2007 = 100
102
100
98
96
94
92
90
88
86
84
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Political Considerations

What lies ahead for the economy and inflation will have significant impact on the U.S. political process, as recent economic woes did on the 2010 mid-term election. Historically, the concerns of the electorate have been dominated by pocketbook issues. Prior to gimmicked methodologies making the reporting of disposable personal income largely meaningless, that measure was an excellent predictor of presidential elections.

In every presidential race since 1908, in which consistent, real (inflation-adjusted) annual disposable income growth was above 3.3%, the incumbent party holding the White House won every time. When income growth was below 3.3%, the incumbent party lost every time. Again, with redefinitions to the national income accounts in the last two decades, a consistent measure of disposable income as reported by the government has disappeared. Yet, even with the upside biases in official reporting, 2010 annual growth in real disposable income was 3.1%, below the traditional 3.3% limit. The mid-term election results would suggest that the actual growth number was somewhat less.

As was suggested would be the case in the 2008 report, the economy contributed to the Republicans losing the White House in 2008. In the 2010 report, it was suggested that, "Present economic conditions are bleak enough to impair re-election prospects severely for incumbents in the 2010 mid-term election."

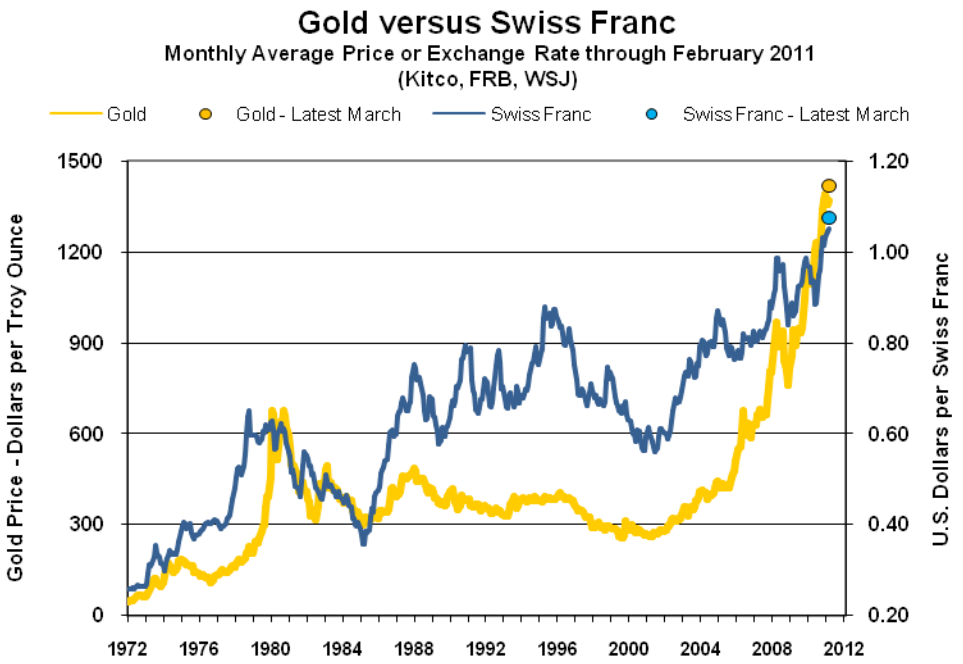
A wide variety of possibilities would follow or coincide politically with a hyperinflationary great depression, but the political status quo likely would not continue. Times would be financially painful enough to encourage the development of a third party that could move the Republicans or Democrats to third-party status in the 2012 presidential and congressional elections.

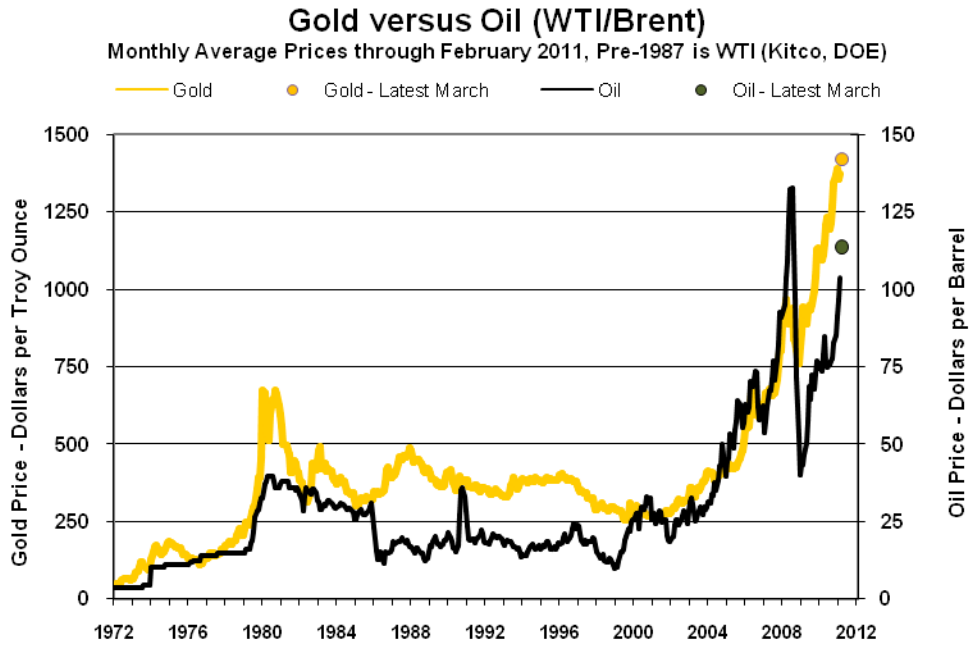
Where I always endeavor to keep my political persuasions separate from my analyses, for purposes of full disclosure, my background is as a conservative Republican with a libertarian bent.

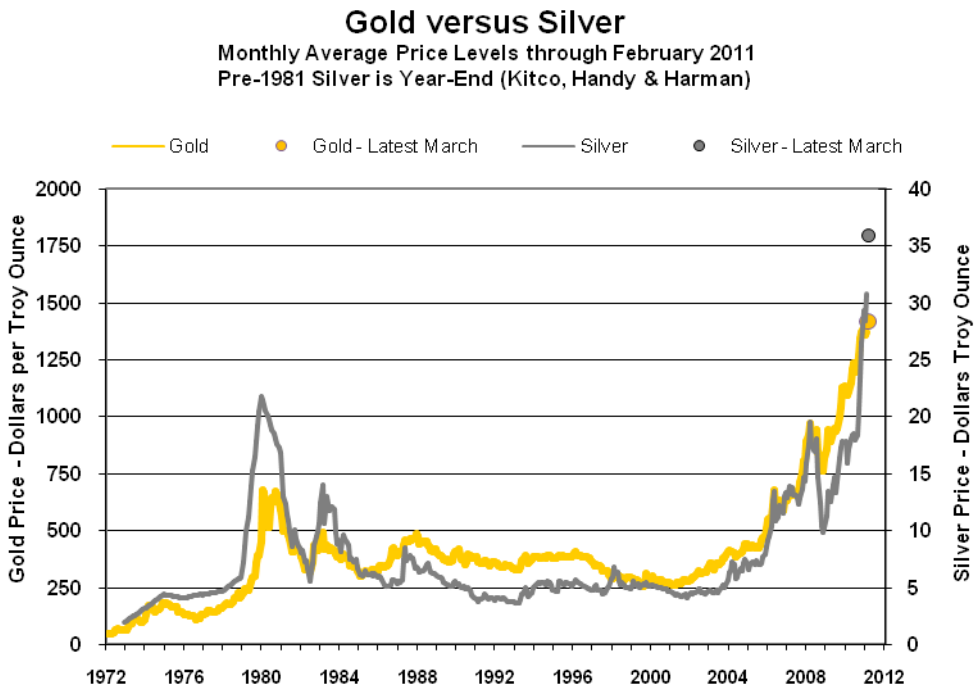
Early Impact of Dollar Debasement

Inflationary pressures have started to surface from the Fed's efforts at dollar debasement. A weakening U.S. dollar has placed upside pressure on dollar-denominated oil prices and other dollar-denominated commodity prices, including food, which in turn have begun pushing annual inflation higher. This is not inflation generated by strong economic demand, but rather inflation driven by the Federal Reserve's monetary efforts to weaken the dollar. While global supply problems or concerns also have affected food and energy commodity prices, movements against the dollar seem to be the primary moving force behind the spiked dollar prices, at present.

Shown in the next three graphs are powerful fundamentals that either drive U.S. inflation or reflect market expectations of the longer-term domestic inflation outlook. The currency, oil and gold markets have seen extreme volatility in the last couple of years, and they likely will continue to be volatile in the year ahead. Reflecting the inflationary pressures from a weaker dollar and higher oil prices, ongoing solvency issues for the United States, and continued dollar debasement efforts by the Federal Reserve—including the apparent recent loss of the U.S. dollar's traditional safe-haven stats—the Swiss franc, gold and silver have hit historic or multi-decade (silver) highs in early-March 2011.


Gold versus Swiss Franc
Monthly Average Price or Exchange Rate through February 2011
(Kitco, FRB, WSJ)
Gold
Gold - Latest March
Swiss Franc
Swiss Franc - Latest March
Gold Price - Dollars per Troy Ounce
U.S. Dollars per Swiss Franc
1500
1200
900
600
300
0
1.20
1.00
0.80
0.60
0.40
0.20
1972
1976
1980
1984
1988
1992
1996
2000
2004
2008
2012


Gold versus Oil (WTI/Brent)
Monthly Average Prices through February 2011, Pre-1987 is WTI (Kitco, DOE)
Gold
Gold - Latest March
Oil
Oil - Latest March
Gold Price - Dollars per Troy Ounce
Oil Price - Dollars per Barrel
1500
1250
1000
750
500
250
0
150
125
100
75
50
25
0
1972
1976
1980
1984
1988
1992
1996
2000
2004
2008
2012


Gold versus Silver
Monthly Average Price Levels through February 2011
Pre-1981 Silver is Year-End (Kitco, Handy & Harman)
Gold
Gold - Latest March
Silver
Silver - Latest March
Gold Price - Dollars per Troy Ounce
Silver Price - Dollars Troy Ounce
2000
1750
1500
1250
1000
750
500
250
0
40
35
30
25
20
15
10
5
0
1972
1976
1980
1984
1988
1992
1996
2000
2004
2008
2012

Section 5—Historical U.S. Inflation: Why Hyperinflation Instead of Deflation

Fire and Ice

Some say the world will end in fire,
Some say in ice.
From what I've tasted of desire
I hold with those who favor fire.
But if it had to perish twice,
I think I know enough of hate
To say that for destruction ice
Is also great
And would suffice.

