



The Longbrake Letter*
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October, 2013

I. Political Dysfunction in Washington Threatens the Economy

There is no shortage of news coverage and analysis about the federal government shutdown and debt ceiling political battle. It is the topic de jure. Hopefully by the time you receive this month's letter some kind of resolution — probably a temporary one — will have been crafted by Congress and accepted by President Obama. I will not recount events in any kind of detail in this letter, since there is plenty of coverage. Events are moving fast. There are many possible twists and turns likely to occur in the next few days. At this writing there is a significant possibility but not certainty that October 17 — the date the U.S. Treasury purportedly runs out of cash — will pass without some kind of temporary fix. . . a permanent solution seems unlikely, but not entirely impossible.

What we know is that we will not fall off the fiscal cliff on October 17 if there is no congressional action. At least for a few more days it is likely that the U.S. Treasury will be able to continue making payments. There is general agreement that November 1, when a large amount of payments must be made, is the critical date. Even then, there are possible options to enable the U.S. Treasury to borrow additional funds and keep making scheduled payments. These options have been discussed in theoretical terms and have generally been dismissed. But, in exigent circumstances what today is theoretical may become reality.

*The information contained in this newsletter does not constitute legal advice. This newsletter is intended for educational and informational purposes only.

1. Debt Ceiling Options

One option for dealing with a failure to raise the debt ceiling involves the president invoking the 14th Amendment of the Constitution which states that “the validity of the public debt of the United States, authorized by law, shall not be questioned.” Without getting into the legal intricacies of how the 14th Amendment might apply to the current situation, I would simply comment that the Obama Administration has publicly stated that it does not believe the amendment “. . . provides the authority to the president. . .” to end the crisis.¹

Another option is for the U.S. Treasury to declare a longer “debt issuance suspension period” (DISP). DISP rules, which were established by Congress in the 1980s, permit the U.S. Treasury to disinvest intragovernmental debt, which is counted as a part of the debt ceiling, to create additional room for cash-based borrowing. The Treasury has already invoked DISP to extend cash borrowing since the debt limit became binding in May. The Treasury appears to have the authority and discretion to extend the DISP period beyond October 17. There is precedent for doing so. In 1995 the Treasury announced a 12-month DISP period. If this were done now, the Treasury could create additional cash borrowing capability of approximately \$75 to \$85 billion, which would be more than sufficient to enable it to meet the large amount of scheduled payments due on November 1.²

2. Funding the Federal Government and Raising the Debt Ceiling

As the drama unfolds there are two things that Congress must do: pass a resolution to fund the federal government so that the shutdown can be ended and raise the debt ceiling so that the Treasury can continue to meet obligations as they come due. There are two contentious political issues standing in the way: the drive by conservative Republicans (Tea Party Republicans)

¹A readable nontechnical discussion of the 14th Amendment to the Constitution was penned by Sean Wilentz, professor of history at Princeton University, and published as an op ed piece in the New York Times: Sean Wilentz. “Obama and the Debt,” The New York Times, October 7, 2013.

²A more detailed explanation of the mechanics of the debt issuance suspension period can be found in: Alec Phillips and Kris Dawsey. “The Debt Limit: How, When, and What If,” Goldman Sachs US Economics Analyst, Issue No: 13/40, October 5, 2013.

to defund the Affordable Care Act (ObamaCare), and reductions in federal spending coupled with tax reform.

House Republicans, driven by approximately 90 with “Tea Party” sympathies, have made passing a continuing resolution to fund the government conditional on delaying funding of ObamaCare for a period of time. Needless to say, this condition has been rejected out of hand by President Obama and Democrats.

While, as of this writing no legislation had yet been crafted to raise the debt ceiling, House Republicans, led by Representative Paul Ryan, had suggested a short-term increase in the debt ceiling to provide additional time to negotiate spending and tax reforms. No mention of delaying funding of ObamaCare was contained in this House Republican proposal. However, President Obama rejected the conditionality of this offer.

Anger has built on both sides of the aisle and so have accusations of loss of trust to the extent that the Republican House leadership stated on October 12 that there was no further basis to continue talks with the White House and that the Senate would have to assume leadership in the quest to find a workable set of compromises. This, of course, may simply be political posturing, but it does illustrate the deep political divide that has developed in Washington.

3. How Did We Get Into This Mess?

Without attempting to dig deeper into the details of the current situation, which is evolving hourly, I think it might be instructive to provide some commentary about how we got to this point in our political affairs because it will shed light on what we might expect going forward.

While the proximate primary cause of the current political dysfunction is traceable to the rise of the Tea Party and the substantial number of Tea Party House Republicans, to appreciate the reasons that this minority faction of the Republican Party has such commanding influence one needs to understand how the mechanics of political party leadership determination has evolved over the last 45 years.

George Friedman recently wrote an insightful analytic commentary en-

titled “The Roots of the Government Shutdown.”³ Beginning in the late 1960s, at the same time as the Civil Rights and anti-Vietnam War movements were gaining momentum, political reformers sought to break the power of party bosses by sponsoring reforms, principally by selecting leaders through primaries, but also by establishing rules governing financial contributions.

In the old party-boss system, money was important in politics just as it is today and it flowed through the party bosses, who used it and the ability to control patronage jobs, such as local postmasters, to maintain their power bases. The reformers objected to the inherently corrupt aspects of the party-boss system. However, as Friedman points out, the party-boss system produced some truly great presidents, such as the two Roosevelts — Theodore and Franklin, Woodrow Wilson, Harry Truman, Dwight Eisenhower and John Kennedy.

In addition, and this is key, party bosses were generally political pragmatists. They were more interested in acquiring, exercising and maintaining power than they were in pursuing highly ideological agendas.

Primaries destroyed the power of political bosses and in that regard the reform movement was successful. But there was an unintended and unexpected consequence. In most states party registration is required and only registered members of a party can vote for candidates of that party in a primary.⁴ By itself this would not necessarily lead to narrowly-based outcomes. But, because typically a small percentage of voters participate in primaries and “true believers” are more likely to vote in primaries than centrists or independents, fervent party members who often have focused, ideological agendas, can dominate primary outcomes.

This means that because of the realities of how the primary system works in most states, ideological minorities often can control election outcomes or can threaten more centrist Republicans with the possibility of primary challengers. Take, for example, the case of Mitch McConnell (R-KY), who has

³George Friedman. “The Roots of the Government Shutdown,” Stratfor Global Intelligence, October 8, 2013.

⁴There are a few states that have open primaries. For example, in Washington State, there is no party registration requirement and thus there are not separate primaries based on party registration. The two candidates with the most votes advance to the general election. Thus, it is possible for two members of the same political party to be on the ballot in the general election.

been a senator for 28 years and is the Senate Republican minority leader. He already has an announced Tea Party challenger for the 2014 primary election. It is much too early to speculate how this election could turn out. The challenger could defeat McConnell in the primary or so weaken McConnell that he could lose to the Democrat challenger in the general election. Since both are very real possibilities, it seems possible these threats to his re-election could influence McConnell's political decisions in the current crisis.

Friedman also discusses the importance of money in politics. The reformers sought to reduce the influence of money by limiting individual contributions to political candidates. But other reforms, such as political action committees, circumvented the effectiveness of individual contribution limits. Then, the Supreme Court's decision in the Citizens United case opened up the flood gates for corporations and large individual donors to contribute to candidates who espouse the donor's ideological agenda.

There is one more ingredient that has contributed to the current situation. Several years ago the Supreme Court opined that House district boundaries needed to be drawn in a way that did not discriminate against specific groups of Americans — the one-man, one-vote rule. In practice this resulted in drawing boundaries that concentrated the percentage of certain groups and assured election of minority candidates. But, this also enabled boundary drawers to gerrymander remaining district boundaries to create safe seats for either Republicans or Democrats. The Constitution requires a census of the U.S. population to be conducted every ten years and for House districts to have approximately equal numbers. Because of population shifts over time, this leads almost always to the need to redraw district boundaries. Typically this is the task of a state legislature and whichever party controls the state legislature has the upper hand in drawing the boundaries.

2010 was the year of the most recent decennial census and it fell to state legislatures elected in 2010 to draw House district boundaries. 2010 just happened to be the landslide election year for Republicans, not just in the House of Representatives but also in many states, as voters reacted negatively to President Obama's policies in general and to the Affordable Care Act in particular. The outcome was that Republicans were able to gerrymander many districts to create a high probability of a Republican House majority. Many of these gerrymandered Republican seats were designed to be safe, so that other than a primary challenger the incumbent need not

worry about a serious challenge from a Democratic opponent. Because district boundaries will not be redrawn until after the 2020 decennial census these safe seats will persist for at least another eight years.

Now all of the elements are in place that have fostered and will continue to sustain the ideological tilt that is driving the House's approach to the federal budget, the debt ceiling and attempts to delay or defund ObamaCare. Most Tea Party Republicans come from safe, gerrymandered districts. They are not threatened by moderate Republican challengers. Many moderate Republicans, because of primary registration requirements and typical voting patterns of party members, are threatened by potential Tea Party challengers. Finally, money flows freely and abundantly to politicians with ideological agendas.

A politician with an ideological agenda in a safe seat has no incentive to compromise. Friedman points out that ideologues have always been a part of the American political fabric. The problem is not one of their existence but of their overrepresentation in the Congress: “. . . *the problem is that the current system magnifies the importance of the ideologues such that current political outcomes increasingly do not reflect the public will, and that this is happening at an accelerated pace. It is not ideology that is the problem. It is the overrepresentation of ideologues in the voting booth. Most Americans are not ideologues, and therefore the reformist model has turned out to be as unrepresentative as the political boss system was. . . . Each faction is deeply committed to its beliefs, and feels it would be corrupt to abandon them. Even if it means closing the government, even if it means defaulting on debt, ideology is a demanding mistress who permits no other lovers.*”

There is little to be hopeful about. What got us into the current predicament cannot be changed overnight. It is difficult for “reason” to prevail and compromise is more challenging to achieve. In the longer run, perhaps reforms will evolve that restore a more democratically representative political process. That is not the case today and the road to reforms that would achieve such a change in the political process is murky at best.

4. Topics Covered in the October Longbrake Letter

In the remainder of this month's letter, I provide updates about the **U.S. Economic Outlook — Real GDP Growth in Section II, Consumer**

Income and Spending in Section III, Employment in Section IV, Business Activity in Section V, Monetary Policy, Inflation, and Interest Rates in Section VI, and Possible Consequences of Fiscal Policy Dysfunction for the Economy in Section VII.

In the *Appendix*, which summarizes prospects for key issues for 2013 and beyond, which I outlined in the *December Longbrake Letter*, I have updated comments to reflect recent developments.

II. U.S. Economic Outlook — Real GDP Growth

Second quarter real GDP growth did not change much in the “Final Estimate”. As can be seen in **Table 1**, there were small improvements in

Table 1
Composition of 2013 and 2012 Quarterly GDP Growth

	Second Quarter Advance Estimate	Second Quarter Preliminary Estimate	Second Quarter Final Estimate	First Quarter 2013	Fourth Quarter 2012	Third Quarter 2012
Personal Consumption Private Investment	1.22%	1.21%	1.24%	1.54%	1.13%	1.15%
Nonresidential	.55%	.53%	.56%	-.57%	1.13%	.04%
Residential	.38%	.37%	.40%	.34%	.50%	.35%
Inventories	.41%	.59%	.41%	.93%	-2.00%	.60%
Net Exports	-.81%	.00%	-.07%	-.28%	.68%	-.03%
Government	-.08%	-.18%	-.07%	-.82%	-1.31%	.67%
Total	1.67%	2.52%	2.47%	1.14%	0.13%	2.78%
Final Dom. Sales	1.26%	1.93%	2.01%	.21%	2.13%	2.18%
Final Dom. Sales	1.34%	2.11%	2.08%	1.03%	3.44%	1.51%

consumer spending, business investment and government investment. These components added 0.20% to real GDP. These improvements were offset by 0.25% in decreases in inventories and net exports.

