Our Perspectives:
Commentary on the economy & regulatory policies affecting financial companies

Barnett Sivon & Natter P.C.
ATTORNEYS at LAW
WASHINGTON, DC

The Longbrake Letter*

Bill Longbrake

November, 2013

In this month's letter, I provide updates about the **U.S. Economic Outlook — Real GDP Growth** in **Section I**, **Consumer Income and Spending** in **Section II**, **Employment** in **Section III**, **Business Activity** in **Section IV**, **Monetary Policy, Inflation, and Interest Rates** in **Section V**, and **Fiscal Policy Developments** in **Section VI**.

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.

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

Annualized third quarter real GDP growth in the "Advance Estimate" was a greater than expected 2.8 percent. However, details, shown in **Table 1**, were not as strong as the headline number implied.

Consumer spending growth was the weakest since the second quarter of 2011 and inventory growth was strong. Because inventories tend to be highly volatile, a more informative measure of the underlying strength of real GDP growth can be derived by subtracting inventory growth. This measure is referred to as "Final Domestic Sales." With the exception of the second quarter, "Final Domestic Sales" has been growing close to 2.0 percent annualized.

Private GDP, which eliminates both inventories and government expenditures, has averaged about 2.0 percent annualized growth over the last several quarters.

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

Table 1
Composition of 2013 and 2012 Quarterly GDP Growth

	Third Quarter 2013 Advance Estimate	Third Quarter 2013 Preliminary Estimate	Third Quarter 2013 Final Estimate	Second Quarter 2012	First Quarter 2012	Fourth Quarter 2012
Personal Consumption	1.04%			1.24%	1.54%	1.13%
Private Investment						
Nonresidential	.20%			.56%	-.57%	1.13%
Residential	.43%			.40%	.34%	.50%
Inventories	.83%			.41%	.93%	-2.00%
Net Exports	.31%			-.07%	-.28%	.68%
Government	.04%			-.07%	-.82%	-1.31%
Total	**2.85%**			**2.47%**	**1.14%**	**0.13%**
Final Dom. Sales	**2.02%**			**2.01%**	**0.21%**	**2.13%**
Private GDP	**1.98%**			**2.08%**	**1.03%**	**3.44%**

1. 2013 Q3 GDP — Advance Estimate

Personal consumption expenditures, which account for 68.0 percent of real GDP, contributed 1.04 percent to third quarter GDP growth. Consumer spending growth was disappointingly weak. This weakness was offset by an outsized gain in inventories. Data revisions may transfer some of the inventory buildup into higher consumer spending. If that does not occur, then the apparent growth in inventories will be confirmed and the excess will have to be worked off in the fourth quarter. That would depress real GDP growth in the fourth quarter. To achieve sustainable GDP growth of 2.5 percent requires consumer spending to grow at an annual rate of 1.70 percent, not 1.04 percent indicated by the third quarter "Advance Estimate" nor by the average of 1.24 percent over the last four quarters.

Consumer purchases of durables were strong, but expenditures on services were weak.

Consumption remains extraordinarily weak and will remain so as long as unemployment remains high and wage growth is slow.

Nonresidential investment growth added 0.20 percent to GDP growth, but was decidedly lackluster. Nonresidential investment accounts for 12.5 percent of GDP but contributed only 7.2 percent of GDP growth in the third quarter. Investment in structures was very strong but this was offset by a decline in equipment and software spending.

To a substantial extent, a significant improvement in real GDP growth in coming quarters will depend 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 three quarters of 2013 would be 4.0 percent. The actual reported growth rate was 2.5 percent. GS's forecast growth for all of 2013 early this year was 4.5 percent; it's revised 2013 forecast, which includes actual results for the first three quarters of 2013, is 2.4 percent.

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 consensus expectations.

Residential investment accounts for 3.2 percent of GDP but contributed 18.6 percent of GDP growth during the first three quarters of 2013.

However, the rise in mortgage rates since early summer has been followed by lackluster housing data. These data indicate that residential investment growth is likely to weaken somewhat in the fourth quarter.