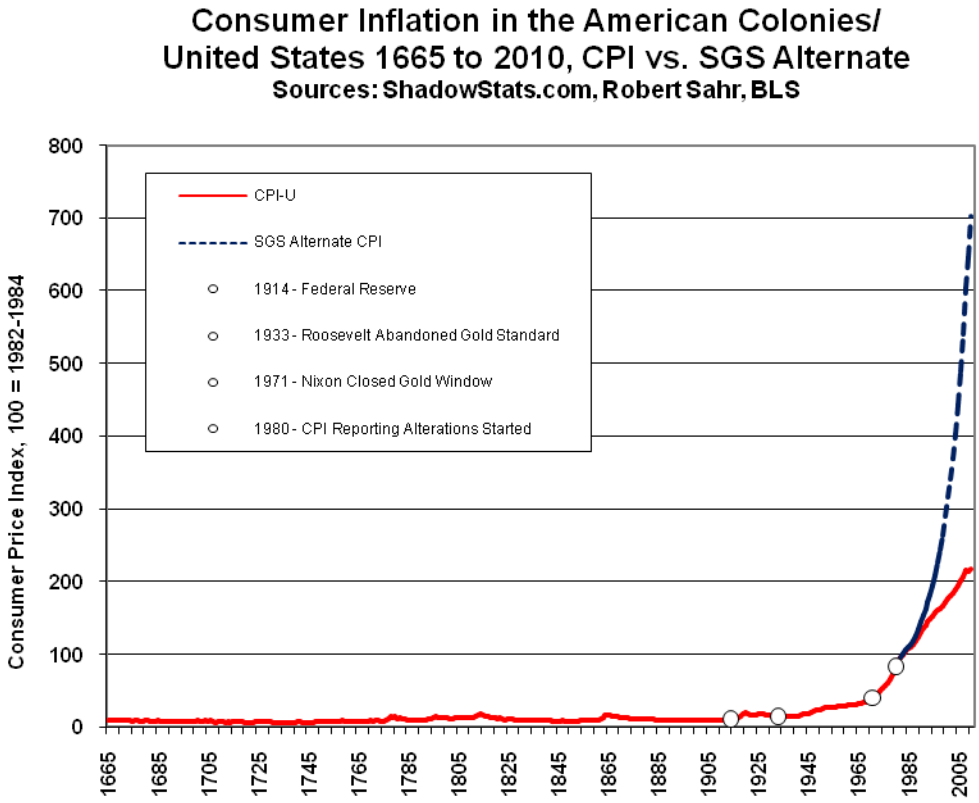
– Robert Frost

As to the fate of the developing U.S. great depression, it will encompass the fire of a hyperinflation, instead of the ice of deflation seen in the major U.S. depressions prior to World War II. What promises hyperinflation this time is the lack of monetary discipline formerly imposed on the system by the gold standard; a fiscally bankrupt federal government; and a Federal Reserve dedicated to debasing the U.S. dollar.

Both the federal government and the Federal Reserve have demonstrated that they will not tolerate a systemic collapse and a great deflation, as seen during the Great Depression. As discussed in *Section 6—Federal Reserve, the Money Supply and Fighting Deflation*, those risks are being fought, and will be fought, at any cost that can be covered by the unlimited creation of new money. It was a devil's choice, but the choice has been made. Extreme systemic interventions, and formal measures to debase the U.S. dollar through the effective unlimited creation of money to cover systemic needs and the government's obligations, pushed the timing of a systemic collapse—threatened in September 2008—several years into the future. The cost of instant salvation, though, was inflation. Eventual systemic collapse is unavoidable at this point, but it will be in a hyperinflationary great depression, instead of a deflationary one.

Putting the current environment in historical perspective, the following two graphs measure the level of consumer prices since 1665 in the American Colonies and later the United States. The first graph shows what appears to be a fairly stable level of prices up to the founding of the Federal Reserve in 1913 (began activity in 1914) and to Franklin Roosevelt's abandoning of the gold standard in 1933. Then, inflation takes off in a manner not seen in the prior 250 years, and at an exponential rate when viewed using the SGS-Alternate Measure of Consumer Prices in the last several decades. The price levels shown prior to 1913 were constructed by Robert Sahr of Oregon State University. Price levels since 1913 either are Bureau of Labor Statistics (BLS) or SGS-based, as indicated.

The magnitude of the increase in price levels in the last 50 years or so, however, visually masks the inflation volatility of the earlier years. That early volatility becomes evident in the second graph, where the CPI history is plotted using a logarithmic scale. Seeing such detail is a particular benefit of using such a plot, although the full scope of what is happening may be lost to those not used to thinking log-based.

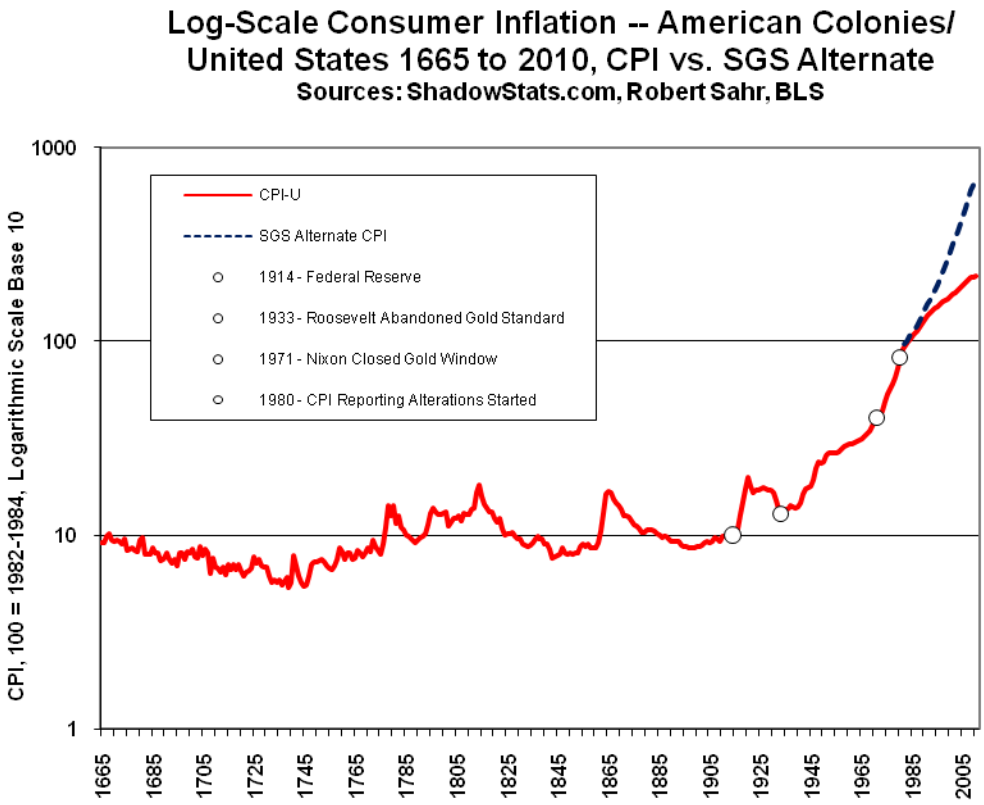


The logarithmic scale was used here at reader request. The pattern of the rising CPI level, however, still looks rather frightening even in the modified form. Further, since inflation ideally is something that is flat over time—not compounding like the population and related series that grow with it—I do not have any issue with using a non-log scale for the visual impact of what is happening.

Persistent year-to-year inflation (and the related compounding effect) did not take hold until post-Franklin D. Roosevelt. Additionally, the CPI level reflects purchasing power lost over time for those holding dollars, which is cumulative, and which has reached extremes (as will be discussed shortly) due to the late-era compounding effect. If my assessment is correct on where this is headed, the log-based graph shortly will look like the arithmetic-based graph, as was seen the latter months of the Weimar circumstance and as shown in the *Weimar Republic* section.

Indicated by the newly visible detail in the second graph are the regular periods of inflation—usually seen around wars—offset by periods of deflation, up through the Great Depression. Particular inflation spikes can be seen at the time of the American Revolution, the War of 1812, the Civil War, World War I and World War II (which lacked an ensuing, offsetting deflation). As result, consumer prices at the time

of the Fed's founding in 1913 were about the same as they had been in New Amsterdam (today's New York City) in 1665.



The inflation peaks and the ensuing post-war depressions and deflationary periods, tied to the War of 1812, the Civil War and World War I, show close to 60-year cycles, which is part of the reason some economists and analysts have been expecting a deflationary depression in the current period. There is some reason behind 30- and 60-year financial and business cycles, as the average difference in generations in the United States is 30 years, going back to the 1600s. Accordingly, it seems to take two generations to forget and repeat the mistakes of one's grandparents. Similar reasoning accounts for other cycles that tend to run in multiples of 30 years.

Allowing for minor, average-annual price-level declines in 1949, 1955 and 2009, the United States has not seen a major deflationary period in consumer prices since before World War II. The reason for this is the same as to why there has not been a formal depression since before World War II: the abandonment of the gold standard and recognition by the Federal Reserve of the impact of monetary policy—free of gold-standard system restraints—on the economy.

The gold standard was a system that automatically imposed and maintained monetary discipline. Excesses in one period would be followed by a flight of gold from the system and a resulting contraction in the money supply, economic activity and prices.

Faced with the Great Depression, and unable to stimulate the economy, partially due to the monetary discipline imposed by the gold standard, Franklin Roosevelt used those issues as an excuse to abandon gold and to adopt close to a fully-fiat currency under the auspices of what I call the debt standard, where the government effectively could print and spend whatever money it wanted to create.

Roosevelt's actions were against the backdrop of the banking system being in a state of collapse. The Fed stood by twiddling its thumbs as banks failed and the money supply imploded. A depression collapsed into the Great Depression, with intensified price deflation. Importantly, a sharp decline in broad money supply is a prerequisite to significant goods and services price deflation. Messrs Greenspan and Bernanke are students of the Great Depression period. As did Mr. Greenspan before him, "Helicopter Ben" has vowed not to allow a repeat of the 1930s money supply collapse.

Where the Franklin Roosevelt Administration abandoned the gold standard and its financial discipline for the debt standard, twelve successive administrations have pushed the debt standard to the limits of its viability, as seen now in the continuing threat of systemic collapse. At present, it is the Obama Administration that has to look at abandoning the debt standard (hyperinflation) and starting fresh. Yet, the Administration and many in Congress have taken recent actions suggestive of hoping only to push off the day of reckoning for the economic and systemic solvency crises until after the 2012 presidential election. They do not have that time.