Table 1 shows two alternative measures of real GDP in addition to the customarily reported comprehensive measure — final domestic sales, which

equals real GDP less the change in inventories, and private GDP, which equals final domestic sales less government expenditures.

1. 2013 Q2 GDP — Final Estimate

Personal consumption expenditures, which account for 68.2% of real GDP, contributed 1.24% to second quarter GDP growth. Over the last five quarters, the contribution of consumption expenditures to GDP growth has been in a tight range from 1.13% to 1.54% and has averaged 1.27%. The contribution of 1.54% in the first quarter was boosted by tax-avoidance acceleration of income at the end of 2012. An average GDP contribution rate of consumer spending of 1.27%, if sustained, implies that GDP will grow 1.86% annually. This assumes, of course, that the other components of GDP, which comprise 31.8%, also collectively grow at an annual rate of 1.86% and add 0.59% to GDP growth. If real GDP growth is to reach 2.5% on a sustained basis, consumer expenditures will need to contribute 1.70% to GDP.

Nonresidential investment fell in the first quarter and rose in the second quarter. The net result was that the level in the second quarter was about the same as the level in the fourth quarter of 2012. Nonresidential investment accounts for 12.6% of GDP.

To a substantial extent, a significant improvement in real GDP growth in coming quarters depends upon strong acceleration in private investment spending including residential. Indeed, this is exactly what most forecasters expect to occur. This is a very important assumption because above trend growth in investment is critical to accelerating employment and income growth, which, in turn are necessary outcomes if consumer spending is to strengthen. Fundamentals, such as growth in corporate profits, are supportive of acceleration in investment spending. This is a bit of a “chicken and egg” problem because stronger consumer spending depends upon increased investment activity to drive employment and income, but increased investment activity depends upon expectations that consumer demand will improve. Thus, improvements in business and consumer confidence are important. Once investment growth rises a virtuous and self-reinforcing circle will set in with employment, income and spending steadily accelerating.

On balance recent forecasts of rising investment spending have turned

out to have been overly optimistic. For example, in early 2013 GS forecast the annual rate of growth in nonresidential investment during the first half of 2013 would be 2.9%. The actual reported growth rate was -0.1%. GS's forecast growth for all of 2013 early this year was 6.0%; it's revised 2013 forecast, which includes actual results for the first and second quarters, is 3.6%. Since growth was essentially zero in the first half, this means that GS is expecting a sharp acceleration in the second half. That seems optimistic, particularly in light of rising uncertainty because of political battles over government spending and the federal debt limit. If investment activity does not accelerate in coming quarters, then growth in consumer spending is unlikely to improve much and growth in GDP will continue to fall short of expectations.

Residential investment accounts for 3.1% of GDP but contributed 16.6% of GDP growth in the first half of 2013. This sector of the economy has been growing faster than the rest of the economy for the last seven quarters. If growth in residential investment continues at its recent pace, it will add 0.3% to real GDP growth in 2013. However, during the first half of 2013 the actual annual growth rate was 12.9% compared to GS's original forecast of 15.6%. Although there is great excitement about the very large increases in housing prices, other indicators of housing activity and investment have not met expectations. Evidence continues to emerge that the much expected recovery in housing will be more gradual and take longer than was expected early in the year. What this means is that residential investment growth is likely to continue to fall short of expectations and could shave as much as 0.2% off of real GDP growth forecasts over the next few quarters.

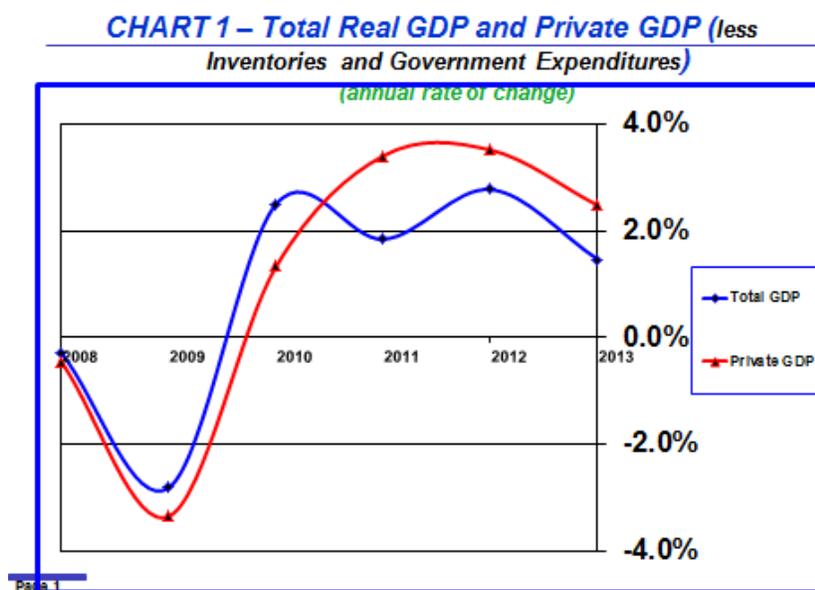
Government expenditures fell much less than expected during the second quarter. Government expenditures comprise 18.5% of real GDP. The decline in state and local government expenditures since the Great Recession appears to have hit bottom in the first quarter. There was a small increase in the second quarter. However, the full impact of federal sequestration was not visible in second quarter data. A large decline seems likely when third quarter data is reported and this could depress third quarter real GDP growth significantly. Declining federal government expenditures will continue to be a significant negative contributor to GDP growth during the remainder of 2013. This should be offset by modest growth in state and local government expenditures so that the overall decline in the second half of 2013 is forecast to be about -2.5%, which would be about the same rate of decline as realized in the first half of 2013. Government expenditures

probably will continue to decline during 2014, but the rate of decline should diminish.

Net exports had a slight negative effect on GDP growth in the “Final Estimate”. While this GDP component tends to be extremely volatile from quarter to quarter, over longer time periods its contribution to real GDP growth is close to zero.

2. Longer-Run Trend in Total Real GDP and Private GDP

Chart 1 compares total real GDP growth from 2008 through the second



quarter of 2013 with a measure of private sector real GDP growth, which is derived by subtracting changes in inventories and government spending from total GDP. (Also, see the last line in **Table 1**.)

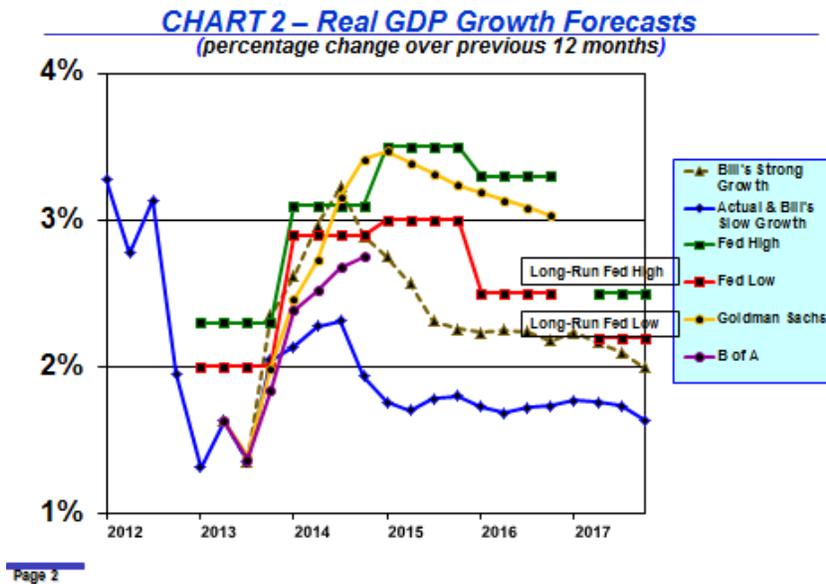
There are two takeaways from **Chart 1** — one good, and one troublesome. The good story is that private sector real GDP growth was about 3.5% in both 2011 and 2012. However, this measure decelerated to 2.5%

in the first half of 2013 compared to the first half of 2012 and reflects the negative effects of higher personal and payroll taxes.

Although the recent decline in private GDP growth is troublesome, as the shock effect of higher taxes on personal income disappears in 2014 there is reason to be hopeful that real private GDP growth will return to the 3.5% level. It is this expectation along with acceleration in investment spending that underpins forecasters' consensus that real GDP growth will accelerate to an above trend level in 2014.

3. GDP Forecasts for Q3, Q4 and 2013

Although most forecasters have expected growth to pick up during the second half of 2013, recent data reports indicate that it is likely that **third quarter** and **fourth quarter** growth will fall short of expectations. The government shutdown poses downside risks. **Chart 2** and **Table 2** show



GDP forecasts/projections for the third and fourth quarters of 2013 and for the full years 2013 through 2016. Except for Global Insight, Economy.com,

Table 2
Real GDP Growth Forecasts — B of A, GS, Global Insight, Economy.com, Blue Chip Average, Bill’s “Slow Growth”, Bill’s “Strong Growth” and FOMC High and Low Projections

	2013:3	2013:4	2013 Q4 to Q4	2013 Y/Y	2014 Y/Y	2015 Y/Y	2016 Y/Y
B of A	1.7	2.0	1.8	1.5	2.6		
GS	1.8	2.5	2.0	1.6	2.9	3.3	3.1
Global Insight*	2.3	2.4		1.5	2.7	3.5	3.1
Economy.com*	2.6	2.8		1.7	3.3		
Blue Chip Average*	2.3	2.7		1.5	2.6	3.1	2.9
Bill’s Slow Growth			2.0	1.6	2.2	1.8	1.7
Bill’s Strong Growth			2.3	1.7	2.9	2.5	2.2
FOMC — High				2.3	3.1	3.5	3.3
FOMC — Low				2.0	2.9	3.0	2.5

*Forecast as of August 2013

and the Blue Chip Average, all other forecasts, including the FOMC’s projections, have been updated and reflect current thinking.

B of A expects 1.7% growth in the third quarter and has lowered its fourth quarter estimate to 2.0% to incorporate the effect of the federal government shutdown. B of A has reduced its forecast for 2013 GDP fourth-quarter-to-fourth-quarter (Q4/A4) growth to 1.8% and 1.5% year over year (Y/Y).

GS’s forecast for the remainder of 2013 is somewhat stronger than B of A’s forecast — 1.8% Q3, 2.5% Q4, 2.0% Q4/Q4, and 1.6% Y/Y. However, in light of the federal government shutdown, GS is considering lowering its fourth quarter real GDP forecast by 0.25% to 0.50%.

Third quarter forecasts prepared by Global Insight, Economy.com and the Blue Chip Average, which are shown in **Table 2**, appear to be too high based upon incoming third quarter data. These forecasts are a month old and may have been revised.