This sector of the economy has been growing faster than the rest of the economy for the last eight quarters. If growth in residential investment continues at its recent pace, it will add 0.4 percent to real GDP growth in 2013. However, during the first three quarters of 2013 the realized annual growth rate was 14.1 percent which was a little slower than GS's original forecast of 15.6 percent. 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 percent off of real GDP growth forecasts over the next few quarters.

Government expenditures comprise 18.5 percent of real GDP and contributed a tiny 0.04 percent to third quarter GDP growth. State and local government expenditures, which had been declining steadily since the Great Recession, accounted for 0.17 percent on top of 0.05 percent in the second quarter and clearly have become a positive contributor to GDP growth. This positive trend is likely to continue but substantial acceleration is unlikely.

Federal expenditures continue to shrink and reduced third quarter real GDP by 0.13 percent. However, the full impact of federal sequestration was not visible in second or third quarter data. A large decline seems likely when fourth quarter data are reported and this could depress fourth quarter real GDP growth significantly.

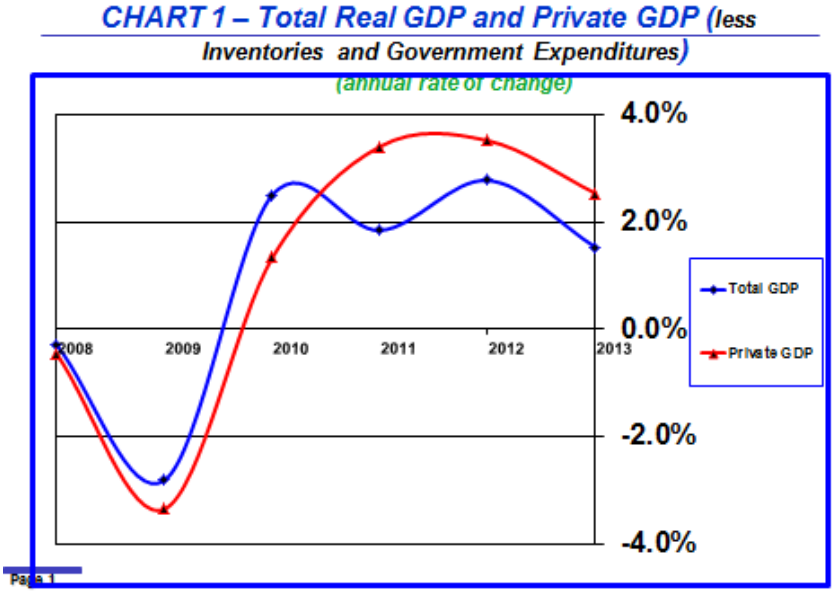
Government expenditures will probably rise modestly during 2014 because state and local spending is expanding and federal government spending cuts will be smaller. Q4/Q4 growth could be about 0.4 percent, but Y/Y growth would actually be slightly negative in a range of -0.2 to -0.4 percent compared to -2.2 percent in 2013.

Net exports contributed 0.31 percent to third quarter growth. The estimate of net exports in the "Advance Estimate" is not very reliable because it is based upon only two months of actual data and an estimate for the third month. Imports rose sharply in September trade data, which means

that the contribution of net exports to real GDP should be revised down in the "Preliminary Estimate" by about 0.2 percent, resulting in third quarter real GDP growth of 2.6 percent. 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 third



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 percent in both 2011 and 2012. However, this measure decelerated to 2.5 percent in the first three quarters of 2013 compared to the first three quarters 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 percent 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 Q4

Although **third quarter** GDP growth exceeded expectations, estimates of **fourth quarter** GDP growth have been reduced. Part of lowered expectations is due to the impacts of the federal government shutdown in October. **Table 2** shows GDP forecasts/projections for the fourth quarter of 2013

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

	2013:4	2013 Q4 to Q4	2013 Y/Y	2014 Y/Y	2015 Y/Y	2016 Y/Y
B of A	1.7	2.0	1.7	2.7		
GS	1.5	2.0	1.6	2.9	3.3	3.1
Global Insight	1.6		1.5	2.5	3.2	3.2
Economy.com	2.1		1.6	3.1		
Blue Chip	2.4		1.6	2.6	2.9	2.8
Bill's Slow Growth		1.9	1.6	2.2	1.8	1.8
Bill's Strong Growth		2.2	1.7	2.9	2.6	2.3
FOMC — High			2.3	3.1	3.5	3.3
FOMC — Low			2.0	2.9	3.0	2.5

and for the full years 2013 through 2016.