The effect of the post-Roosevelt policies has been a slow-motion destruction of the U.S. dollar's purchasing power, per the accompanying table, since the gold standard was abandoned in 1933. The magnitude of purchasing power lost over the decades can be lost again in a matter of weeks or months.

Loss of U.S. Dollar Purchasing Power

Through February 2011

	Since January of		
Versus	**1914**	**1933**	**1970**
Swiss Franc	**-81.4%**	**-81.4%**	**-77.3%**
CPI-U	**-95.5%**	**-94.2%**	**-83.0%**
Gold	**-98.6%**	**-98.6%**	**-95.5%**
SGS-Alternate CPI	**-98.7%**	**-98.3%**	**-95.0%**

Please note in the above table that gold and the Swiss franc were held constant by the gold standard versus coins in 1914 and 1933. The data are from the Federal Reserve Board, Bureau of Labor Statistics and from SGS data and calculations. The magnitude of the loss in the U.S. dollar's purchasing in the span of almost one century could be repeated in the span of less than 12 months starting in the next year or two. Again, fiscal and monetary malfeasance by the federal government and the Federal Reserve are to blame.

Section 6—Federal Reserve, the Money Supply and Fighting Deflation

The Fed's recent efforts at liquefying the system have been extreme, yet broad liquidity generally has been in monthly and annual decline. Where the Fed's systemic actions have generated temporary apparent systemic stability, the continued weakening annual growth in the broad money supply, and continued extreme Fed efforts at systemic liquefaction, suggest that the systemic solvency crisis is far from over. The extraordinary formal efforts by the Federal Reserve to debase the U.S. dollar, however, have started to boost consumer inflation. The event of the Fed actually pushing this policy into full force is an indication of panic on the part of the U.S. central bank and likely a measure of how close Mr. Bernanke believes the United States still is to a systemic collapse.

"Helicopter Ben" on Preventing Deflation

Federal Reserve Chairman Ben Bernanke picked up his various helicopter nicknames and references as the result of a November 21, 2002 speech he gave as a Fed Governor to the National Economists Club entitled *Deflation: Making Sure 'It' Doesn't Happen Here*. The phrase that the now-Fed Chairman Bernanke likely wishes he had not used was a reference to "Milton Friedman's famous 'helicopter drop' of money."

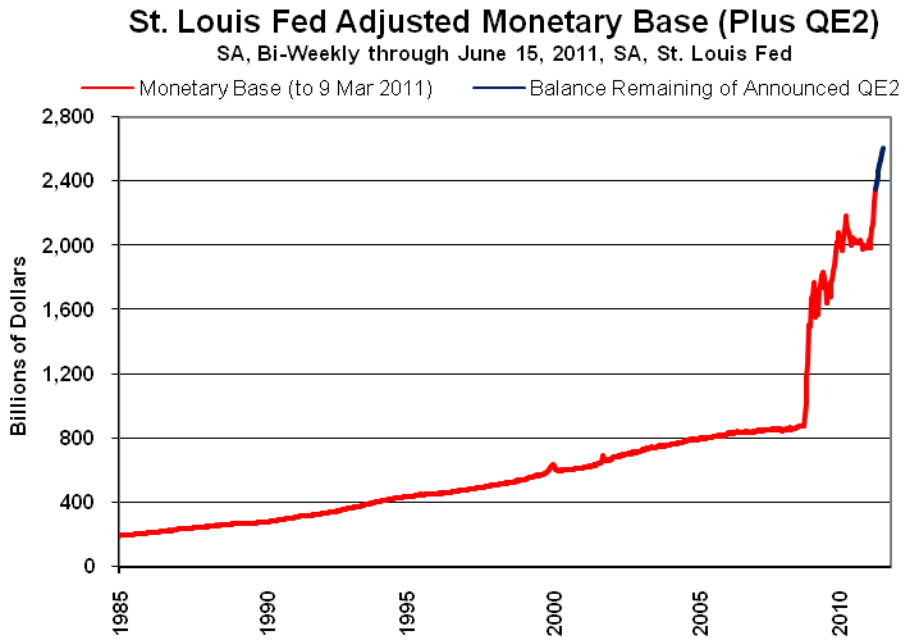
Attempting to counter concerns of another Great Depression-style deflation, Bernanke explained in his remarks: "I am confident that the Fed would take whatever means necessary to prevent significant deflation in the United States …"

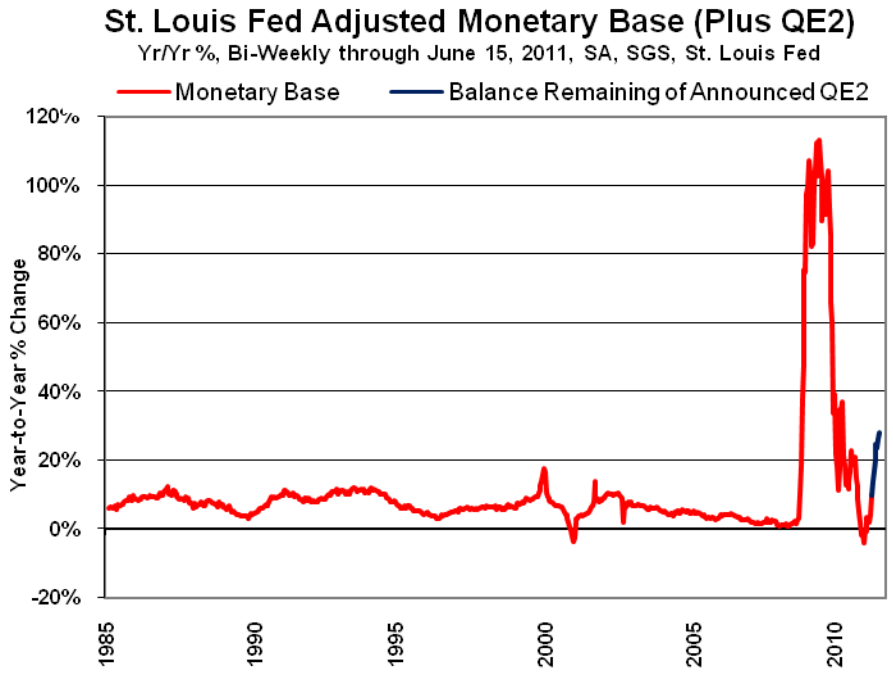
As expounded upon by Bernanke, "Indeed, under a fiat (that is, paper) money system, a government (in practice, the central bank in cooperation with other agencies) should always be able to generate increased nominal spending and inflation, even when the short-term nominal interest rate is at zero."

"Like gold, U.S. dollars have value only to the extent that they are strictly limited in supply. But the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost. By increasing the number of U.S. dollars in circulation, or even by credibly threatening to do so, the U.S. government can also reduce the value of a dollar in terms of goods and services, which is equivalent to raising the prices in dollars of those goods and services. We conclude that, under a paper-money system, a determined government can always generate higher spending and hence positive inflation." The full text of then-Fed Governor Bernanke's remarks can be found at: http://federalreserve.gov/boarddocs/speeches/2002/20021121/default.htm.

Faced with extreme risk of systemic collapse in the wake of the Lehman failure, Bernanke launched his first round of anti-deflation actions back in 2008, but they did not work fully as advertised. While the systemic solvency crisis had been contained at least temporarily in key areas, and depositor funds did not suffer heavy losses, the broad money supply began to decline month-to-month in June of 2009 and turned down year-to-year in December 2009. The deepest annual M3 decline seen so far in this crisis was 6.0% in June 2010. Although that was the worst decline in broad money since the great Depression, it still was not deep enough to generate a 1930s-style great deflation. In contrast, the great deflation

reflected roughly a one-third contraction in money supply from bank failures and loss of depositor money.





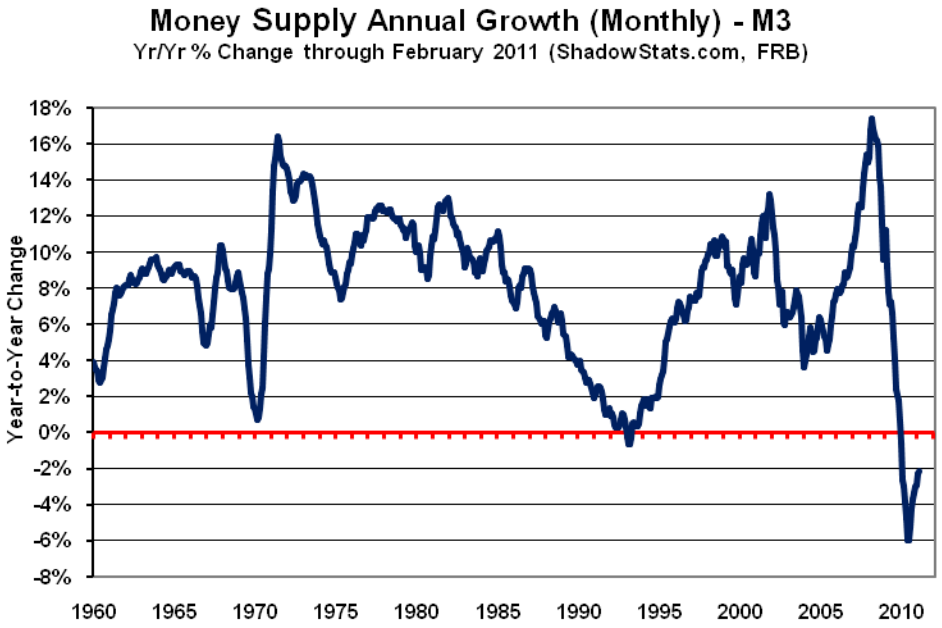
Back in September 2008, the Fed started dropping cash from helicopters, as shown in the graphs of the monetary base. The process was repeated with the introduction of QE2 in November 2010, with the Fed monetizing Treasury debt (see the graphic in *Background*).