Bill’s “**Slow Growth**” Q4/Q4 forecast shown in **Table 2** is 2.0% and 1.6% Y/Y. Bill’s “**Strong Growth**” Q4/Q4 forecast is 2.3%, reflecting a

strong finish to the year, but Y/Y growth of 1.7% would be only slightly higher. In light of political developments, the “**Slow Growth**” scenario is the more likely outcome.

As **Table 3** shows, the FOMC’s real GDP growth projections have

Table 3
FOMC Central Tendency Real GDP Growth Projections
Compared to Actual Results — 2011 to 2015

Meeting Date	2011	2012	2013	2014	2015	2016	Long Run
Jan 2011	3.7	3.95	4.0				2.7
Apr 2011	3.3	3.65	4.0				2.7
June 2011	2.75	3.1	3.75				2.7
Nov 2011	1.7	2.9	3.35	3.6			2.6
Jan 2012		2.55	3.1	3.55			2.6
Apr 2012		2.55	3.1	3.6			2.6
June 2012		2.05	2.85	3.4			2.6
Sep 2012		1.8	2.9	3.4	3.35		2.6
Dec 2012		1.8	2.6	3.4	3.35		2.6
Mar 2013			2.5	3.2	3.15		2.5
June 2013			2.3	2.9	3.05		2.5
Sept 2013			2.1	2.75	2.95	2.85	2.3
Actual Q4 to Q4	2.01	1.95	2.0*	3.4*	3.2*		
Actual Y/Y	1.85	2.78	1.6*	2.9*	3.3*		
Long Run Potential							2.2-2.5#

*GS forecast

#Bill’s “Slow Growth” long-run potential = 2.18%; Bill’s “Strong Growth” long-run potential = 2.52%

been persistently overly optimistic. Following a well-established pattern, the FOMC reduced its GDP projections for 2013, 2014 and 2015 and introduced a more modest projection range for 2016 at its September meeting.

4. Impact of Financial Conditions and Uncertainty on GDP Growth

Recent economic research conducted by GS has established a strong linkage between changes in financial conditions and subsequent changes in real GDP growth.⁵ Such a linkage has long been understood to exist, but GS has established and tested models which link conditions in financial markets to subsequent developments in the real economy. These models measure both the magnitude and timing of changes in financial conditions on real GDP growth.

Policy uncertainty also impacts economic activity.⁶ Higher uncertainty leads to reduced risk appetite and delays in hiring and investment activity. Various measures indicate that uncertainty declined considerably since late 2012. Up until the political budget battles this was a favorable development for economic activity. In fact, in recent research GS found that the effects of reduced uncertainty should largely offset the effects of tighter financial conditions over the next several quarters.

However, policy uncertainty has exploded with the government shutdown and the threat not to raise the federal debt ceiling by October 17. The shutdown will have limited direct effect on economic activity because most federal spending has not been impacted. In addition, Congress has promised back pay to furloughed federal workers, which means that when the shutdown ends, there will be catch up in consumer spending. Knowing this, many furloughed employees will probably dip into savings to sustain consumption.

However, if the shutdown continues to drag on, the direct impacts on economic activity will accumulate. The greater risk, however, is that rapidly escalating policy uncertainty will begin to have negative impacts and will initiate negative feedback loops.

⁵Jan Hatzius and Sven Jari Stehn. "A Taylor Rule for the Goldman Sachs Financial Conditions Index," Goldman Sachs US Economics Analyst, Issue No: 13/28, July 12, 2013. Also, see Jan Hatzius, Goldman Sachs US Daily: "Better Data vs. Tighter Financial Conditions," June 25, 2013, Shuyan Wu, Goldman Sachs US Daily: "Another Look at Financial Conditions vs. Growth," July 11, 2013, and Shuyan Wu and Jan Hatzius, Goldman Sachs US Daily: "How Big a Risk from Financial Conditions," August 22, 2013.

⁶Jan Hatzius and Sven Jari Stehn. "Reduced Uncertainty and the Move over the Hump," Goldman Sachs Economics Analyst Issue No: 13/36, September 6, 2013.

5. GDP Forecasts for 2014 and Beyond

As **Chart 2** shows, most forecasters expect GDP growth to accelerate in 2014 and 2015 as negative fiscal drag diminishes and unemployment gradually declines (also see **Table 2**).

Both B of A and GS forecast strong residential and business investment growth in 2014. GS's forecast is 10.1% and B of A's is 8.6%. Since investment comprises 15.7% of real GDP, these forecasts imply that investment will contribute between 1.35% and 1.58% to real GDP in 2014. If consumer spending continues at its recent trend level of 1.27%, then real GDP should grow between 2.62% and 2.85% in 2014, provided that none of the other GDP components contribute anything. The FOMC's median central tendency projection of 2.75% (**Table 3**) is consistent. While investment growth could accelerate sharply during 2014, the recent increase in mortgage rates, tighter financial conditions, and increased policy uncertainty, if sustained, pose significant downside risks.

Although FOMC projections have been systematically overly optimistic in the past, FOMC projections for 2014, 2015 and 2016 are similar to those of most forecasters. Note in **Chart 2** that my forecasts are generally lower, particularly for the "**Slow Growth**" scenario. The principal difference has to do with my view that investment growth and, therefore, productivity growth will remain low relative to historical levels. Slow investment growth will hold back employment growth and retard income growth, which implies that consumer spending growth will remain mired near recent low levels. A detailed analysis of the case for low investment growth, low productivity growth, and below consensus real GDP growth was presented in the *September Longbrake Letter*.

6. Recession Risks

Low real GDP growth during 2013 coupled with uncertainties about the future course of monetary policy and the potential consequences of the current political battle over funding the federal government and raising the federal debt ceiling have led some to speculate about the possibility of recession.

Several economic business cycle models indicate that the probability of recession is near zero. These models generally compare the current values

of a plethora of economic variables with their values experienced during recession. For example, the Economic Trend Index, a diffusion index of 14 leading/coincident indicators, is at about the 90% level and indicates negligible recession risk.

III. Consumer Income and Spending

At the end of 2013 personal income, consumption expenditures, and saving were very volatile from month to month. This was caused by timing of income recognition in late 2012 to optimize tax burdens in anticipation of changes in fiscal policy. This led to a substantial increase in reported income in late 2012. Also, there appears to be some seasonality in the data in conjunction with timing of certain types of incentive compensation. The monthly data are not seasonally adjusted.

1. Percentage Changes in Personal Income and Disposable Income 2011, 2012 and 12 Months Ending in May, June, July, and August 2013

To provide a better sense of trends, **Table 4** shows data which compare percentage changes for 2011 and 2012 and the 12-month periods ending in May, June, July, and August 2013. The 12-month periods simply take the difference between data for a month in 2012 and the same month in 2013. This method omits the anomalies in the year-end 2012 data. By showing four successive 12-month periods, one can get a sense of the underlying trend in various income categories. However, as a caution, the data will be revised many times in the future. So, what appears to be a trend now may be revised away later.

Growth in personal income and disposable income has been weaker so far in 2013 than it was in 2011. This difference is due entirely to the change in the payroll tax rate, which is explained further below. Moreover, growth rates in both income measures are improving as 2013 progresses.

However, the primary component of personal income — wage and salary compensation — appears stuck in the vicinity of a 3.2% growth rate. The improving trend in personal income is being driven by rising growth rates

Table 4
Percentage Change in Personal Income and Its Disposition for
2011, 2012 and 12 Months Ending May, June, July, and August
2013

	2011 Pct. Change	2012 Pct. Change	Pct. Change May 12- May 13	Pct. Change Jun 12- Jun 13	Pct. Change Jul 12- Jul 13	Pct. Change Aug 12- Aug 13
Personal Income	4.63%	7.94%	3.15%	3.16%	3.40%	3.72%
Compensation	2.81%	6.80%	3.15%	3.28%	3.18%	3.24%
Proprietors' Inc.	11.05%	5.07%	10.19%	9.25%	10.13%	10.84%
Rental Income	19.44%	7.28%	9.22%	9.01%	9.97%	10.79%
Asset Income	4.59%	18.90%	3.06%	3.32%	4.61%	4.88%
Government Transfers	0.17%	4.06%	3.59%	3.58%	3.53%	4.44%
Less: <i>Personal Taxes</i>	4.50%	9.47%	14.21%	14.44%	13.88%	13.57%
Disposable Income	3.63%	7.52%*	1.99%	1.97%	2.34%	2.76%
Less: <i>Consumption</i>	4.13%	3.73%	2.79%	3.23%	3.02%	3.10%
Personal Saving	-4.40%	74.14%	-12.08%	-19.26%	-10.17%	-3.70%
Personal Saving Rate	5.67%	5.61%	5.14%	5.05%	4.99%	4.97%
Adj. Personal Income [#]	3.77%	7.84%	4.02%	4.04%	4.26%	4.57%

*2.68%, if tax-avoidance timing impacts on “Compensation” and “Asset Income” are removed [#]Growth rate in personal income, assuming no change in the payroll tax rate. The payroll tax rate was lowered by 2 percentage points in 2011 and restored to its original level in 2013.

for proprietors income, rental income, and asset income.

Growth in disposable income is being helped by all of these factors plus a slow deceleration in the rate of growth in personal taxes. Next January the rate of growth in personal taxes will drop sharply on the anniversary of both the increase in payroll taxes and the increase in tax rates on high income individuals.

Changes in the payroll tax rates in recent years have distorted the growth rate in personal income. That is because payroll taxes are netted from personal income. That doesn't affect the growth rate in personal income if the payroll tax rate remains constant. However, Congress reduced the tax rate in 2011 and then returned it to its original rate in 2013. The bottom

line in **Table 4**, labeled “Adj. Personal Income”, shows what the growth rate in personal income would have been in each period, if the payroll tax rate had never been changed. The adjusted data tell an interesting story. The reported growth rate in 2011 was 4.63%, but if the payroll tax rate had not been reduced it would have been 3.77%. When the payroll tax rate was returned to its former level in 2013, the adjusted personal income growth rate as of August would have been 4.57% rather than the actual rate of 3.72%, which was depressed by the increase in the payroll tax rate. Note that the difference in the two growth rates in 2011 and 2013 is identical except with the opposite signs. When the effect of the changing payroll tax rate is removed it becomes clear that personal income growth has actually been strengthening. This should become apparent in the reported data beginning in January 2014 when there is no year-over-year change in the payroll tax rate.

All-in-all, the story told in **Table 4** is an encouraging one.

2. Consumption

Although less definitive, data in **Table 4** suggest that the growth rate in consumer spending is rising gradually. However, the 12-month growth rate of 3.10% remains substantially below 2011 and 2012 growth rates. If disposable income growth continues to rise, consumer spending growth should edge up, but probably to a lesser extent as consumers seek to restore savings balances. Whenever the growth rate in spending exceeds the growth rate in disposable income the gap is filled by drawdowns on savings.