B of A expects 1.7 percent growth in the fourth quarter, including a 0.5 percent reduction due to the federal government shutdown, which will be reversed in the first quarter of 2014. B of A's forecast for 2013 GDP fourth-

quarter-to-fourth-quarter (Q4/Q4) growth is 2.0 percent and 1.7 percent year over year (Y/Y).

GS's forecast for the fourth quarter is marginally weaker than B of A's forecast — 1.5 percent Q4, 2.0 percent Q4/Q4, and 1.6 percent Y/Y. GS's current activity index (CAI) was 2.5 percent in September and October. Normally, real GDP approximates CAI, but the government shutdown and the overshoot in third quarter inventories led GS to reduce its fourth quarter growth estimate to 1.5 percent.

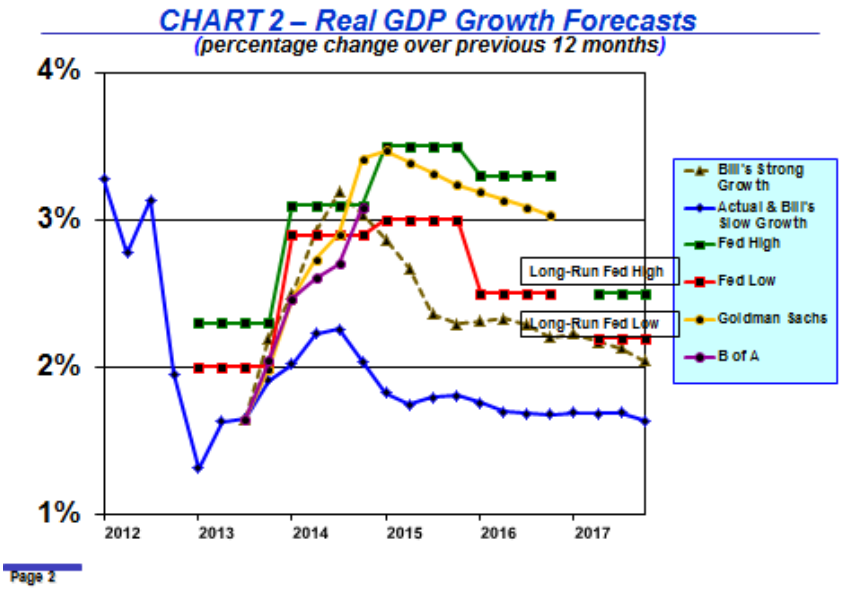
Fourth quarter forecasts prepared by Economy.com and the Blue Chip Average, which are shown in **Table 2**, appear to be too high based upon recent data reports.

Bill's "***Slow Growth***" Q4/Q4 forecast is 1.9 percent and 1.6 percent Y/Y. Bill's "***Strong Growth***" Q4/Q4 forecast is 2.2 percent, reflecting a strong finish to the year, which increasingly appears to be unlikely. Y/Y growth of 1.7 percent, however, would be only slightly higher than in the "***Slow Growth***" scenario, which is the more likely outcome.

4. GDP Forecasts for 2014 and Beyond

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

Both B of A and GS forecast strong residential and business investment growth in 2014. GS's Y/Y forecast is 8.1 percent and B of A's is 8.6 percent. Since investment comprises 15.7 percent of real GDP, these forecasts imply that investment will contribute between 1.27 percent and 1.34 percent to real GDP growth in 2014. If consumer spending continues at its recent trend level of 1.24 percent, then real GDP should grow between 2.51 percent and 2.58 percent in 2014, provided that none of the other GDP components contribute anything. B of A forecasts Y/Y 2.72 percent GDP growth in 2014 and GS forecasts Y/Y 2.88 percent. In addition, the FOMC's median central tendency projection of 2.75 percent (**Table 3**) is consistent, although the FOMC's high-low projection range of 3.1 percent to 2.9 percent is slightly higher (**Table 2**).