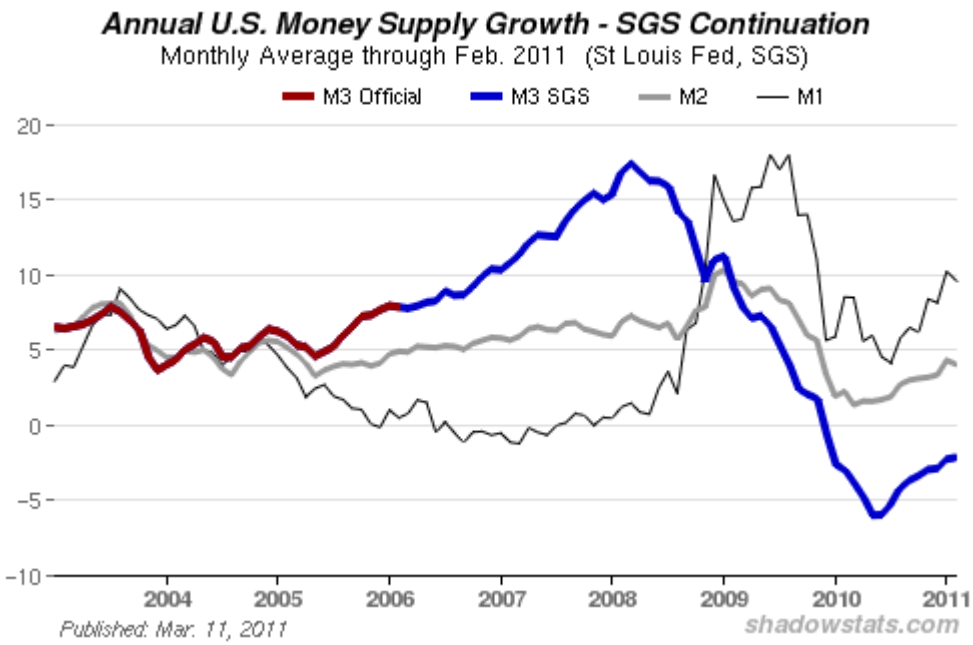
As shown in the two graphs of level and year-to-year change, Bernanke's spiking of the monetary base has been extraordinary and without precedent. The Fed's renewed panic with QE2 has started a new spike in the monetary base that currently is setting successive record levels. Despite the active fleet of choppers, though, systemic liquidity and solvency remain in deep trouble.

The monetary base remains the Federal Reserve's primary tool for impacting money supply growth. As has been the case for the bulk of the extraordinary expansion of the monetary base since late-August 2008—an increase of 169%—the monetary base growth has not been reflected meaningfully in money supply growth, unless it has been holding off even greater money contraction.

Fundamentally, banks are placing high levels of excess reserves with the Fed, instead of lending the funds into the normal flow of commerce. As a result, bank lending is down, and small businesses and consumers are experiencing a horrific liquidity squeeze. This pattern continues despite the Fed's QE2 buying of Treasury securities.

The monetary base is not part of the money supply; it consists of currency (as in M1) plus bank reserves. If the banks were lending normally, M1 and the broader measures would be growing. The ratio of M1 to the monetary base, the monetary base multiplier simply is not a meaningful measure under this circumstance.





The SGS-Ongoing M3 estimate (the Fed abandoned reporting its broadest money supply measure, M3, back in March 2006) has been contracting year-to-year since December 2009, with annual growth slowing as shown in the M3 graph. Inflation-adjusted annual M3 growth also turned negative year-to-year in December 2009, a leading indicator to an economic downturn in normal times, and a signal of a significant turn for the worse in the current, severe economic contraction (see *Already in Depression, Economy is Declining Anew as Inflation Spikes*).

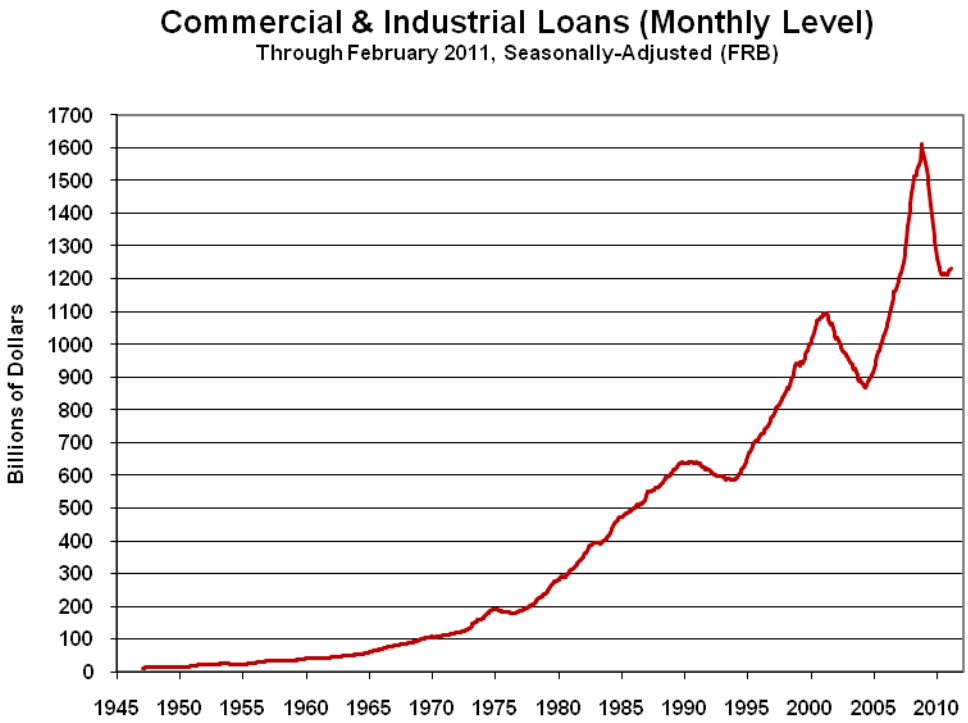
Banks Not Increasing Lending into the Regular Flow of Commerce

As shown previously in *Structural Consumer Liquidity Problems*, consumer credit outstanding has been in historic contraction, intensifying liquidity constraints on consumers and exacerbating the structural problems with inflation-adjusted household income. Again, recent small gains have been due to an increase in government student loans, not to increases in regular consumer bank lending.

The following two graphs show the historical levels of commercial and industrial loans by commercial banks. The first graph shows the history since World-War II. The second graph shows detail since 2000. With recent revisions to the series, recent small monthly increases have been seen. Nothing more than bottom-bouncing, so far, but the first positive sign for bank lending in some time.

Unlike the early stages of quantitative easing that focused on the Fed buying up troubled mortgage-backed securities, the current round of buying Treasuries—effectively monetizing fully net Treasury issuance—should have some positive effect on the money. Funds paid out by the Treasury usually end up in private checking accounts, which are part of the money supply. Banks need to increase lending, though, in order for the money supply to pick up its full and excessive potential.

Some banks are not lending, because they claim there is a lack of credit-worthy borrowers. Anecdotal evidence and troubled money supply growth suggest that the biggest issue is in still-impaired bank balance sheets. The systemic-solvency crisis has constrained many banks' ability to increase lending.


Commercial & Industrial Loans (Monthly Level)
Through February 2011, Seasonally-Adjusted (FRB)
Billions of Dollars
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010


Commercial & Industrial Loans (Monthly Level)
Through February 2011, Seasonally-Adjusted (FRB)
Billions of Dollars
1700
1600
1500
1400
1300
1200
1100
1000
900
800
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Inflation and Slowing/Contracting Money Growth

The Fed's efforts at currency debasement have been reflected in a weakening of the U.S. dollar's value in foreign exchange markets. In theory, though, slowing or outright contraction in broad money supply growth should be reflected in slower inflation or outright deflation. As with most economic theories, however, there often are simplifying assumptions that may not be appropriate under certain circumstances, and there often are unusual circumstances. Money supply, for example, works best as a predictor of inflation in a closed system, as was seen with Zimbabwe. Also, perversely, contracting money supply can spur inflation when the economy is declining faster than the money supply.

Money Supply outside the United States. Unlike Zimbabwe, the United States has a significant amount of dollars (currency and near-cash) held outside the country, where shifting dynamics may have significant impact on U.S. inflation. To the extent that foreign holdings of U.S. dollars are in stasis, with demand and supply in balance, then the circumstances of the simplified money supply model tend to work. The dollar's global position, though, is not in balance, particularly with the Fed working to debase the U.S. currency and to create inflation.

One distortion up front is in the U.S. currency in circulation, as reported in the narrowest money supply measure, M1. More than half of the $930 billion reflected in recent M1 (and monetary base) reporting is physically outside the United States in "dollarized" countries and elsewhere.

Separately, as reported by the Fed in its fourth-quarter 2010 flow-of-funds analysis, foreign holders of U.S. assets have something in excess of $12 trillion in liquid dollar-denominated assets that could be dumped at will into the global and U.S. markets. In perspective, U.S. M3 is somewhat shy of $14 trillion.

As excess dollars get dumped into the global markets, a shift in the tide against the U.S. dollar gets reflected in a weakening exchange rate, which in turn spikes dollar-denominated commodity prices, such as oil. Increasingly, that effect has been in response to intensifying dollar-debasement efforts by the Fed. The result is that U.S. consumer inflation has started to increase, once again, not from strong economic demand and a surging domestic money supply, but from distended monetary policies and a global glut of dollars that has been encouraged by the U.S. central bank.

Demand and supply affect the U.S. dollar. Supply soars and demand shrinks with the increasing unwillingness of major dollar holders to continue holding the existing volume of U.S. currency and dollar-denominated assets, let alone to absorb new exposure.

Therein lies a significant threat to near-term U.S. inflation. Heavy dumping of the U.S. dollar and dollar-denominated assets would be highly inflationary to U.S. consumer prices. It also likely would activate heavy Fed intervention in buying unwanted U.S. Treasuries. When the Fed moves to buy Treasuries as the lender of last resort—to monetize U.S. debt still well beyond anything seen to date—that also would tend to trigger renewed growth in the otherwise flagging broad money growth.

In order to get the broad money supply to grow, the federal government has to spend and borrow more money, where the Fed will have to buy large quantities of the Treasury's securities, monetizing the federal debt. The liquidity action pre-QE2 has been primarily buying otherwise illiquid mortgage-backed securities off the balance sheets of troubled banks. The domestic banks in turn have leant

substantial excess reserves back to the Fed, rather than lending into the normal stream of commerce, which would spike the money supply and otherwise be something of an economic positive.

The Fed remains the U.S. Treasury's lender of last resort. Panicked dollar selling and dumping of dollar-denominated paper assets—particularly U.S. Treasuries—likely would force the Fed's hand in an increasingly rapid monetizing of Treasury debt.

Economy Shrinking Faster Than Money Supply? As noted in the *Money Supply Special Report*, inflation discussed in the financial markets, financial media and *SGS Commentaries*, usually centers on price changes in goods and services as traditionally measured by the CPI survey. Such, however, is not the same measure of price changes as encompassed in general monetary theory (it also is far removed from being a measure of asset inflation or deflation), where the relationship between money supply and inflation commonly is expressed as:

$$M \times V = P \times Q$$

In the preceding equation, M is the money supply. V is the velocity of money, as measured by the number of times the money supply turns over in a year, relative to the economy as reflected in nominal (not-adjusted for inflation) gross national product (GNP), where V = GNP/M. GNP is the broadest measure of U.S. economic activity and encompasses the more popularly reported gross domestic product (GDP).