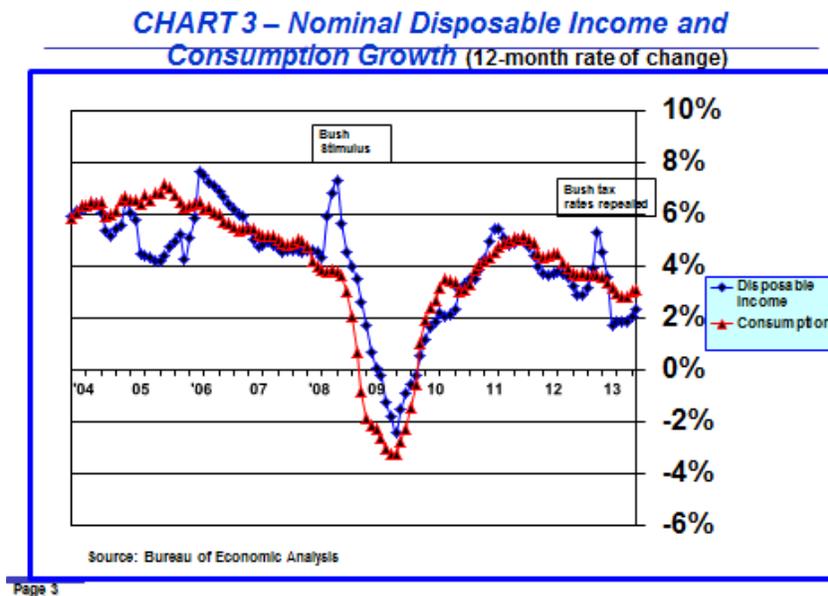
Prospects for faster income growth in coming months will also improve with employment growth. While employment growth has been good, it has not been great. Moreover, a disproportionate amount of new jobs has been in the part-time and lower wage categories.

This implies that because consumption growth exceeds income growth, the risks remain tilted in the direction of slow recovery in consumption growth and this will continue to depress real GDP growth. Those risks can be offset either through stronger income growth or further declines in the saving rate. But, if consumers decide to increase their savings rate, spending growth would slow and set in motion adverse feedbacks that would depress economic activity. At the moment that risk appears to be remote because

employment is improving slowly, wage rate growth is stable and may be on the cusp of improving, and credit for consumer goods, especially autos, is readily available.

3. Disposable Income and Spending

Chart 3 shows the nominal rate of growth in disposable income and con-



sumer spending from 2004 to the present. Growth rates are calculated as changes in quarterly averages year over year. This method smooths timing anomalies to a certain extent, although major events such as occurred at the end of 2012 will still impact the observed trend for the following 12 months.

The annual rate of growth in disposable income began slowing in early 2011 and declined from 5.5% in April 2011 to 2.9% in September 2012, but then surged to 5.4% in December, followed by a resumption of the decline to 2.4% in August.

Chart 3 shows that growth in consumer spending, after peaking at 5.2%

in September 2011, slowed to about 3.7% in July 2012, remained at that level until December 2012 and has since declined further to 3.1% in August 2013.

4. Outlook for Nominal Disposable Income and Spending

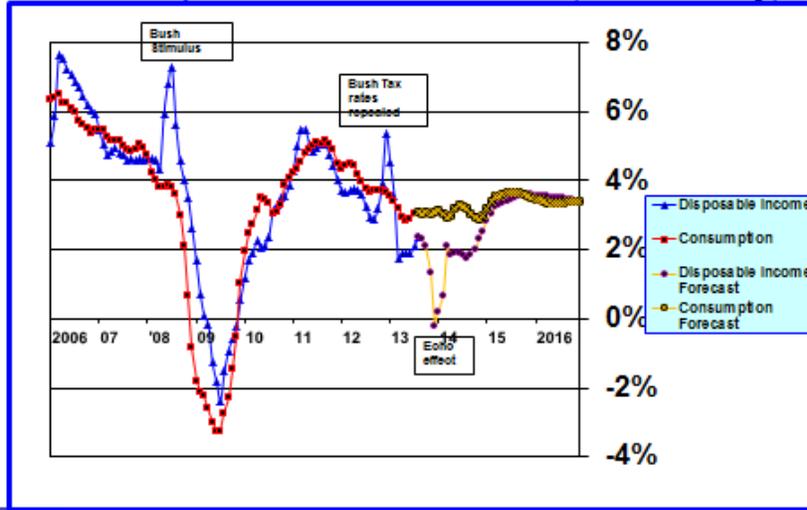
As can be seen in **Charts 4A** and **4B**, I expect nominal consumer disposable income growth will slow in coming months. This trend is not in doubt because of the 12-month moving average calculation method. However, recovery in income growth in my econometric analysis from recent levels does not occur late 2014, which is at odds with other forecasts. A partial explanation involves my expectation that inflation will remain near recent low levels. Since nominal wage growth tends to follow the trend in inflation in the long run, low inflation will retard improvement in wage growth. Thus, most of the increase in the growth rate in disposable income will have to come from improved employment growth. Of course, above trend employment growth will slowly close the employment gap and as the gap closes, eventually that will result in upward pressure on nominal wages.

Chart 4A shows my “*Slow Growth*” scenario forecast for growth in nominal consumer disposable income and consumption through 2016. The story **Chart 4A** tells is not a strong one. It is a story that is consistent with low labor force growth, paltry productivity gains, low inflation and meager increases in wages and salaries.

Chart 4B shows my “*Strong Growth*” scenario forecast for growth in nominal consumer disposable income and consumption through 2016. Higher rates of growth in employment and productivity in the “*Strong Growth*” scenario lead to stronger growth in nominal disposable income and consumption on an escalating basis during 2014-2016. Importantly, most of the effect of the faster growth in employment on inflation in this scenario is offset by the benefits of increased productivity. This means that the improvement in real income and consumption growth is nearly the same in the “*Strong Growth*” scenario as the improvement in nominal income and consumption growth.

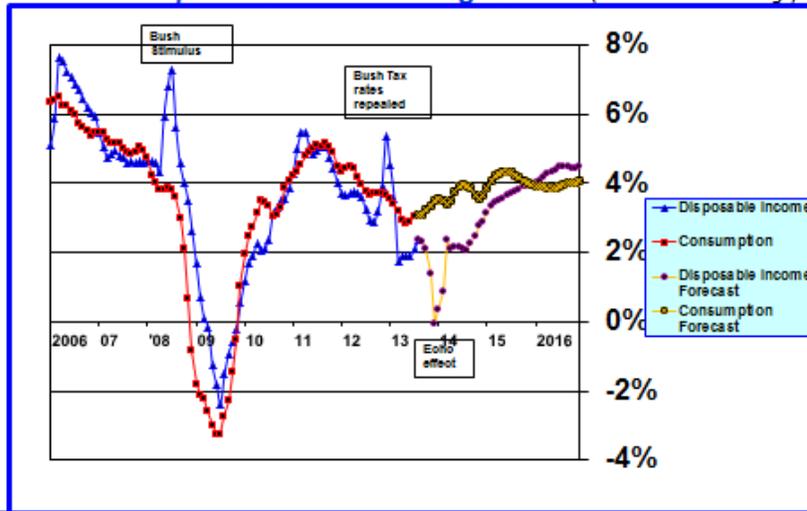
Notice that in **Chart 4B** nominal disposal income growth exceeds nominal consumption growth in 2016. This means that the saving rate, based upon the assumptions underpinning the “*Strong Growth*” scenario, will increase in 2016.

CHART 4A – Forecast Nominal Disposable Income and Consumption Growth – Slow Growth (12-month rate of change)



Page 4

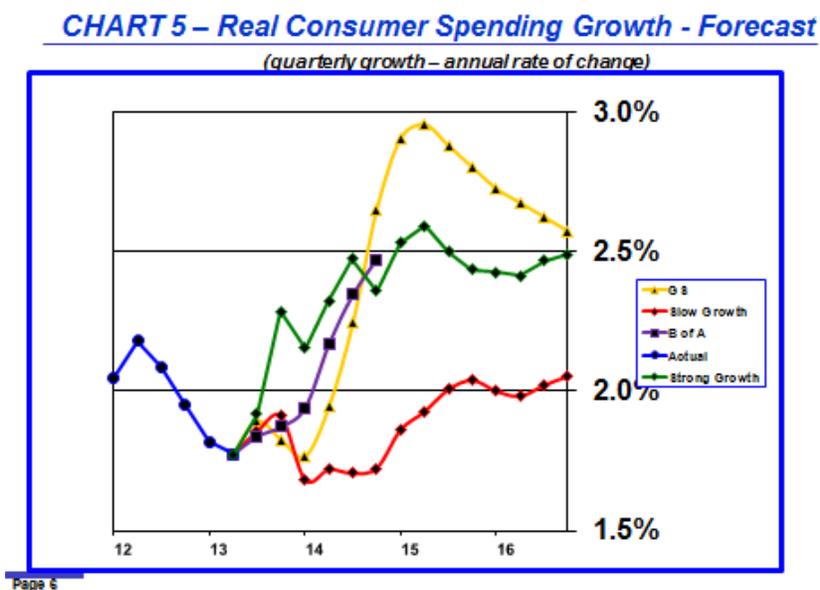
CHART 4B – Forecast Nominal Disposable Income and Consumption Growth – Strong Growth (12-month rate of change)



Page 5

5. Real Consumer Spending Forecasts

Chart 5 shows forecasts for quarterly real consumer spending growth at an



annualized rate. B of A and GS expect consumer spending growth to slow to a 1.7% annualized growth rate during the remainder of 2013. Bill’s “*Slow Growth*” forecast indicates growth of about 1.9% for the two remaining quarters in 2013.

My “*Slow Growth*” scenario forecasts much weaker real consumer spending growth in 2014, 2015, and 2016 than either GS or B of A. My “*Strong Growth*” forecast is higher than GS’s and B of A’s forecasts through late 2014 but underperforms GS’s forecast after that.

6. Consumer Confidence

Measures of consumer confidence generally have edged lower since mid-summer. However, the University of Michigan’s consumer sentiment index fell sharply in September to 77.5 from 82.1 in August. Its recent peak was

85.1 in July. Both the current conditions and expectations sub-measures declined in August and September. Expectations are now at the lowest level since January when the year-end fiscal follies had unsettled consumers.

According to the Conference Board's survey, overall consumer confidence fell to 79.7 in September compared to 81.8 in August; however, the present situation index rose while the expectations index fell. The differential between jobs easy to get minus jobs hard to get improved from -22.0 in August to -21.2 in September. This is not indicative of a robust labor market, but at least the differential is headed in the right direction.

ISI's company surveys have been relatively stable over the last four months. Its diffusion index peaked at 52.3 in the week of June 7, edged down slightly to 51.3 in the week of August 2 and rose a tad to 51.9 in the week of September 13 and declined to 51.4 in the week of October 11. This is indicative of an economy that is neither gaining nor losing momentum. However, the government shutdown may result in depressing ISI's index.

Overall, consumer confidence measures are not particularly robust, which reflects the on-going lethargic improvement in employment and incomes. Confidence measures do not suggest acceleration in economic activity but more of the same — an economy muddling along but showing gradual improvement. The government shutdown is a downside risk, although it is too early to estimate whether that risk will have a significant impact.

Rasmussen conducts a daily consumer confidence poll. Prior to the government shutdown the Rasmussen index averaged 100 during September and was 103 on October 1. By October 9 the index had fallen to 92. However, to put matters into perspective, this index fell to the mid-60s during the federal debt crisis in July and August 2011.

Another measure of "economic optimism", the IBD/TIPP index, has dropped sharply to 38.4 in recent days.

My sense is that recent political turmoil may slow economic activity a tad in the fourth quarter but it is unlikely to derail the slow economic recovery that has been underway since the end of the Great Recession.

IV. Employment

Courtesy of the federal government shutdown, the September employment report had not yet been released at the time of the writing of this letter. Thus, necessarily, there is little in the way of detailed updated analysis that I can provide.

Even though updated employment data are unavailable, debate continues over the extent to which labor market slack exists. This debate is important because it bears on market and FOMC assessments about the timing of future interest rate increases.