As **Table 3** shows, the FOMC's real GDP growth projections have 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. Nonetheless, the 2013 Q4/Q4 projection of 2.1 percent still appears to be too high.

Other real GDP growth forecasts for 2014 range from 2.5 to 3.1 percent. So, there appears to be substantial consensus.

For the last couple of years both B of A and GS's forecasts have been at the pessimistic end of the spectrum and their conservatism has proved well founded. However, both are now are optimistic that growth will accelerate in 2014 and that the case for that call is strong. ***First, fiscal policy will not be highly contractionary*** as it has been over the last two years. Recovery in state and local spending will marginally exceed a small negative impulse from federal spending. ***Second, corporate profits are high and balance sheets are strong***. This should stoke a sizable increase in investment spending. Note, however, that investment depends primarily on

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	3.70	3.95	4.00				2.7
Apr 2011	3.30	3.65	4.00				2.7
June 2011	2.75	3.10	3.75				2.7
Nov 2011	1.70	2.90	3.35	3.60			2.6
Jan 2012		2.55	3.10	3.55			2.6
Apr 2012		2.55	3.10	3.60			2.6
June 2012		2.05	2.85	3.40			2.6
Sep 2012		1.80	2.90	3.40	3.35		2.6
Dec 2012		1.80	2.60	3.40	3.35		2.6
Mar 2013			2.50	3.20	3.15		2.5
June 2013			2.30	2.90	3.05		2.5
Sep 2013			2.10	2.75	2.95	2.85	2.3
Actual Q4 to Q4	**2.01**	**1.95**	**1.99***	**3.42***	**3.24***	**3.03***	
Actual Y/Y	**1.85**	**2.78**	**1.65***	**2.88***	**3.35***	**3.11***	
Long Run Potential							**2.2-2.5#**

*GS forecast
#Bill's "Slow Growth" long-run potential = 2.12%; Bill's "Strong Growth" long-run potential = 2.48%

sales growth and shrinking capacity. Excess capacity remains high and sales growth has been very weak. **Third, banks have rebuilt capital and are more willing to lend.** Note, however, that willingness to extend credit requires demand for credit and so far demand has been slack and shows little sign of improving. **Fourth, housing prices are rising, excess inventory has diminished considerably and household formation is accelerating.** Residential investment should increase further from already relatively strong levels in 2013. Note, however, that access to mortgage credit remains constrained and higher home prices and interest rates are reducing affordability and will depress demand. ***Fifth, households have reduced debt burdens and rising prices for houses and financial assets are boosting wealth, which should increase consumer spending.*** Note, however, that the increase in wealth is almost entirely concentrated at the

top of the distribution. Wealthy households have a much lower propensity to spend.

Bill's "***Strong Growth***" scenario of Y/Y 2.91 percent growth in 2014 is consistent with the consensus, but Bill's "***Slow Growth***" scenario projects only Y/Y 2.17 percent growth. About 57 percent of the difference in these two 2014 GDP growth rates is due to 8.8 percent private investment growth in Bill's "***Strong Growth***" scenario, similar to B of A and GS, compared to 6.2 percent in Bill's "***Slow Growth***" scenario.

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.

Bill's real GDP forecasts for 2015 and 2016 are lower than other forecasts for both scenarios. 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***

5. 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.[1] Such a linkage has long been understood to exist, but GS

[1] Jan 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.

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. Financial conditions tightened in early summer during the taper tantrum but have moderated somewhat since then. The government shutdown did not adversely affect financial conditions, but the stronger than expected October employment report did. Overall, although financial conditions have fluctuated during the year, the impact on real GDP appears to be slightly negative, but to a very limited extent.

Policy uncertainty also impacts economic activity.[2] Higher uncertainty leads to reduced risk appetite and delays in hiring and investment activity. Macroeconomic Advisers' statistical analysis indicated that policy uncertainty reduced real GDP growth annually during 2010, 2011, 2012, and 2013 and raised the unemployment rate by 0.6 percent.