In turn, nominal GNP = P x Q, where P is some measure of GNP deflator (prices/inflation) and Q represents some measure of physical quantity/volume, or a real (inflation-adjusted) GNP, as a measure of economic output.

So, the P, or inflation measure here, effectively is the GNP deflator. The change in P is a broader inflation measure than the consumers' CPI, since it also covers costs of consumption for businesses, government and net exports, in addition to the costs of consumer spending on goods and services. In terms of the other variables, the price equation is:

$$P = (M \times V) / Q,$$

where price level (P) equals money supply times velocity (M x V), divided by real GNP (Q). Typically, increases in the combination of money supply and velocity, relative to Q (real GNP) result in higher prices. A drop in Q (real GNP), as seen in recessions, also would be inflationary, in theory, if money supply times velocity increased or otherwise did not drop as quickly as real GNP.

The latter case may be happening. Although none of the equation components can be measured accurately, the theoretical relationships can be useful. As discussed in *Historical Perspective on the Economic Data*, based on key underlying economic series, the inflation-adjusted broad economy does appear to be declining faster than has been suggested in GDP reporting. If the pace of decline in the economy is faster than the pace of decline in the money supply times velocity, then that circumstance is inflationary, even with declining money growth.

Nonetheless, I expect that money supply growth and velocity will pick up at excessive rates with the hyperinflation.

Consider, too, the following variation on the monetary equation:

$$Q = (M/P) \times V$$

Activity the inflation-adjusted economy (Q) is the same thing as inflation-adjusted money supply (M/P) times velocity (V). Such is the theoretical basis as to why a decline in year-to-year inflation-adjusted M3 signals an economic downturn, as graphed at the beginning of *Already in Depression, Economy is Declining Anew as Inflation Spikes*.

Money Growth and Velocity Will Increase. The U.S. hyperinflation very much will reflect a complete loss of confidence in the U.S. dollar. The Fed has primed the system for explosive money supply growth; all that is needed is a pickup in bank lending.

The Fed's moves to debase the U.S. dollar have started to worked, impairing the U.S. currency's exchange rate value and triggering commodity inflation fueled by the weak-dollar policy. This also has helped to set the stage for a global dumping of the dollar and dollar-denominated paper assets, a rapid influx of unwanted dollars from abroad that either would collapse the financial markets or would force the Fed to flood the system with the incoming liquidity, monetizing dumped U.S. Treasury securities among other assets.

As the debased-dollar inflation mounts, people in the United States are going need higher earnings to buy necessities such as gasoline and food. Even with a weak economy and high unemployment, wages will increase. Companies paying higher costs for labor and goods increasingly will raise their prices, and their borrowing needs will increase. Holders of dollars increasingly will not want to hold them long, in turn, raising the velocity of money, and so the cycle of inflation will begin to accelerate, all with still-impaired economic activity.

Section 7—U.S. Government Cannot Cover Existing Obligations

The U.S. Treasury publishes annual financial statements of the United States Government, prepared using generally accepted accounting principles (GAAP), audited by the General Accountability Office (GAO) and signed off on by the U.S. Treasury Secretary. The 2010 statements were published December 15, 2010 (see *Special Commentary No. 340*).

GAAP-accounting is what major U.S. corporations use. Such statements usually include liabilities for retired employees' pensions and health care obligations. Yet successive administrations have argued that unfunded Social Security and Medicare obligations should remain off the government's balance sheet, claiming that the government always has the option of changing the Social Security and Medicare programs. That said, there still is no political will in Washington to go public with the concept of eliminating or substantially cutting those programs.

GAAP-Based U.S. Government Finances

The broad GAAP-based federal deficits, including the Social Security and Medicare unfunded liabilities, have been in the $4 trillion to $5 trillion range in 2008 and 2009, and 2010's deficit again likely was near $5 trillion, remaining both uncontainable and unsustainable. The federal government cannot cover such an annual shortfall by raising taxes, as there are not enough untaxed wages and salaries or corporate profits to do so. On the spending side, all government spending, except Social Security and Medicare could be cut, but the broad GAAP results still would be in deficit. As demonstrated by recent Administration and Congressional reaction to the deficit cutting measures put forth by the president's deficit commission, there is no political will to slash Social Security and Medicare severely.

The estimate of a broad 2010 GAAP-based deficit at $5 trillion is mine. At issue with the published report, consistent year-to-year accounting was not shown, with a large, one-time reduction in reported 2010 Medicare liabilities, based on overly optimistic assumptions of the impact from recently enacted healthcare legislation. Referred to in the statements as the Affordable Care Act (ACA), the broad GAAP-based results from the ACA accounting show an annual surplus of $7.0 trillion in 2010, but again, that is not in terms of consistent reporting. Looking at what the annual change would have been in Medicare liabilities, consistently viewed either on the 2009 base versus a 2010 number on the 2009 basis, or the 2009 number on the 2010 basis versus the 2010 base, should result in net deterioration on a relative year-to-year basis.

Separately, the one-time ACA-based reduction in the net present value of unfunded social insurance liabilities (closed group), from $52.1 trillion in 2009, to $43.1 trillion in 2010, all was due to the Medicare restatement; Social Security liabilities actually rose.

The new health-care enhanced Medicare results used in the statements were prepared under the auspices of the Administration, but the GAO—the U.S. government's auditor and the auditor of the GAAP-based financials—did not buy into the happy numbers.

Per the covering letter of Robert F. Dacey, Chief Accountant, U.S. Government Accountability Office, the GAO would not express an opinion on the financial statements (see pages 221-233 of the statements). Specifically, consider the following excerpts from pages 226 and 227:

"DISCLAIMER OF OPINION ON THE STATEMENT OF SOCIAL INSURANCE FOR 2010 AND UNQUALIFIED OPINIONS FOR 2009, 2008, AND 2007

"Because of significant uncertainties (discussed in Note 26 to the consolidated financial statements), primarily related to the achievement of projected reductions in Medicare cost growth reflected in the 2010 Statement of Social Insurance, we were unable to obtain sufficient evidence to support the amounts presented in the 2010 Statement of Social Insurance. Consequently, we are unable to, and we do not, express an opinion on the 2010 Statement of Social Insurance. The Statement of Social Insurance presents the actuarial present value of the federal government's estimated future revenue to be received from or on behalf of participants and estimated future expenditures to be paid to or on behalf of participants, based on benefit formulas in current law and using a projection period sufficient to illustrate the long-term sustainability of the social insurance programs. …"

"As a result, readers are cautioned that amounts reported in the 2010 Statement of Social Insurance and related Notes may not fairly present, in all material respects, the financial condition of the federal government's social insurance programs, in conformity with GAAP. The uncertainties related to the 2010 Statement of Social Insurance also affect the projected Medicare and Medicaid costs reported in the Fiscal Projections for the U.S. government, which is presented in Supplemental Information and is summarized in Management's Discussion and Analysis and other accompanying information."

The GAO went so far as to run an "Illustrative Alternative Scenario" (page 130) to the government's happy Medicare adjustments, with the net effect of showing a net present value of unfunded Medicare liabilities (open group) $12.4 trillion higher than that used in the Administration's formal accounting. The alternative assumptions appear more realistic than the politicized data used in getting ACA enacted. Accordingly, under present accounting conditions there simply is no way of coming up with precise, meaningful hard numbers, in terms of total government obligations.

The results are summarized in the accompanying table, showing various deficit, debt and obligation measures.

U.S. Government - Alternative Fiscal Deficit and Debt

Reported by U.S. Treasury

Sources: U.S. Treasury, Shadow Government Statistics.

Fiscal Year[1]	Formal Cash-Based Deficit ($Billions)	GAAP Ex-SS Etc. Deficit ($Billions)	GAAP With SS Etc. Deficit ($Trillions)	GAAP Federal Negative Net Worth ($Trillions)	Gross Federal Debt ($Trillions)	Total[2] Federal Obligations (GAAP) ($Trillions)
Alternative 2010	*$1,294.1*	*$2,080.3*	*$5.3*[3]	*$68.9*[3]	*$13.6*	*$76.3*[3]
Official 2010	*$1,294.1*	*$2,080.3*	*($7.0)*[3]	*$56.5*[3]	*$13.6*	*$64.0*[3]
2009[4]	1,417.1	1,253.7	4.3	63.6	11.9	70.5
2008	454.8	1,009.1	5.1	59.3	10.0	65.6
2007	162.8	275.5	1.2[5]	54.3	9.0	59.8
2006	248.2	449.5	4.6	53.1	8.5	58.2
2005	318.5	760.2	3.5	48.5	7.9	53.3
2004	412.3	615.6	11.0[6]	45.0	7.4	49.5
2003	374.8	667.6	3.0	34.0	6.8	39.1
2002	157.8	364.5	1.5	31.0	6.2	35.4

(1) Fiscal year ended September 30th; the numbers are subject to rounding differences. (2) Includes gross federal debt, not just "public" debt. While the non-public debt is debt the government owes to itself for Social Security, etc., the obligations there are counted as "funded" and as such are part of total government obligations. (3) The official reporting includes a large, one-time reduction in the estimated net present value of unfunded Medicare liabilities, due to generally favorable underlying assumptions tied to the passage of healthcare legislation. With consistent accounting, SGS estimates the GAAP shortfall with Social Security and Medicare for 2010 to be roughly $5 trillion. The *Alternative* numbers here are being used as a placeholder until better accounting estimates are available, and reflect results using the "illustrative alternative scenario" on Medicare costs shown on page 130 of the 2010 report. (4) The 2009 data predate December 2009 guarantees of Fannie Mae and Freddie Mac and do not reflect PBGC or FDIC liabilities. Please note that mid-year accounting redefinitions for TARP knocked off roughly $500 billion from the reported formal cash-based estimate and contributed to a TARP "profit" in the GAAP numbers. (5) On a consistent reporting basis, net of one-time changes in actuarial assumptions and accounting, SGS estimates that the GAAP-based deficit for 2007 topped $4 trillion, with negative net worth of $57.1 trillion and total obligations of $59.8. So as to maintain consistency with the official GAAP statements, the "official" numbers are shown. (6) SGS estimates $3.4 trillion, excluding one-time unfunded setup costs of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (enacted December 2003). Again, in order to maintain consistency with the official GAAP statements, the "official" numbers are shown in the table for 2004. The 2010 GAAP statements were released on December 21, 2010: http://fms.treas.gov/fr/index.html. The initial SGS analysis of same is found in *Commentary No. 340*.