In the minutes of the September FOMC meeting there was broad agreement that labor market conditions have improved since the current round of quantitative easing was initiated last year. However, FOMC members who favored continuing quantitative easing without tapering “... *viewed incoming data as having been on the disappointing side... despite clear improvements in labor market conditions... [and] were not yet adequately confident of continued progress.*” Members who favored starting tapering immediately stated that meaningful cumulative progress has already occurred. Part of the difference in these two points of view may have to do with the interpretation of the amount of slack remaining in the labor market and that depends upon whether the significant decline in the employment participation rate is structural, and thus permanent, or cyclical, and thus temporary.

Employment growth over time approximates growth in the working age population with adjustments for demographic and life style trends. Currently, the working age population is growing at about 1.0% annually. Demographic and life style trends are depressing this figure to between 0.7% and 0.8%. The labor force — those in the working age population who are working or looking for work — is growing at an annual rate of about 0.5%. The implication of these three sets of growth rates is that some people are dropping out of the labor force for reasons other than long-term trends in demographic and life style considerations. These are “discouraged” people who have given up looking for work. The question is whether these discouraged workers will reenter the labor force and, if so, when.

While monetary policy has been accommodative, the short-run policy issue for the FOMC as the labor market slowly recovers is how and when to normalize monetary policy. If the normalization process is delayed for

too long there is risk that inflationary pressures will emerge; but if normalization occurs prematurely there is an opposite risk of slowing economic recovery. This is the FOMC's challenge: how to adjust policy — not too much tightening too soon versus not too little too late. The FOMC rightly has focused on the health of the labor market as its guide. But its selection of the deeply flawed household survey-based unemployment rate as a guidepost is problematic. While FOMC members understand the shortcomings of this measure and emphasize that many other labor market measures enter into policy setting, this introduces considerable complexity into attempting to understand the timing and extent of policy normalization. Market participants have difficulty dealing with the opaqueness of complexity and appear to be more comfortable with simple decision rules. This means that the flawed measure of the unemployment rate and perceptions about how the FOMC might adjust monetary policy in response to improvements in this measure have had greater impact on interest rates and financial conditions than many members of the FOMC appear to be comfortable with.

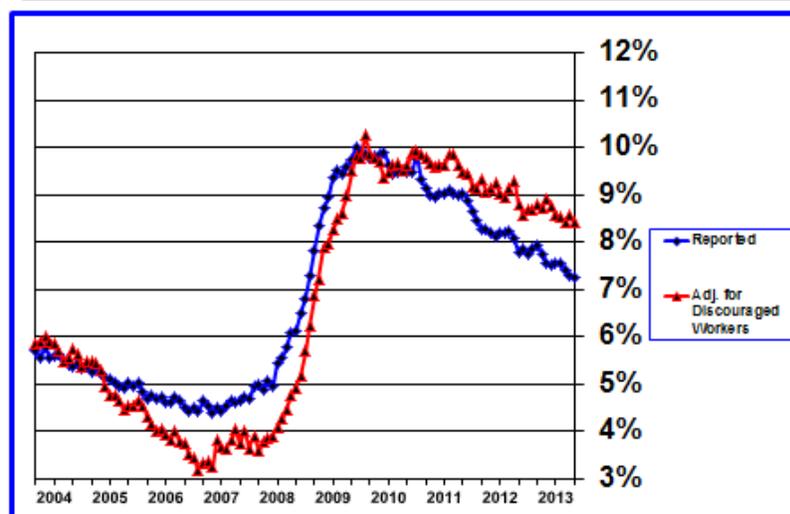
1. Temporary Discouraged Workers or Permanent Structural Unemployment?

In recent months the unemployment rate declined more than expected, partially because employment growth was a little stronger but also because more workers dropped out of the labor market than expected. **Chart 6** shows my alternative unemployment measure, which adjusts for discouraged workers. In August, my alternative unemployment rate was 8.57% compared to BLS's reported rate of 7.28%. This difference of 1.24% amounts to 2.0 million discouraged workers.

What is important from a policy standpoint is whether workers who have stopped looking for jobs, and thus are no longer counted as unemployed, will reenter the job market when jobs become more plentiful or whether their exit is permanent because there are no jobs that fit their skills and there won't be any in the future.

If discouraged workers re-enter the labor market as unemployment falls this will retard the speed with which the unemployment rate falls. Put differently, it might take longer for the unemployment rate to fall to the policy guideline of 6.5% or to the full-employment rate of 5.5%. To date the preponderance of analysis supports the expectation that many discouraged

CHART 6 – Reported Unemployment Rate & Adjusted for Discouraged Workers



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workers will re-enter the labor force as labor market conditions improve but that reentry will not occur to a meaningful extent until the unemployment rate, as conventionally measured by BLS, falls well below 6.5%.

2. Labor Market Slack — Goldman Sachs Estimate

In a recent study GS concluded that current labor market slack equals about 4% of the labor force plus marginally attached workers, or approximately 6.2 million (August data).⁷

GS arrived at the 4% estimate employing two different analytical approaches. The first approach combined the conventionally-measured employment gap (difference between the reported 7.28% unemployment rate and CBO's full-employment 5.5% rate) and its estimate of the participation gap. The second approach combined data provided in the BLS employment report for the (1) employment gap plus (2) the involuntary part-time

⁷David Mericle. Goldman Sachs US Daily: "Looking Beyond the Unemployment Rate," September 9, 2013.

(those working part-time for economic reasons) gap plus (3) the marginally attached (those not employed or looking for work, but willing to work) gap. The values of the second and third gaps were determined by comparing recent data to historical averages.

GS recently updated its analysis of the participation rate.⁸ Since the end of the Great Recession the participation rate has fallen by 2.75 percentage points. GS estimates that 1.25 percentage points are due to demographic factors and, thus, reflects a permanent decline. The remaining decline of 1.50 percentage points is due to other factors, some of which may be cyclical and some of which may be structural. My estimate of the cyclical component, as shown in **Chart 6**, is approximately 1.25 percentage points, which, if reasonable, would leave .25 percentage points of the decline due to structural factors.

GS notes that there have been numerous studies and most indicate that between 50% and 75% of the total 2.75 percentage point decline in the participation rate is due to cyclical factors. This amounts to a range of 1.4 to 2.0 percentage points, somewhat greater than my estimate, but consistent with GS's estimate of 1.5 percentage points.

GS concludes from the work of others and its own analysis that the total unemployment gap is about 4.0 percentage points, which is substantial. Research also shows that the cyclical participation gap historically has not declined much until the labor market has strengthened considerably. This means that BLS's unemployment rate will probably need to fall below 6.5% and be approaching the long-term 5.5% full employment level before significant numbers of discouraged workers reenter the labor force.

For these reasons, GS argues that the FOMC's 6.5% unemployment guideline should not be considered to be the threshold for raising the federal funds rate because considerable labor market slack would still prevail at this level.

Debate is likely to continue and the market will probably continue to find the intricacies of the debate confusing and so will tend to focus on the conventionally measured 6.5% unemployment rate guideline. I think it is likely that the FOMC will need to clarify the 6.5% guideline more explicitly

⁸Sven Jari Stehn. Goldman Sachs US Daily: "The State of the Participation Debate," October 2, 2013.

at a future meeting. FOMC members, including Chairman Bernanke, have observed that the FOMC considers many measures of labor market strength in addition to the unemployment rate. At the recent September FOMC meeting members discussed this issue. However, until the FOMC changes its policy statement market confusion is likely to continue.

3. Labor Market Slack — Bill’s Estimate

If the employment-to-population ratio were the same today as it was in early 2000, about 64.5%, there would be 14.5 million more Americans employed today, which would be approximately 10% more than the actual number employed currently. GDP, personal income, consumer spending and tax receipts would all be higher by roughly 10%, the unemployment rate would be about 3.75%, and the federal deficit would be much lower.

Putting 14.5 million to work is not particularly realistic because of demographic changes in the workforce such as aging and later entry of younger people into the labor force. These changes account for about 3.2 million which lowers the number from 14.5 million to 11.3 million, which is still a very large number.

Further, while getting back to a 3.75% unemployment rate would be outstanding, CBO’s estimate of the long-run non-accelerating inflation rate of unemployment (NAIRU) is 5.5%. The difference between the 3.75% early-2000 rate of unemployment and 5.5% would subtract an additional 4.6 million, leaving 6.7 million as the “optimal” number of additional workers. That 6.7 million is composed of 4.4 million who are currently looking for work (difference between 7.3% and 5.5% rate of unemployment) and 2.0 to 2.3 million discouraged workers.

Note that the small difference between my estimate of labor market slack of 6.7 million and GS’s estimate of 6.3 million is the result only our alternative methodologies for estimating the decline in the participation rate due to discouraged workers dropping out of the labor force. Thus, I believe my alternative unemployment rate of 8.57%, shown in **Chart 6**, is a reasonable estimate of the “true” unemployment rate pursuant to “normal” labor market conditions.

4. Implications of Substantial Labor Market Slack

What does all of this mean? First and foremost, the collapse in the employment-to-population ratio (total number employed to total number eligible to work) means that the U.S. economy is a lot smaller than it could be based on historical employment patterns. That means there is less income per capita and less wealth. Americans are not as well off as they could be if a greater proportion of them were employed.

Second, the U.S. has no unemployment objectives other than “full employment”. As discussed above, we are not even sure how to measure what “full employment” is. We do not know how to determine whether someone is discouraged. We do not have any objective for what the employment-to-population ratio ought to be. Therefore, we have few specific policies aimed at creating jobs.

V. Business Activity

Business activity is positive but is also indicative of a weak economy. Business investment continues to be lackluster.

1. Recent Developments

ISM Manufacturing Index rose to 56.2 in September from 55.7 in August. Values of this index above 50 mean that manufacturing activity is expanding. The production subcomponent held at a high level of 62.6, but the new orders subcomponent eased to 60.5, indicating slightly slower future growth in manufacturing activity. The employment subcomponent improved from 53.3 to 55.4. Manufacturing continues to be a bright spot in an otherwise lackluster economy.

ISM Services Index declined sharply in September to 54.4 from 58.6 in August. The business activity subcomponent fell to 55.1 from 62.2 and employment dropped to 52.7 from 57.0. However, new orders remained robust at 59.6. Services cover a much greater portion of the economy than manufacturing. Nevertheless, both indices exceed 50, indicating that economic

activity is expanding.

Small business optimism (**NFIB — National Federation of Independent Business**) edged down slightly in September to 93.9 from 94.1 in August. This measure has improved in recent months but remains at an historically depressed level. Unfortunately, pessimism is building once again. The measure of businesses expecting the economy to improve fell to -10% from -2% (this measure subtracts pessimistic responses from positive responses).

Small businesses, and specifically newly started small businesses, historically have been the main drivers of job growth. Last month I reported that the NFIB measure of small business hiring plans jumped in August. Unfortunately, that was a reporting error and the measure declined from +10% in August to +9% in September. While any positive number signals favorable employment conditions, the current positive level remains well below the historical average that has prevailed during good economic times.