Various measures indicate that uncertainty declined considerably during the first half of 2013. Then, policy uncertainty exploded with the government shutdown and the threat not to raise the federal debt ceiling. The shutdown had limited direct effect on economic activity because most federal spending was not impacted. There were some indirect impacts, which both B of A and GS estimate will subtract 0.5 percent from fourth quarter real GDP. However, this impact is temporary and will reverse in the first quarter of 2014.

6. Recession Risks

There is little talk among forecasters currently about recession risk. The consensus is that recovery will continue and growth will accelerate in 2014.

Various models of recession risk indicate a very low probability — generally 10 percent or less. These models typically compare the current values of a plethora of economic variables with their values during a period of recession.

But, there is a contrary view, which is not based on traditional analysis or models.

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

Charles Gave of GKResearch compares the cost of capital with the growth rate in corporate profits. Based upon this metric, he believes that recession risks are rising. His research indicates that when the cost of capital, which he measures as the Baa corporate bond yield, exceeds the growth rate in corporate profits, as approximated by the real GDP growth rate, by 250 basis points, a recession follows. Gave's theory was explained in the ***September Longbrake Letter***. The Baa interest rate has been rising recently and is not far from the "recession frontier". That frontier could be breached with a small incremental increase in the Baa bond yield, a small decline in inflation, or a combination of both.

II. 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 June, July, August, and September 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 June, July, August, and September 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

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

	2011 Pct. Change	2012 Pct. Change	Pct. Change Jun 12-Jun 13	Pct. Change Jul 12-Jul 13	Pct. Change Aug 12-Aug 13	Pct. Change Sep 12-Sep 13
Personal Income	**4.63%**	**7.94%**	**3.16%**	**3.40%**	**3.78%**	**3.68%**
Compensation	2.81%	6.80%	3.28%	3.17%	3.32%	2.87%
Proprietors' Inc.	11.05%	5.07%	9.25%	10.39%	11.32%	12.25%
Rental Income	19.44%	7.28%	9.01%	9.36%	9.73%	10.30%
Asset Income	4.59%	18.90%	3.32%	4.66%	4.97%	6.13%
Government Transfers	0.17%	4.06%	3.58%	3.54%	4.49%	3.79%
Less: ***Personal Taxes***	4.50%	9.47%	14.44%	13.65%	13.31%	12.45%
Disposable Income	**3.63%**	**7.52%***	**1.97%**	**2.39%**	**2.89%**	**2.91%**
Less: ***Consumption***	**4.13%**	**3.73%**	**3.23%**	**3.01%**	**3.18%**	**2.73%**
Personal Saving	**-4.40%**	**74.14%**	**-19.26%**	**-9.18%**	**-2.55%**	**6.37%**
Personal Saving Rate	**5.67%**	**5.61%**	**5.05%**	**5.00%**	**4.97%**	**4.99%**
Adj. Personal Income[#]	**3.77%**	**7.84%**	**4.04%**	**4.26%**	**4.63%**	**4.50%**

*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.

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, growth in the primary component of personal income — wage and salary compensation — has not been improving and declined in September based on preliminary data. Thus, the improving trend in personal income growth is being driven entirely by rising growth rates for proprietor's 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 percent, but if the payroll tax rate had not been reduced it would have been 3.77 percent. When the payroll tax rate was returned to its former level in 2013, the adjusted personal income growth rate as of September would have been 4.50 percent rather than the actual rate of 3.68 percent, 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 virtually identical except with 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 2.73 percent 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 drawing down savings.