Sources for the SGS Table Data

Fiscal Year (Column 1) -- All numbers are for the indicated fiscal year (ended September 30th), in either billions or trillions of dollars as shown.

Formal Cash-Based Deficit (Column 2) -- headline deficit number from page xi of the 2010 report, "Nation by the Numbers Table," hereinafter referred to as NBN, line: "Unified Budget Deficit."

GAAP ex-SS Etc. Deficit (Column 3) -- euphemistically referred to as "Net Operating Cost" in NBN. It excludes social insurance unfunded liabilities.

GAAP with SS Etc. Deficit (Column 4) -- previous number (2) plus year-to-year change in the net present value of social insurance unfunded liabilities, which comes from NBN (page xi) line "Closed Group" under "Statement of Social Insurance," 2010 minus 2009 (for the 2010 number). The "Closed Group" is used here as it has been the preferred measure used in earlier government statements.

The *Alternative* accounting adds in the differential to the NBN line "Closed Group" and the $12.4 trillion additional net present value of excess expenditures over income for Medicare shown in the "Illustrative Alternative Scenario," shown on page 130.

GAAP Federal Negative Net Worth (Column 5) -- "Total net position" from NBN (page xi), plus the 2010 "Closed Group" total net present value unfunded liabilities of social insurance from NBN. The *Alternative* is adjusted for the alternative Medicare example.

Gross Federal Debt (Column 6) -- from "Note 14. Federal Debt ..." pages 88 to 90 of the 2010 report. Total held by public (p. 88) plus Total intragovernmental (p. 90).

Total Federal Obligations (Column 7) -- Total liabilities from the NBN (page xi) line in the 2010 report, plus the 2010 "Closed Group" total net present value unfunded liabilities of social insurance from NBN, plus total intragovernmental debt from (p. 90) of the 2010 report.

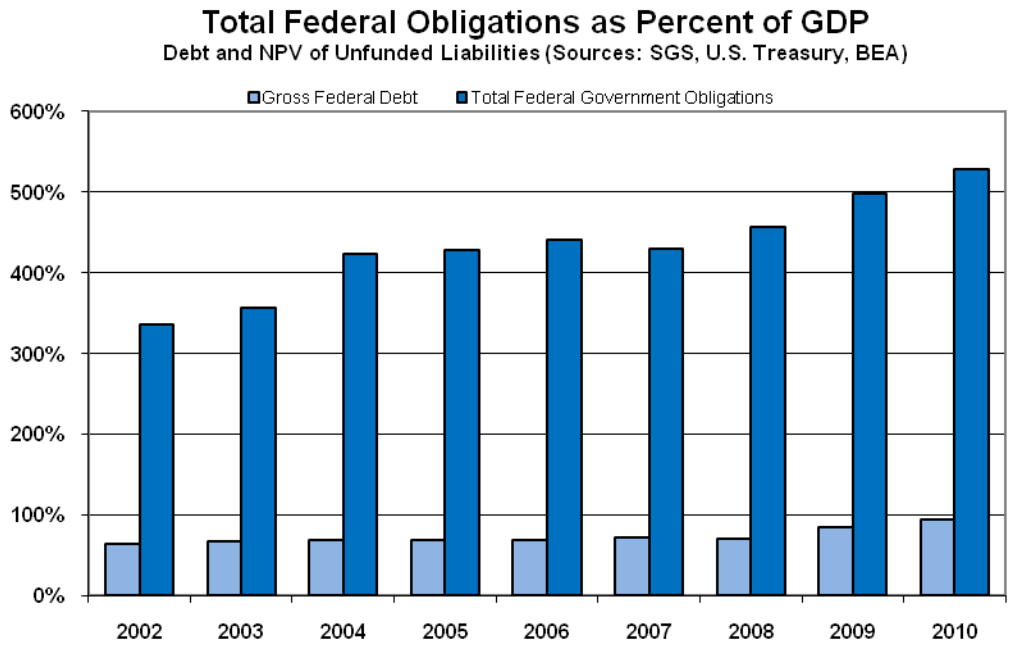
The *Alternative* accounting adds in the NBN line "Closed Group" adjusted for the $12.4 trillion additional net present value of excess expenditures over income for Medicare shown in the "Illustrative Alternative Scenario," shown on page 130.

U.S. Debt and Obligations at 15 Times GDP

As shown in the following graph, U.S. federal obligations are so huge versus the national GDP that the country's finances look more like those of a banana republic than the world's premiere financial power and home to the world's primary reserve currency, the U.S. dollar. Total federal debt and obligations at the end of the September 30, 2010 fiscal year were likely close to $76 trillion, or more than five times total U.S. GDP. The $76 trillion includes roughly $14 trillion in gross federal debt, with the balance reflecting the net present value of unfunded obligations.

If not for the special position the United States holds in the world, its debt—U.S. Treasuries—likely would be rated as below investment grade, instead of triple-A. Major rating agencies have hinted at possible longer-term rating downgrades on Treasury securities.

A downgrade by U.S. rating agencies, though, is not likely, so long as U.S. Treasuries are denominated in U.S. dollars and as long as they are used as the benchmark for the triple-A rating. Such ratings usually are an opinion as to the risk of default. Treasuries denominated in U.S. dollars are not likely to face actual default, so long as the Treasury and Fed can create dollars to pay off the face amounts of the obligations.


Total Federal Obligations as Percent of GDP
Debt and NPV of Unfunded Liabilities (Sources: SGS, U.S. Treasury, BEA)
Gross Federal Debt
Total Federal Government Obligations
600%
500%
400%
300%
200%
100%
0%
2002
2003
2004
2005
2006
2007
2008
2009
2010

Section 8—Hyperinflationary Great Depression

Even with the government's spending, debt and obligations running far beyond the ability of the government to cover with taxes or the political willingness of the government to cut entitlement spending, the inevitable inflationary collapse, based solely on these funding needs, possibly could have been pushed well towards the end of the current decade. Yet, the effects of extraordinary economic downturn and the government's response to same, have advanced the turning of Social Security funding from being in net surplus, to net deficit, by several years, to the present day.

The printing presses already are running, and the Fed is working actively to debase the U.S. dollar, effectively funding fully net U.S. Treasury debt issuance to the public. Global rejection of the U.S. dollar and criticism of U.S. government fiscal actions and Federal Reserve monetary policy are accelerating, along with calls for a new world reserve currency.

Actions already taken to contain the systemic solvency crisis and to stimulate the economy (which have not worked), plus what should be renewed devastating impact of unexpected ongoing economic contraction on tax revenues, have set the stage for a much earlier crisis. Risks are high for the hyperinflation beginning to break in the months ahead; it likely cannot be avoided beyond 2014; it already may be beginning to unfold.

It is in this environment of rapid fiscal deterioration and related massive funding needs that the U.S. dollar remains open to a rapid and massive decline, along with a dumping of domestic- and foreign-held U.S. Treasuries. The Federal Reserve would be forced to monetize further significant sums of Treasury debt, triggering the early phases of a monetary inflation. Under such circumstances, current multi-trillion dollar deficits would feed rapidly into a vicious, self-feeding cycle of currency debasement and hyperinflation.

With the economy already in depression, hyperinflation kicking in quickly would push the economy into a great depression, since disruptions from uncontained inflation are likely to bring normal commercial activity to a halt.

What happens next is anyone's speculation. How long would a hyperinflation last before the government brought its fiscal house into order and established a sound currency? I would be surprised if the hyperinflation crisis lasted beyond a year or two, since the system is not positioned to handle the crisis well and pressures for rapid resolution would be extremely strong. All that depends, however, on what evolves out of what otherwise would be highly unstable political, economic, financial and social environments. Accordingly, the best individuals can do is to take actions to protect themselves and their families, through the worst of foreseeable circumstances, both in terms of personal safety and in terms of the purchasing power of pre-crisis assets.

The following is an exploration of certain problems that likely would have to be handled in a hyperinflation.

Lack of Physical Cash

The United States in a hyperinflation, likely would experience the quick disappearance of cash as we know it. In Zimbabwe, there was the back-up of a well-functioning black market in U.S. dollars, but no

such back-up exists in the United States. Shy of the rapid introduction of a new currency and/or the highly problematic adaptation of the current electronic commerce system to new pricing realities, a barter system is the most likely circumstance to evolve for regular commerce. Such would make much of the current electronic commerce system useless and add to what would become an ongoing economic implosion. It also could take a number of months to become reasonably functional.

Some years back, I happened to be in San Francisco, having dinner with a former regional Federal Reserve Bank president and the chief economist for a large Midwestern bank. Market rumors that day had been that there was a run on a major bank in the City by the Bay. So I queried the regional Fed president as to what would be happening if the rumors were true.

He had had some personal experience with a run on banks in his region and explained how the Fed had a special team designed to handle such a crisis. The biggest problem he had had was getting adequate cash to the troubled banks to cover depositors, having to fly cash in by helicopters to meet the local cash-flow needs.

The troubled bank in San Francisco, however, was much larger than the example cited, and the former Fed bank president speculated that there was not enough cash in the vaults of the regional Federal Reserve Bank, let alone the entire Federal Reserve System, to cover a true run on deposits at the major bank.

Therein lies an early problem for a system headed into hyperinflation: adequate currency. Where the Fed may hold roughly $150 billion in currency outside of roughly $50 billion in commercial bank vault cash, the bulk of roughly $930 billion in currency outside the banks is not in the United States. Back in 2000, the Fed estimated that 50% to 70% of U.S. dollar cash was outside the system. That number probably is higher today, with perhaps as little as $300 billion in physical cash in circulation in the United States, or roughly 1.7% of M3. The rest of the dollars are used elsewhere in the world as a store of wealth, or as an alternate currency, free of the woes of unstable domestic financial conditions. Those conditions would change severely in the event of a U.S. hyperinflation.

Given the extremely rapid debasement of the larger denomination notes, with limited physical cash in the system, existing currency would become worth more as kindling for a fire than as currency, and would disappear quickly as a hyperinflation broke.

For the system to continue functioning in anything close to a normal manner, the government would have to produce quickly an extraordinary amount of new cash, and electronic commerce would have to be able to adjust to rapidly changing prices.