Rising hiring plans are only part of what needs to happen to spur faster employment growth. The other necessary ingredient is a substantial increase in new business formation, which has been severely depressed in recent years. Although established small businesses have not cited access to credit as a significant problem, it seems probable that tight credit availability has constrained new business formation. In a recent study, GS concluded that as credit standards continue to ease small business employment growth will pick up in coming quarters but will still underperform historical norms.⁹

New businesses not only have been the primary source of employment growth historically, they have also been engines of productivity growth. Thus, a substantial increase in small business formation would have favorable effects on employment, income and productivity. While this may occur naturally as the economy continues to heal, there remains the question of whether structural changes in the economy and potential adverse consequences of macro fiscal and monetary policies will dampen new business formation.

GSAI (Goldman Sachs Activity Index) fell to 50.0 in September from 56.6 in August. As is the case for the ISM indices, a value above

⁹Kris Dawsey. “Small Business, New Business, and the Recovery,” Goldman Sachs Economics Analyst Issue No: 13/35, August 30, 2013.

50 connotes business expansion. Importantly, the employment index was a sub-50 reading of 44.5, which is not positive but is tempered by the fact that it has been below 50 for several months.

Before tax **corporate profits** rose to 12.53% of GDP in the second quarter just short of the all-time high of 12.60% recorded in the fourth quarter of 2011.

2. Business Investment and Capital Stock

Net growth in the real net private stock of capital, as measured by the 5-year average rate of growth, has fallen from about 3.5% in the mid-1950s to 1.2%. While business investment spending has recovered from the depths of the Great Recession, it has risen only to its long-term average which is considerably below levels experienced during vigorous economic expansions. The recent decline in nonfarm productivity growth is especially worrisome because it indicates the consequences of weak investment spending and the declining rate of growth in the real net private stock of capital.

3. Delaney Partnership to Build America Act

Increases in the rate of potential GDP growth depend on higher productivity which in turn depends upon increased investment, both private and public. In the public sector, the American Society of Civil Engineers estimates that \$3.6 trillion in infrastructure spending is needed by 2020.

Rep. John Delaney (D-MD) has introduced legislation entitled “Partnership to Build America Act” which would create the American Infrastructure Fund (AIF). The idea is that large U.S. businesses with international operations would purchase \$50 billion in AIF bonds with a 50-year maturity and a 1% rate of interest. The inducement to purchase these bonds would be that purchasers would be able to repatriate foreign earnings tax-free based upon a multiple of the bonds they bought. Then, the \$50 billion would be treated as if it were equity and geared at a 15:1 leverage ratio to support \$750 billion in loans and credit guarantees. At least 25% of AIF infrastructure projects would need to be financed by public-private partnerships in which private financing would have to account for at least 20% of project

costs. While details of this proposal may make it unworkable in practice, at the least it is an attempt to address a critical issue that is receiving very little attention as Congress battles over the federal budget and debt.

VI. Monetary Policy, Inflation and Interest Rates

Up until and immediately following the September 18 FOMC meeting monetary policy dominated the news. But more recently monetary policy debates have been eclipsed by the unfolding federal budget and debt ceiling battle.

Although Chairman Bernanke had consistently reiterated prior to the September 18 FOMC meeting that monetary policy decisions are data dependent, the market in its collective wisdom was convinced that the FOMC would announce the commencement of tapering of large scale asset purchases and that tapering would focus initially in a reduction of \$10 to \$15 billion per month in Treasury securities purchases while leaving mortgage backed securities purchases untouched.

Thus, the market was taken by surprise by the FOMC's announcement that tapering would not begin. While my sense is that Chairman Bernanke probably believed that the market was not listening to what he was saying prior to the meeting, the market's misinterpretation can be traced back to Bernanke's own commentary after the June FOMC meeting where he openly talked about the possibility of tapering later in the year and gave the example of a 7.0% unemployment threshold and a mid-2014 date as a possible end to quantitative easing. These statements were always conditioned upon the performance of the economy and were based on achievement of the FOMC's projections, particularly for real GDP growth. The market did not interpret the conditional statements in the way in which Chairman Bernanke intended. The upshot of all of this is that the FOMC's communications have become more opaque and less transparent.

Recently released minutes of the September 18 FOMC meeting reveal a lively debate about the pros and cons of commencing tapering. The decision appears to have been a close call and more reflective of the views of voting members than all members including non-voting members. The decision also appears to have been influenced by the downside risks posed by the pending federal budget and debt ceiling issues, which have now been realized.

The market now better appreciates the importance of the “data dependent” guidance, but the FOMC has provided little concrete guidance on what data measures are important to watch other than the flawed unemployment rate.

Thus, the FOMC and Chairman Bernanke have lost a degree of credibility. The tightening in financial conditions that occurred following Bernanke’s congressional testimony in May and the June FOMC meeting eased slightly on the day of the FOMC’s meeting but have changed little since then. For example, the 10-year Treasury rate was 2.69% on September 18 and 2.70% on October 11.

1. September FOMC Meeting

The FOMC modified several parts of its statement to make it clearer that data will drive key monetary policy decisions.

Assessment of the Economy. In July the FOMC said: “*Labor market conditions have shown further improvement in recent months...*” The September statement modified this declarative statement: “*Some indicators of labor market conditions have shown further improvement in recent months...*” This modification clarified two things. First, it made it clear that the FOMC is watching many labor market indicators, not just the unemployment rate. Second, it also made it clear that not all labor market indicators are improving. One such indicator is probably the participation rate. The FOMC added a sentence stating its concern over the recent tightening in financial conditions.

Monetary Policy Statement. Lest there be any doubt its data dependent focus for tapering asset purchases, the FOMC added the following language in the policy section of the FOMC statement: “*In judging when to moderate the pace of asset purchases, the Committee will, at its coming meetings, assess whether incoming information continues to support the Committee’s expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective. Asset purchases are not on a present course, and the Committee’s decisions about their pace will remain contingent on the Committee’s economic outlook...*”

2. Updated FOMC Economic Projections

September FOMC projections for key economic indicators are shown in **Table 5** along with projections from previous FOMC meetings for comparative

Table 5
Economic Projections of Federal Reserve Board Members
And Federal Reserve Bank Presidents, June 2013

Variable	Central Tendency					
	2013	2014	2015	2016	Longer Run	
Real GDP %	<i>Sep</i>	<i>2.0-2.3</i>	<i>2.9-3.1</i>	<i>3.0-3.5</i>	<i>2.5-3.3</i>	<i>2.2-2.5</i>
	June	2.3-2.6	3.0-3.5	2.9-3.6		2.3-2.5
	Mar	2.3-2.8	2.9-3.4	2.9-3.7		2.3-2.5
	Dec	2.3-3.0	3.0-3.5	3.0-3.7		2.3-2.5
Unemp. Rate %	<i>Sep</i>	<i>7.1-7.3</i>	<i>6.4-6.8</i>	<i>5.9-6.2</i>	<i>5.4-5.9</i>	<i>5.2-5.8</i>
	June	7.2-7.3	6.5-6.8	5.8-6.2		5.2-6.0
	Mar	7.3-7.5	6.7-7.0	6.0-6.5		5.2-6.0
	Dec	7.4-7.7	6.8-7.3	6.0-6.6		5.2-6.0
PCE Inflation %	<i>Sep</i>	<i>1.1-1.2</i>	<i>1.3-1.8</i>	<i>1.6-2.0</i>	<i>1.7-2.0</i>	<i>2.0</i>
	June	0.8-1.2	1.4-2.0	1.6-2.0		2.0
	Mar	1.3-1.7	1.5-2.0	1.7-2.0		2.0
	Dec	1.3-2.0	1.5-2.0	1.7-2.0		2.0
Core PCE %	<i>Sep</i>	<i>1.2-1.3</i>	<i>1.5-1.7</i>	<i>1.7-2.0</i>	<i>1.9-2.0</i>	
	June	1.2-1.3	1.5-1.8	1.7-2.0		
	Mar	1.5-1.6	1.6-2.0	1.8-2.1		
	Dec	1.6-1.9	1.6-2.0	1.8-2.0		

purposes.

FOMC members reduced real GDP growth projections for 2013 and 2014 at its September meeting. Note that the initial range for the real GDP growth projection for 2016 is lower than the range for 2015. That suggests that the FOMC expects the output gap to have closed considerably by 2016 and that growth will begin slowing towards its long-term expected range of 2.2% to 2.5%. The FOMC's long-term expected potential rate of real GDP growth at full employment is exactly consistent with my 2.2% to 2.5% range (see **Table 3** above).

There were only small changes in the projections for the unemployment rate, the PCE inflation rate and the core PCE inflation rate.

3. Janet Yellen's Optimal Control Approach to Monetary Policy

Now that President Obama has nominated Janet Yellen to be Ben Bernanke's successor as chairman of the Board of Governors of the Federal Reserve, which also means that she will chair the FOMC, it is important to understand her recent work on "optimal control".

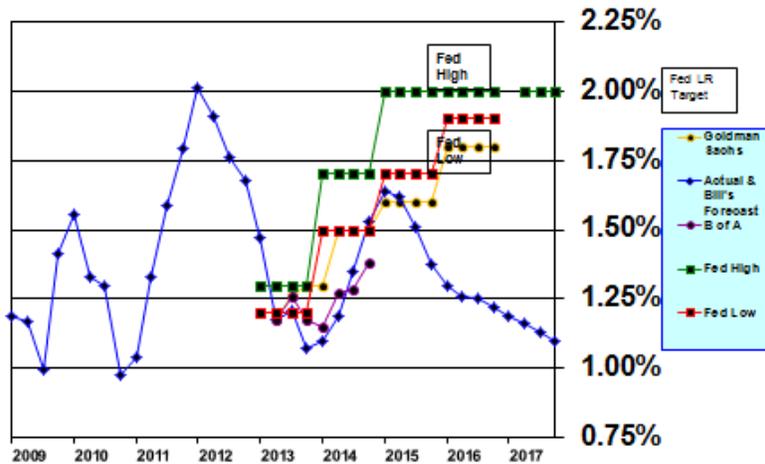
Optimal control involves keeping the federal funds rate lower for a longer period of time than traditional analytical approaches indicate would be the case. The consequence is two-fold. First, under an optimal control approach, the unemployment rate is expected to fall more quickly to the desired full-employment level because federal funds rate increases are deferred for a period of time. Second, inflation rises above the 2% target, but not by much. However, once the federal funds rate is normalized, the inflation rate quickly falls back to the target of 2%.

For optimal control to work as the Federal Reserve's econometric model indicates, inflation expectations must remain well-anchored. There is reason to believe that this can be accomplished by crafting explicit guidance language as to what the FOMC intends to do and what measures its actions should be judged by. One implication of an optimal control policy is that the federal funds rate would need to be maintained at the zero boundary well after the unemployment rate falls below 6.5%. At the very least the FOMC would need to change its current 6.5% unemployment rate guidance. Also, the FOMC would need to make it clear that temporary increases in core PCE inflation above 2.0% would not lead to increases in the federal funds rate so long as the increase did not exceed a certain level, say 2.5%, and as long as the employment target had not yet been achieved. All of this would require careful crafting of guidance language to assure that market expectations and FOMC policy are in sync. The FOMC's clumsy handling of tapering guidance is illustrative of just how important being transparent and establishing credibility is to the effectiveness of monetary policy.

4. Prospects for PCE Inflation

Core PCE inflation was 1.23% in August and total PCE inflation was 1.15% (see **Chart 7**). Compared to core PCE inflation, total PCE inflation is

CHART 7 – Core PCE Inflation Forecasts
(percentage change over previous 12 months)



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much more volatile and has been negative for short periods of time in the past. For that reason the FOMC prefers to focus policy deliberations on the core PCE inflation measure.