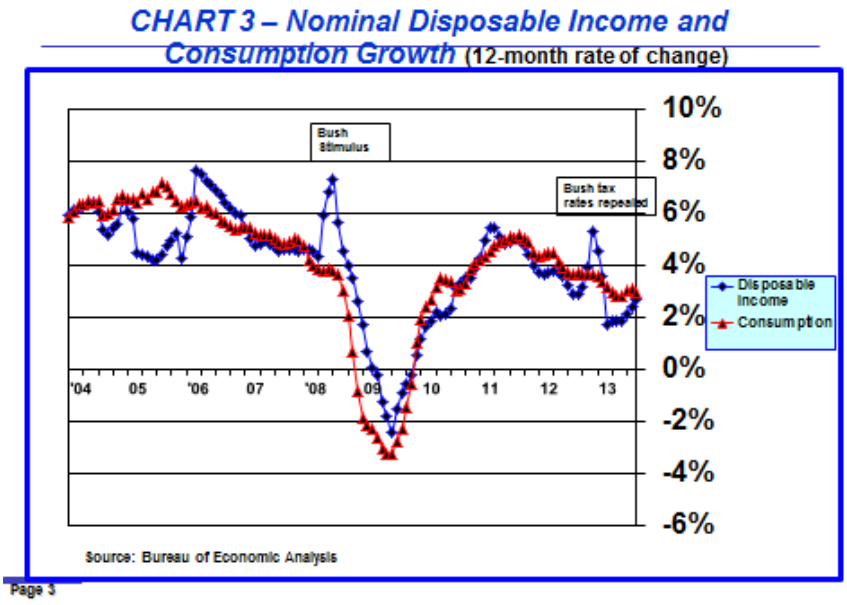
Prospects for faster income growth in coming months will also improve with employment growth. While employment growth has been good, it has

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

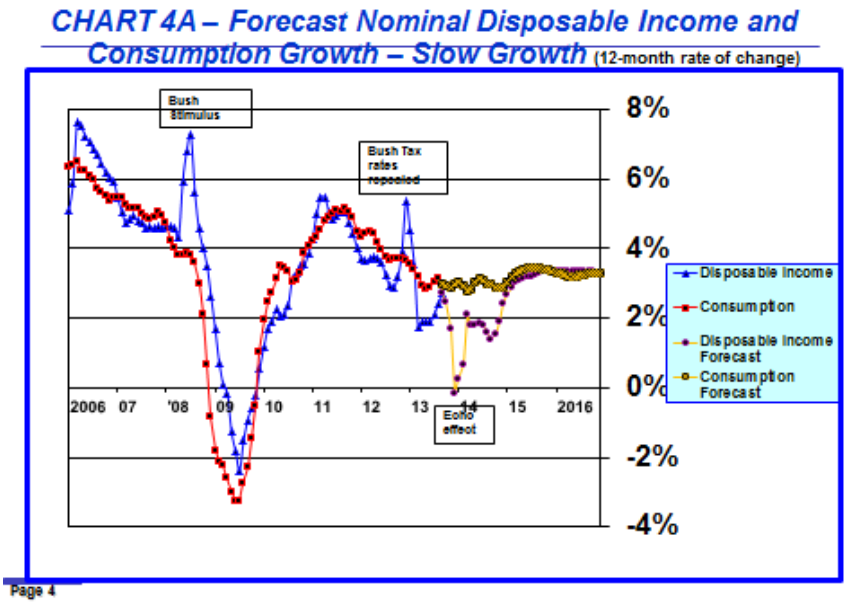
changes in quarterly averages year over year. This method smooths timing anomalies to a certain extent, although major events such as occurred at the end of 2012 will still impact the observed trend for the following 12 months.

The annual rate of growth in disposable income began slowing in early 2011 and declined from 5.5 percent in April 2011 to 2.9 percent in September 2012, but then surged to 5.3 percent in December, followed by a resumption of the decline to 2.7 percent in September.