In terms of cash, new bills of much higher denominations would be needed, but production lead time is a problem. Conspiracy theories of recent years have suggested the U.S. Government already has printed a new currency of red-colored bills, intended for some dual internal and external U.S. dollar system. If such indeed were the case, then there might be a store of "new dollars" that could be released at a 1-to-1,000,000 ratio, or whatever ratio was needed to make the new currency meaningful, but such would not resolve any long-term problems—as seen in the multiple Zimbabwe devaluations—unless it was part of an overall restructuring of the global currency system, and unless the U.S. government first put its fiscal house in order.

From a practical standpoint, however, currency would disappear, at least for a period of time in the early period of a hyperinflation.

Possible Short-Term Electronic Relief for Individuals

For those who have foreign-currency denominated bank accounts outside the United States, something along the lines of a debit card against that account—let's say a Swiss franc account—could help, in theory. In the U.S., one could buy $100,000 worth of groceries with the debit card, and 50 Swiss francs would be deducted overnight from the account in Zurich, based on the then-current exchange rate. Such presumes, though, the ongoing functioning of a system in the U.S. that could handle the transaction.

Where the vast bulk of today's money is not physical, but electronic, however, chances of the system adapting there are virtually nil. Think of the time, work and effort that went into preparing computer systems for Y2K, or even problems with the recent early shift to daylight savings time. Systems would have to be adjusted for variable, rather than fixed pricing, credit card lines would need to be expanded daily, the number of digits used in tallying dollar-denominated transactions would need to be expanded sharply. I have had assurances from some in the computer field, though, that a number of businesses have accounting software that can handle any number of digits.

From a practical standpoint, however, the electronic quasi-cashless society of today likely also would shut down early in a hyperinflation. Unfortunately, this circumstance rapidly would exacerbate an ongoing economic collapse.

Barter System

With standard currency and electronic payment systems non-functional, commerce quickly would devolve into black markets for goods and services and a barter system. Gold and silver both are likely to retain real value and would be exchangeable for goods and services. Silver would help provide smaller change for less costly transactions. One individual indicated to me that he had found airline bottles of high-quality scotch to be ideal small change in a hyperinflationary environment.

Other items that would be highly barterable would include full bottles of liquor or wine, or canned goods, for example. Similar items that have a long shelf life can be stocked in advance of the problem, and otherwise would be consumable if the terrible inflation never came. Separately, individuals, such as doctors and carpenters, who provide broadly useable services, already have services to barter.

A note of caution was raised once by one of my old economics professors, who had spent part of his childhood living in a barter economy. He told a story of how his father had traded a shirt for a can of sardines. The father decided to open the can and eat the sardines, but he found the sardines had gone bad. Nonetheless, the canned sardines had taken on a monetary value.

Howard J. Ruff, who has been writing about these problems and issues since Nixon closed the gold window, rightly argues that it would take some time for a barter system to be established, and suggests that individuals should build up a six-month store of goods to cover themselves and their families in the difficult times. Such is within the scope of normal disaster planning in some areas of the country (for example, I sit almost on top of the Hayward Fault). Stories out of the great Japanese earthquake just reinforce those common-sense principles.

Financial Hedges and Investments

During these times, safety and liquidity remain key concerns for investments, as investors look to preserve their assets and wealth through what likely are going to be the most difficult of times. Those who can preserve their wealth and maintain liquidity will have the ability to take advantage of extraordinary investment opportunities during and after the crises.

The nature of what lies beyond the onset of the hyperinflation cannot be predicted by anyone with much confidence, given the extreme systemic and economic disorder and political instability that likely would follow. Any number of outcomes is possible, and the following comments reflect concepts that should offer some asset protection given the reality of a hyperinflation, or where certain behavior can be anticipated. Beyond that point, whether there are functioning stock markets or financial institutions, or how society, the economy and government would function are open questions. I'm an economist, not an investment advisor. Individuals simply have to use their own common sense in preparing for and handling whatever may arise.

Gold and Silver. In a hyperinflation, physical gold and silver would be primary hedging tools that would retain real value and also be portable in the event of possible civil turmoil. At some point, the failure of the world's primary reserve currency will lead to the structuring of a new global currency system. I would not be surprised to find gold or silver as part of the new system, structured in there in an effort to help sell a new non-fiat currency system to the public.

Real Estate. Real estate also would provide a basic long-range inflation hedge, but it lacks the portability and liquidity of gold. That could become an issue if the political environment shifted so radically that ownership of private property became impossible. A subscriber queried as to the relative merit of different types of real estate.

Again, allowing for periods of possible illiquidity, over the long-term, real estate in general should tend to retain much of the purchasing of the dollars invested into it. Depending on location and function, agricultural, residential and commercial real estate could appreciate relative to each other in that sequence through a hyperinflation, but nothing is set. As before, individual common sense has to be applied to particular circumstances.

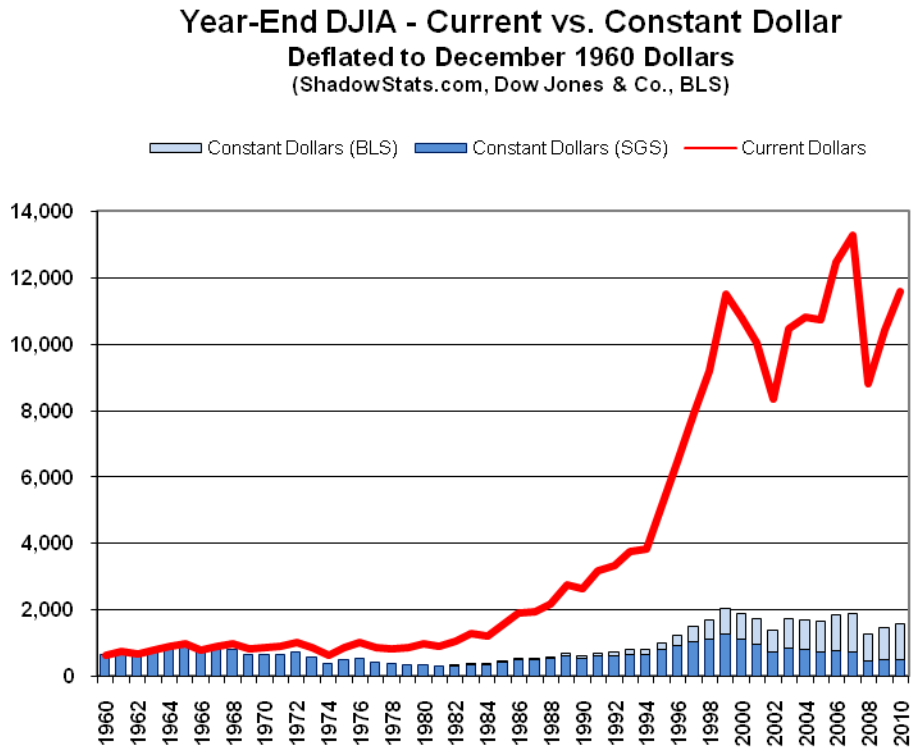
Currencies. Having some funds invested offshore—outside of the U.S. dollar—would be a plus in circumstances where the government might impose currency or capital controls. I still look at the Swiss franc, the Canadian dollar and the Australian dollar as currencies likely to maintain their purchasing power against the U.S. dollar. Any suggestions here in terms of currencies, gold and silver, etc. are for holding same over the long term. Extreme near-term price volatility remains a risk in most markets.

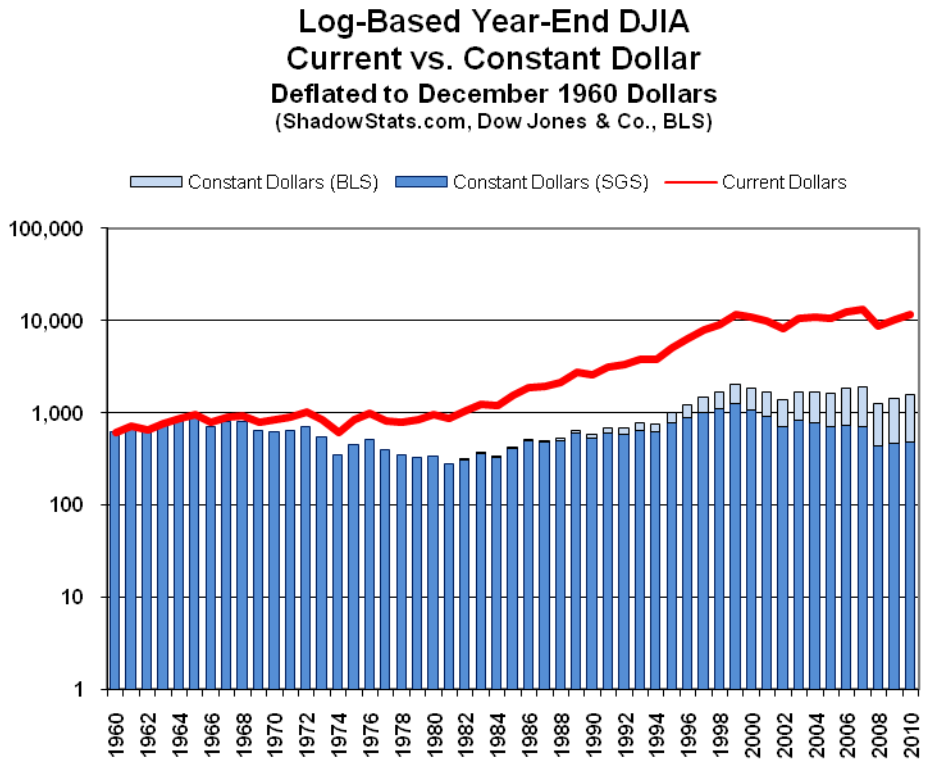
Taking on Debt. Inflation is supposed to be the debtor's friend, where debtors, like the U.S. government, end up paying off their obligations in cheap dollars. A note of caution is offered here. The current circumstances are extraordinary. Borrowers should consider their ability to carry debt through extremely difficult economic times, including possible loss of employment, etc., before high inflation might kick in. Consider, too, the U.S. government recently has intervened in altering terms and conditions of mortgages. Could a radical political change end up recasting the terms of personal obligations?

Bonds. If inflation increases, so too should bond yields. Yields would continue to rise in a situation with rising inflation. That would reduce the value of bonds already held at lower yields.

TIPS. The U.S. Treasury offers securities where yields and principal get adjusted regularly for the rate of inflation. In a hyperinflation, price changes can be so rapid that the principal and/or yield adjustment would lag enough so as to make the adjustments worthless. The reporting lag in calculating the adjusting CPI index—if it even could be calculated—still would wipe out investors, unless the Treasury became particularly creative and began benchmarking to spot gold or such, but nothing like that is in place.