PCE inflation is well below the FOMC's target level of 2% and is not much above the lows experienced briefly in mid-2009 and late-2010 when the FOMC was concerned about the threat of deflation. In its assessment section of its September policy statement, the FOMC acknowledged that "*Apart from fluctuations due to changes in energy prices, inflation has been running below the Committee's longer-run objective,*" but added that "*...longer-term inflation expectations have remained stable.*" In the policy section of its statement, the FOMC in effect dismissed the threat of lower inflation or deflation: "*The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.*"

As can be seen in **Table 6** (**Chart 7** shows historical core PCE price index data and data from **Table 6** in graphical form), most forecasts of the core PCE inflation index indicate that inflation should rebound from its August level of 1.2% to 1.4% to 1.5% in 2014, which is consistent with

Table 6
Core PCE Inflation Forecasts — B of A, GS, Bill’s “Slow Growth”, Bill’s “Strong Growth” and FOMC High and Low and Total CPI Inflation Forecasts — Global Insight and Economy.com

	2013	2014	2015	2016	
B of A	1.2	1.4			
GS	1.3	1.5	1.6	1.8	
Bill’s Slow Growth	1.1	1.5	1.4	1.2	1.1
Bill’s Strong Growth	1.1	1.5	1.4	1.4	1.4
FOMC — High	1.3	1.7	2.0	2.0	
FOMC — Low	1.2	1.5	1.7	1.9	
Total CPI	2013	2014	2015	2016	
Global Insight*	1.4	1.4	1.7	1.9	
Economy.com*	1.5	1.9			

*Not updated from September Letter.

the lower bound of the FOMC’s central tendency range for 2014. However, in 2015 and 2016 my core inflation forecasts edge down a bit while other forecasts moves modestly higher but remain below 2%.

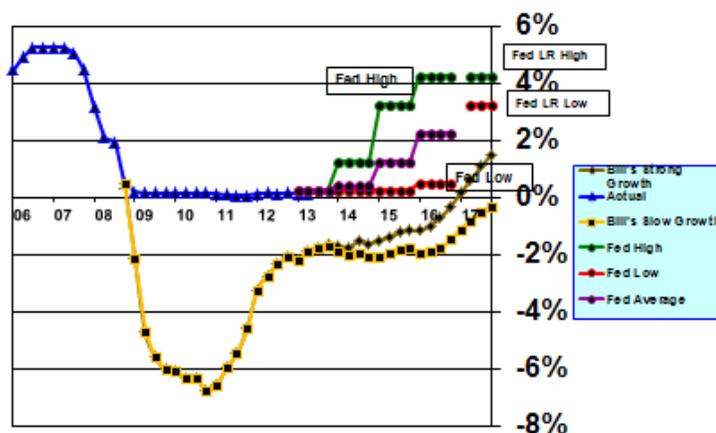
5. Federal Funds Rate

Chart 8 shows the FOMC’s central tendency range for high and low projections for the federal funds rate for 2013, 2014, 2015, and 2016. The purple line (circles) is the average of projections for the 19 FOMC members (7 governors and 12 presidents). The projections imply that the first increase in the federal funds rate will take place either very late in 2014 or in early 2015, although two do not expect the first increase to occur until 2016.

B of A expects the first federal funds rate increase to occur in the summer of 2015 and GS puts the timing in early 2016.

My “*Slow Growth*” and “*Strong Growth*” forecasts are shown by the yellow line (squares) and brown line (diamonds). My “*Slow Growth*”

CHART 8 – Federal Funds Rate Forecast



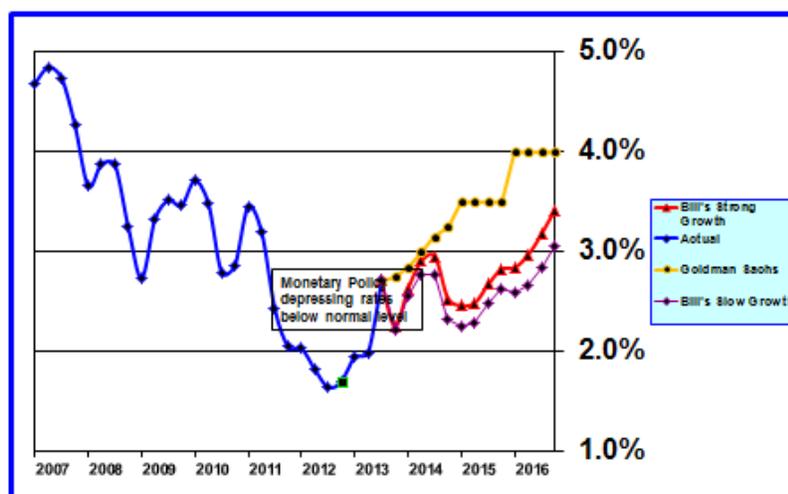
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forecast indicates that the federal funds rate is not likely to increase until 2017 or later, which is inconsistent with FOMC guidance and my forecast that the unemployment rate should fall below 6.5% in early 2015. In my “*Strong Growth*” forecast, the first increase in the federal funds rate occurs in early 2017.

6. 10-Year Treasury Rate

Chart 9 shows forecasts for the 10-year Treasury rate for my “*Slow Growth*” (purple line and diamonds) and “*Strong Growth*” (red line and triangles) scenarios. GS’s forecast is also shown (yellow line and circles).

My forecasts have been revised to include the GSFCI (Goldman Sachs financial condition index) as a variable. For forecasting purposes GSFCI is assumed to remain constant at a neutral level. There is a very strong positive relationship between GSFCI and the level of the 10-year Treasury rate. When financial conditions tighten the 10-year rate rises, and when financial conditions get easier, the 10-year rate falls. This is intuitive, but the

CHART 9 – 10-Year Treasury Rate Forecasts

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econometric analysis indicates that the historical relationship is an extremely strong one. But having said that, in the long-run the level of the 10-year rate depends on the employment growth rate, the employment gap, inflation, and productivity, and not on financial conditions. Financial conditions explain volatility in the 10-year rate around the expected long-term level.

As can be seen in **Chart 9**, my 10-year forecast remains near its current level until early 2014 and then falls about 50 basis points to approximately 2.25% by early 2015 and then rebounds to about 2.75% by the end of 2015. In contrast, GS's forecast does not decline, but rises only about 50 basis points to 3.25% by the end of 2014 and rises a further 25 basis points to 3.50% by the end of 2015. The principal difference between my forecasts and GS's by the end of 2015 is that I forecast inflation to be about 25 basis points lower and the employment gap to be a little higher.

What is important to note is that none of these forecasts indicates a surge in the 10-year rate for a very long time. Indeed, the 10-year rate should fluctuate in a narrow range around 2.75% for at least the next year and move only modestly higher after that.

VII. Possible Consequences of Fiscal Policy Dysfunction for the Economy

Fiscal policy has taken its toll on the U.S. economy during 2013. In January there was the substantial increase in tax rates for high-income earners and higher payroll taxes for wage earners. This translated into a more than a 13% annual rate of growth in personal taxes. Then in March the sequester took effect and forced cuts in federal spending. Now the government shutdown is having three negative impacts. First, it is further depressing government spending, although most of these effects will reverse once the shutdown ends. Second, and more importantly, the shutdown is interrupting economic activity that depends on federal government approvals. And, third, the level of policy uncertainty has soared. Studies indicate that increases in policy uncertainty, when sustained for a period of time, reduce economic activity.

1. Impact on Fourth Quarter Real GDP

Assuming that the government shutdown ends by mid-October, GS expects fourth quarter GDP to be depressed by 0.3% primarily because of reduced pay to furloughed government employees. Since Congress has passed a bill to pay back pay once the shutdown ends, this negative impact would completely reverse in the first quarter of 2014. However, if the shutdown extends for a longer period of time, the hit to real GDP would cumulate at the rate of about 0.15% per week. The negative consequences could be larger than this, if the shutdown extends, because of disruption of business activity dependent upon furloughed government workers. For example, because the National Zoo in Washington, DC is closed, private owned restaurants that cater to visitors have already seen their business activity implode.

Policy uncertainty rose in September and continues to rise. GS estimates that the September increase in policy uncertainty will reduce fourth quarter real GDP growth by 0.2%. Because uncertainty continues to build, the negative impact is likely to be greater and might spill over into the first quarter of 2014.

2. Impact on Financial Conditions

To date there has been a negligible effect on financial conditions. That could change quickly, however, if no action is taken by October 17 to deal with the federal debt ceiling.

3. Impact on U.S. Treasury Rates

Yields on Treasury securities that are maturing within one month have risen from 3 basis points on September 30th to 25 basis points on October 11. The three-month yield rose from 2 to 8 basis points. For the most part the rest of the Treasury yield curve has not been affected by uncertainty over raising the debt ceiling.

Very short-term rates have risen primarily because many money market funds have reduced their holdings of short-term U.S. government securities. Also, some investors are shifting from money market funds that invest in U.S. government securities to money market funds that invest in high quality, non-U.S. government, short-term financial instruments.

4. Rating Agencies

Current ratings of U.S. Treasury debt are:

- Moody's AAA/stable
- S&P AA+/stable
- Fitch AAA

Moody's and S&P's ratings are not likely to change, but Fitch could change its rating from AAA to AA, depending upon how Congress ends up handling the debt ceiling. If the debt ceiling is not raised and Treasury misses a debt payment, S&P would invoke a "Selective Default" rating. The other two rating agencies would probably reduce their ratings and perhaps add a "negative outlook" to the rating.

5. Congressional Budget Office Long-Term Budget Outlook

In the midst of congressional warfare over the 2014 federal budget and the debt ceiling, CBO released an update of its long-term budget outlook which extends 75 years to 2088. The public debt to GDP ratio falls from its current level of 71% to about 68% by 2018, but then reverses course, rising to 71% in 2023, 93% in 2035, 129% in 2050 and 233% in 2085. Annual budget deficits rise from 2.1% of GDP in 2015 to 3.3% in 2023, to 6.1% in 2035, 7.8% in 2050 and 13.5% by 2085.

CBO notes that the outlook would be even worse if Congress eliminated sequestration or extended expiring tax preferences.

The problem is due entirely to the entitlement programs of Social Security, Medicare and Medicaid. With sequestration assumed, there is little left to squeeze out of discretionary spending. Of course, cutting entitlement expenditures is not the sole solution to the problem of exploding debt. Tax increases and tax reform could also be part of the solution.

To date, the so-called “Grand Bargain” which would involve a combination of entitlement and tax reform has gotten nowhere because Republicans have insisted on spending cuts including reductions in entitlement spending and refused to consider any substantive tax increases. Democrats have refused to consider any substantive changes to entitlement programs. Thus, stalemate has reigned.

In recent days Republicans in conjunction with a short-term increase in the debt ceiling and a resolution to fund the government have suggested a Senate-House conference to explore entitlement reforms, such as means testing Medicare and/or changing the inflation adjuster for social security, which could offset some distasteful sequestration spending cuts. However, although tax reform is likely to be included, the old issues of tax increases for Republicans and benefit cuts in entitlement programs for Democrats do not yet appear to be on the table.

While the situation calls for compromise and a “Grand Bargain” approach would a framework for compromise, the ideologues among Republicans and Democrats still appear to be unwilling to give any ground.

It will be interesting to see whether the proverbial “kick the can down

the road” strategy emerges at the eleventh, or even at the twelfth hour, or whether Congress regains its sanity and sets in motion a sincere process to negotiate a “Grand Bargain”. I am not holding my breath on the latter outcome.