As to the potential rapidity of price change, consider some anecdotal evidence. One story out of Weimar Germany involved buying an expensive bottle of wine for dinner. The empty bottle was worth more as scrap glass the next morning than it had been worth as a full bottle of wine the night before. Another story involved negotiating the price and paying for a meal, before sitting down, as the price of the meal would be higher by the time it was finished.





Equities. While equities do provide something of a traditional inflation hedge—revenues and profits get expressed in current dollars—they also tend to reflect underlying economic and political fundamentals. I still look for U.S. stocks to take an ultimate 90% hit, peak-to-trough, net of inflation, during this period. Where all stocks are tied to a certain extent to the broad market—to the way investors are valuing equities—such a large hit on the broad market would tend to have a dampening effect on nearly all equity prices, irrespective of the quality of a given company or a given industry.

The preceding graphs show the year-end Dow Jones Industrial Average (DJIA) in current terms, as well as adjusted for the CPI-U and the SGS-Alternate Consumer Inflation. While stocks may rally based on high inflation, in inflation-adjusted terms, a bear market remains a good shot. An early-hyperinflation DJIA at 100,000 could be worth 1,500 in today's terms.

Possible Official Actions and Responses/External Risks

As consumer prices begin to spike, as the Fed moves to accommodate funding needs for ever-exploding federal fiscal shortfalls, and as the U.S. dollar comes under ever-heavier global selling pressures—all at high risk in the coming months—the federal government and the Federal Reserve could react with a variety of measures that could delay the hyperinflation's onset for brief periods. Those possible actions, though, would not alter the hyperinflation outlook fundamentally or meaningfully. Potential official responses or external events include, but are not limited to:

Currency and Other Market Interventions. The U.S. Treasury can have the New York Federal Reserve Bank intervene in the currency markets in support of the dollar. Even when coordinated with other central banks, intervention usually is counter to fundamental pressures, and does nothing to turn a

currency beyond the period of intervention. Intervention becomes expensive and usually fails in a short period of time. Unless underlying fundamentals are changed at the same time (i.e. interest rates are raised against the rest of the world), supportive intervention provides a selling opportunity for those looking to dump dollars.

Intervention often is preceded by jawboning, which usually fails even faster than the intervention.

Then there is the President's Working Group on Financial Markets (aka the "Plunge Protection Team"), which has been directed to do what it has to do in order to keep financial markets orderly. Actions here, however, usually have been worked through what formerly were investment banks, and are short-lived in impact, as with the currency interventions.

Wage and Price Controls. The federal government can freeze wages and prices or limit the pace of increase in same, but such tends to distort economic activity, creating product shortages and black markets. Fundamental inflation pressures are not relieved.

Nationalization of the Banking System. One "solution" to ongoing and likely deepening systemic insolvency within the banking system would be a nationalization of the banks by the U.S. government. Such likely would accelerate dollar debasement and the onset of the hyperinflation.

Restricted Capital Flows. The federal government can impose restrictions on capital outflows from the United States, impairing the ability of those in the United States to seek financial safe-haven elsewhere. This likely would exacerbate a global dollar panic.

Release of Strategic Petroleum Reserves. As we are go press, there are active suggestions that the Administration tap U.S. strategic oil reserves in order to help provide relief from rising gasoline prices. Such effects would be temporary, and could be short-sighted from a supply standpoint, given the political problems still festering in the Middle East and North Africa.

At the same time, there is talk of OPEC looking to increase oil production to offset any market supply disruptions from those mounting political disorders, but such has not provided much immediate price relief, so far, although the potential economic impact of the Japanese earthquake has had some effect. Nonetheless, the persistently high prices suggest that underlying oil-price strength largely continues to reflect weakness or failing global confidence in the U.S. Dollar.

Balanced-Budget Effort. The government could move to balance its budget—heavily talked about at present—but any such efforts likely would span a number of years, be based on overly optimistic economic assumptions and be focused on the cash-based as opposed to the GAAP-based deficit (see *Section 7—U.S. Government Cannot Cover Existing Obligations*). Efforts on that basis would have limited impacts on both near- and long-term fiscal solvency.

Return to Gold Standard. Suggestions have been floated as to returning the U.S. dollar to full gold backing. While something like that is likely—probably a necessity—in the aftermath of the hyperinflation ahead, the problem (perhaps the desired effect) is that the gold standard would restrict the government's deficit spending. As such, in order for the new system to work, the government first would have to balance its GAAP-based spending—which I contend is not politically feasible at present (see *Section 7—U.S. Government Cannot Cover Existing Obligations*). Unless fiscal circumstances are in balance, a new gold-based system would see continuous devaluations of the dollar against gold, as

unsupportable money was created. On the other hand, if fiscal conditions were in balance, returning to a gold standard likely would not be under serious consideration at present.

Government Seizure of Privately Held Gold. A question commonly raised by subscribers is the potential for the federal government to seize privately held gold, today, as it did back in 1933, when President Franklin Roosevelt abandoned the domestic gold standard. While there is little the federal government might do that would be too surprising in the current environment, seizure of privately-held gold most likely would be tied to some reform of the monetary system, not just as an action aimed at punishing gold investors.

Back in 1933, the use of gold continued for the settlement of international accounts between sovereign states, and the U.S. government's needs under that circumstance were used as an excuse for the seizure of public's gold holdings. While there were some exceptions to the seizure, such as coin collections and jewelry, U.S. investors ended up shifting funds into gold stocks as surrogates for the precious metal.

Private U.S. ownership of physical gold became legal, again, after President Richard Nixon closed the gold window on international settlements in 1971. The shift in private-gold-ownership policy, then, also was tied to the international monetary system's backing, or lack of same, in gold.

Meaningful reform of the global monetary system and creation of a new U.S. currency, of whatever form, most likely would be post-hyperinflation events.

Major Natural Disasters. The catastrophic earthquake in Japan is a reminder of unpredictably of the natural disasters that can befall a nation. Physical damages are not adjusted in GDP, although insurance payments can have positive impact when the payments are made by a foreign-based insurer or reinsurer. Disruptions in normal commerce are a GDP negative, but rebuilding activity is a positive. To the extent the federal government funds rebuilding efforts with deficit spending or pays out unfunded government insurance, such actions add to the deficit and inflation issues.

Military Action. Beyond their horrors, wars historically have roots in economic problems, and they usually have the effect of spiking economic activity and inflation, as well as distracting public attention from other concerns. Orders for military goods at the outbreak of World War II in Europe, for example, helped to pull the United States out of the Great Depression.

Today, defense accounts for just six-percent of durable goods orders in the consumer-driven U.S. economy. A major new military conflict—beyond the wars already impacting U.S. economic activity and fiscal planning—might provide the economy with some boost, but that would be at the expense of an offsetting further sharp deterioration in fiscal conditions and inflation prospects.

Some production gains also might be problematic, where the United States has lost significant manufacturing capacity to offshore competition. When the big gun on the U.S.S. Iowa exploded in 1989, the machine tools needed to manufacture a replacement gun no longer were available in the United States. They were available, however, in China. At the extreme, the outbreak of a global conflict of the magnitude of World War II, today, would be at the horrific risk of becoming nuclear.

Back to the Fed: QE2, QE3 and Other Non-Effective Policies. The Federal Reserve fairly easily can have negative impact on the economy and inflation, but positive results are not so simple. The Fed can kill economic activity by shrinking systemic liquidity, and it can increase inflation by "printing" money.

Efforts to stimulate economic growth or to reduce inflation, however, historically have been much more difficult to accomplish. At present, though, Fed policies perversely are creating new inflation at the same time that a systemic liquidity squeeze is intensifying the economic downturn (see *Section 6—Federal Reserve, the Money Supply and Fighting Deflation*). Continued efforts to debase the dollar should be successful, but not in stimulating economic activity, only in triggering an accelerating pace of inflation.

Significant efforts to cut back on, or to reverse, the so-called quantitative easing actions are not likely. The liquidity that the Fed has put into the system has been deemed necessary by the Fed, likely more from the standpoint of helping banking-system liquidity than really expecting the measures will boost economic activity. As discussed throughout this report, the economic and systemic-solvency crises appear to be worsening, not improving, suggesting more, not less, quantitative easing.

Volcker-Like Inflation Containment. Back in the oil-based inflation of the late-1970s, early-1980s, Federal Reserve Chairman Paul Volcker earned a reputation as an effective inflation fighter. What he did was to raise interest rates so high as to drive the economy into the ground, creating one of the worst (double-dip) recessions of the post-World War II era. He killed economic demand enough so as to offset oil-price distortions, at least partially. With current economic activity already in severe contraction—even more severe than that of the early-1980s—chances of such a policy being pursued or even having the potential of working, at present, are slim.

Restraining the Federal Reserve. Efforts in Congress to restrain government spending could contain federal spending activity when the system next moves to the brink of collapse. As long as the Federal Reserve remains independent, however, it still likely would do whatever it had to in order to prevent systemic collapse into a deflationary great depression. If the Fed were reined-in, then whether the system ended in fire or ice, or somehow bought new life with a miraculous political shift that allowed for fiscal balance, would be in the hands of the President and Congress.

Section 9—Closing Comments

Other Issues

A U.S. hyperinflationary great depression would be extremely disruptive to the lives, businesses and economic welfare of most individuals. Such severe economic pain could lead to extreme political change and/or civil unrest; the timing would be right for the emergence of a successful third party for the 2012 election.

What has been discussed here remains well shy of a comprehensive overview of all possible issues, but rather at least has raised some questions and touched upon some likely consequences. No one can figure out better than you the peculiarities of this circumstance and how you, your family and/or your business might be affected. Using common sense remains the best advice I can give.

These matters will continue to be expanded upon in the regular *SGS Commentaries*, as circumstances and subscriber reactions dictate.

I extend by deep thanks to the various readers who have raised questions and provided ideas, comments and material. As always, please feel free to offer your thoughts or raise your questions by e-mail to johnwilliams@shadowstats.com.

Recommended Further Reading

This section will be updated shortly (advised by e-mail to subscribers), populated with additional significant titles, with volumes ranging from dealing with hyperinflation, to the history behind the money system and today's crises.

As mentioned elsewhere in the text, and as recommended to subscribers for years, there remains:

Fiat Paper Money, The History and Evolution of Our Currency
by Ralph T. Foster (Privately Published)
2189 Bancroft Way, Berkeley, CA 94704
E-mail: tfdf@pacbell.net

To my knowledge, Ralph Foster's extraordinary volume is the most comprehensive and informative analysis available on the history of fiat currencies. Continually updated and expanded, the privately printed book recently has been offered with a novel binding that incorporates authentic worthless fiat currency notes.