APPENDIX: Outlook — 2013 and Beyond — Summary and Highlights of Key Issues

Observations about the 2013 U.S. and global economic outlook and risks to the outlook were contained in the *December Longbrake Letter* and are included below without any changes. As events unfold during 2013, this will enable the reader to track my analytical prowess. Current assessments follow each item with the following identifiers: “+” tracking forecast; “-” not tracking forecast; “?” too soon to know.

1. U.S.

- ***Q4 real GDP*** growth projections range from 0.5% to 1.8%; tracking estimates based on October and November data are consistent with growth of approximately 1.0%.
 - ✓ - ***“Final Estimate” was +0.14%; weaker than expected due to data anomalies.***
- ***2013 real GDP*** growth projections range from 1.5% to 3.0% but with a preponderance of the forecasts falling in the lower end of the range. The drag from tighter fiscal policy will offset gradual improvement in the household and business sectors. Growth should improve gradually over the course of the year. The balance of risks, particularly U.S. fiscal policy but also global growth, is weighted toward slower GDP growth.
 - ✓ + ***First quarter GDP growth was a much weaker than expected 1.14%; the “final estimate” of second quarter growth was 2.47%; forecasts for all of 2013 Q4/Q4 are clustered between 1.8% and 2.0%; the Federal Reserve has reduced its projection but continues to be slightly more optimistic with an expected Q4/Q4 central tendency range of 2.0% to 2.3%.***
- ***Real GDP output gap*** will remain very high and close little, if at all, during 2013.

- ✓ + *The output gap was 5.80% in the first quarter a little higher than that level in the first quarter of 2012. (Because of substantial GDP data revisions, CBO will revise need to revise its estimates of the output gap; this has not occurred yet.)*
- *Employment* should grow about 125,000 per month, somewhat more slowly than in 2012.
 - ✓ - *Data revisions indicate that employment grew 183,000 monthly in 2012; employment growth will be much stronger than 125,000 monthly in 2013; over the first eight months of 2013 payroll growth has averaged 180,000 per month. (Data for September have been delayed because of the federal government shutdown.)*
- *Unemployment rate* should edge down to about 7.5%. A lower rate is not very likely unless more discouraged workers exit the labor force.
 - ✓ -/+ *The unemployment rate has edged down from 7.85% in December to 7.28% in August, but a substantial number of additional discouraged workers has dropped out of the labor force, bringing the labor force participation rate to 63.22%, the lowest level since August 1978. (Data for September have been delayed because of the federal government shutdown.)*
- *Consumer disposable income and spending growth* will remain weak and could decline from 2012 growth rates if employment growth slows and wage and salary increases remain under pressure. Growth will be a lot weaker if Congress permits the payroll tax cut and extended unemployment benefits to expire.
 - ✓ + *Through August both disposable income (7.52% in 2012; 2.76% in 2013) and consumer spending growth (3.73% in 2012; 3.10% in 2013) have been much weaker than in 2012.*
- *Household personal saving rate* will probably continue to decline gradually; however, it could rise if employment and income prospects worsen materially.
 - ✓ + *The saving rate rose at the end of 2012 primarily because of acceleration in capital gains realization to*

avoid higher tax rates in 2013, but the saving rate has been lower over the first eight months of 2013 (4.97% in 2013 vs. 5.61% for all of 2012).

- *Export and import* growth will probably continue to slow gradually due both to slower U.S. growth but also due to deepening recession in Europe.
 - ✓ + *The 12-month moving average measure of the trade deficit fell from 3.26% of GDP in December to 2.94% in July; both export and import growth rates are slowing, but import growth is slowing more rapidly. (Data for August have been delayed because of the federal government shutdown.)*
- *Manufacturing* growth will be subdued reflecting recession in Europe and slower growth in the U.S. The order backlog index was a very low 41.0 in November.
 - ✓ - *Purchasing managers index moved from weak to strong expansion in July, August, and September.*
- *Business investment* spending has slowed sharply because of fiscal cliff concerns and could rebound if there is a satisfactory resolution of major fiscal issues. Capital expenditure plans are cautious based both on concerns about growth and political uncertainty.
 - ✓ + *Business investment growth was very strong in the fourth quarter, no growth occurred over the first six months of 2013, key fiscal issues remain unresolved and policy uncertainty is rising.*
- *Housing investment* is one of the brighter prospects. However, increased activity is likely to be concentrated in multi-family rather than single family. Housing starts are likely to increase 25% in 2013 to approximately one million. Housing prices should rise between 2% and 3%.
 - ✓ + *Starts averaged 906,500 over the first eight months of 2013, up 16.0% from 783,170 in 2012; multi-family starts account for 61.5% of the increase, but only 32.4% of total starts.*
 - ✓ - *Housing prices are rising much, much faster, but the recent sharp rise in mortgage rates probably will slow the rate of increase or stop it altogether.*

- **Monetary policy** — the Federal Reserve has committed to purchase \$85 billion in securities every month including \$40 billion in mortgage backed securities and \$45 billion in U.S. Treasury securities.
 - ✓ + *Monthly purchases of \$85 billion are likely to continue until December at which time the Federal Reserve may begin to taper the amount of monthly purchases; however, federal budget and debt ceiling issues could negatively impact economic activity and delay tapering beyond December.*
- **Inflation** will remain below the Federal Reserve's 2% objective at least through 2015. Concerns about increases in inflation in the long-term are misplaced.
 - ✓ + *August PCE inflation was 1.15% and core PCE inflation was 1.23%.*
- **Federal Funds rate** is not likely to increase before mid-2015 and might not increase until late 2016 or early 2017.
 - ✓ ? *Too early to tell, but sometime between early-2015 and early-2016 appears most likely at this time. My models suggest the federal funds rate will not be raised until late 2016 or sometime during 2017.*
- **Fiscal policy** will be contractionary in 2013, but will become less of a factor in ensuing years.
 - ✓ + *Fiscal policy was more contractionary during the first half of 2013 than most had expected because Congress permitted automatic spending cuts to take effect as scheduled on March 1; fiscal policy is now expected to subtract at least -2.0% from GDP in 2013 and -0.5% in 2014; the deficit is shrinking more rapidly than expected and could be only 3.8% to 3.9% for fiscal 2013.*
- **Potential structural rate of real GDP growth** has declined significantly and could decline further in coming years unless a concerted public initiative is undertaken to invest in education, research and public infrastructure.
 - ✓ ? *Too early to tell, but I remain firm in my conviction; productivity fell at an annual rate of -1.7%*

in the first quarter (revised data) and rose 2.3% in the second quarter; however, productivity is up only 0.3% over the last year.

2. Rest of the World

- *European financial markets* are likely to remain relatively calm thanks to the activist role of the European Central Bank.
 - ✓ *+ To date calm has prevailed but political uncertainty is rising in Italy and Spain; the Cyprus bailout/bail-in was a significant negative development early in the year; however, that crisis passed without any lasting consequences.*
- *European recession* is spreading to stronger countries and worsening in peripheral countries.
 - ✓ *-/+ Eurozone countries collectively eked out small positive GDP growth in the second quarter; however, peripheral countries and Italy are still in recession; fundamental structural problems have not been addressed — Europe's crisis is quiescent for the moment but far from over.*
- *European banking union* will do little to solve deep-seated European and Eurozone structural problems.
 - ✓ *+ The EU has issued a policy paper but no action is expected anytime soon.*
 - ✓ *Germany has persuaded other EU members to eventually amend treaties to require a separation of the ECB's monetary and supervisory responsibilities — this move is seen by some as a delaying tactic on the part of Germany; insurance protocols have been recommended, but no action is likely any time soon.*
- European political dysfunction, populism and nationalism will continue to worsen gradually.
 - ✓ *+ Coalition governments in Italy and Greece appear increasingly fragile, but have managed to hold together; Portugal, Ireland and Greece may need another bailout; nontraditional euro-skeptic parties are gaining strength in several European countries.*

- *China* appears to have achieved a *soft landing* and economic activity will strengthen modestly.
 - ✓ + *Soft landing achieved early in the year, slowing occurred in mid-year, but recent data suggest growth on track to meet lower end of China's target range.*
 - ✓ + *Second quarter year-over-year growth was 7.5% at lower bound of expectations.*
 - *China's new leadership* understands the need to design and implement *economic reforms* and avoid repeating a massive infrastructure spending program.
 - ✓ + *Accumulating evidence that transition toward a more consumer-focused economy has begun.*
 - ✓ + *Implementation of reforms not expected until late 2013 or early 2014 after the Third Plenum of the 18 Central Committee meets in November; however, there are indications that the current leadership is preparing the way for significant reforms.*
 - *Global growth* is likely to be fairly steady in 2013 but will depend on developments in the U.S. and Europe.
 - ✓ + *Global growth is trending at last year's level of about 3%, slowed a bit in the second quarter, but appears to be firmer in the third quarter; slower growth in emerging countries has been offset by modestly better growth in developed economies.*
3. **Risks** — stated in the negative, but each risk could go in a positive direction
- *U.S. fiscal policy* tightens more than expected.
 - ✓ + *Automatic spending cuts kicked in on March 1 and were not modified during fiscal year 2013.*
 - ✓ + *The federal budget deficit is falling much more quickly than expected.*
 - ✓ + *Another budget crisis is underway and has resulted in the shutdown of the federal government; the debt ceiling is also an issue causing policy uncertainty to escalate.*

- *Europe's recession* deepens more than expected; financial market turmoil reemerges; political instability and social unrest rises more than expected threatening survival of the Eurozone.
 - ✓ - *Economic data indicated in the first quarter that the recession was worse than expected, however Eurozone countries collectively posted a small positive increase in GDP during the second quarter; structural problems largely remain unaddressed; Eurozone countries are likely to muddle along for a while, but strong recovery seems unlikely and resumption of crisis is still a distinct possibility.*
 - ✓ - *financial markets have remained calm and the Cyprus crisis passed without creating lasting damage; however, bank credit is difficult to obtain; new political instability and/or additional bailouts in 2014 could reignite a financial markets crisis.*
 - ✓ ? *political instability and social unrest are not yet serious, but trends are unfavorable in several countries — Italy, Greece, Spain, Cyprus, Portugal.*
- *Chinese* leaders have difficulty implementing *economic reforms*; growth slows more than expected.
 - ✓ - *Too early to tell about implementation of reforms, but early signs are encouraging that reforms will be announced late in the year.*
 - ✓ + *Growth forecasts are being revised lower.*
- *Global growth* slows more than expected.
 - ✓ ? *The trend in global growth is about the same as last year, but slightly slower growth occurred in the second quarter which is expected to be offset by slightly stronger growth in the third quarter; B of A revised its global growth forecast for 2013 from 3.2% to 3.0%).*
 - ✓ + *Brazil's economy slowed earlier this year and India and Indonesia are experiencing capital outflows and slower growth.*
- Severe and, of course, unexpected *natural disaster* occurs.
 - ✓ ? *Nothing of any consequence has happened so far this year.*

- *Disruption of Middle East oil supply*, stemming from hostile actions involving Iran and Israel, occurs.
 - ✓ - *Political turmoil in Egypt and civil war in Syria have not had any material impact on global oil prices.*
- *New North Korea attacks South Korea*, which spooked global financial markets.
 - ✓ - *There was a lot of saber rattling early in 2013, but this potential crisis has disappeared from view.*

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