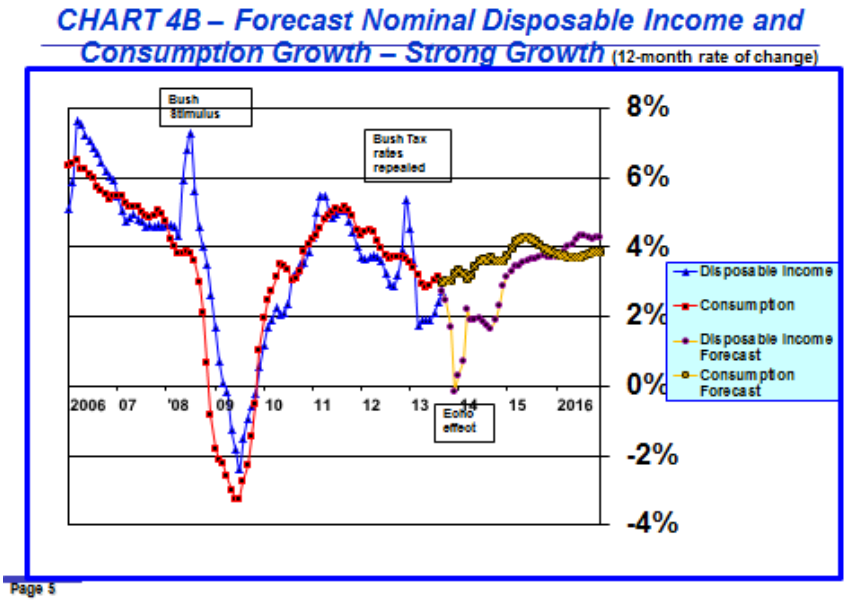
Chart 3 shows that growth in consumer spending, after peaking at 5.2 percent in September 2011, slowed to about 3.7 percent in July 2012, remained at that level until December 2012 and has since declined further to 3.0 percent in September 2013.

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. Recovery in income growth in my econometric analysis from recent levels does not occur until 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.

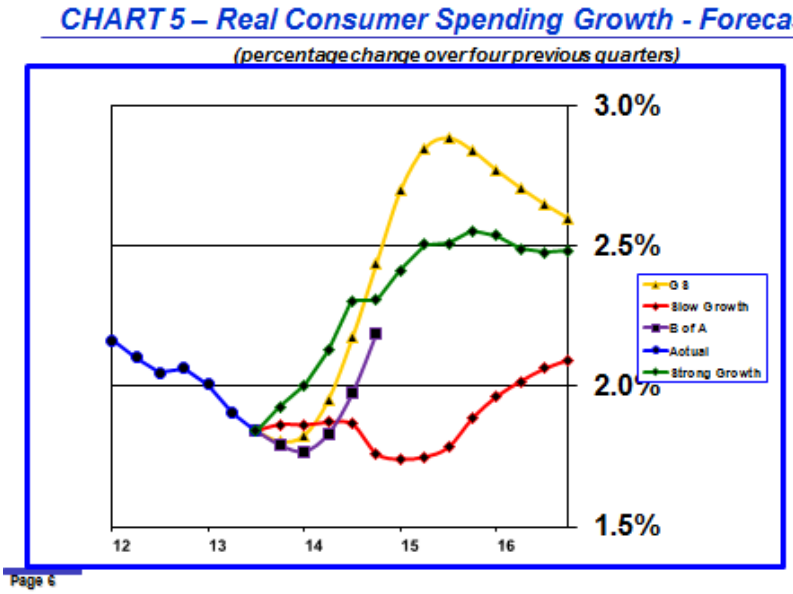
Chart 4B shows my "***Strong Growth***" scenario forecast for growth in nominal consumer disposable income and consumption through 2016.

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.

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 real consumer spending to rise

1.8 percent during 2013. Bill's "***Slow Growth***" forecast indicates growth of about 1.9 percent 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.GS and B of A believe real consumer spending will accelerate during 2014, reaching 3.0 percent toward the end of the year. Y/Y growth is 2.44 percent for all of 2014 for GS and 2.19 percent for B of A. (B of A's Y/Y 2013 forecast is lower than GS's because B of A assumes a slower ramp up to a 3.0 percent growth rate by the end of 2014.) GS projects that real consumer spending growth will be 2.84 percent in 2015 and 2.60 percent in 2016. **Table 5** shows

Table 5
Real Consumer Spending Growth Rate Y/Y Forecasts — B of A, GS, Bill's "Slow Growth" and Bill's "Strong Growth"

Real Consumer Spending Growth	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
B of A	1.66	2.36	2.07	1.85	2.19		
GS	1.66	2.36	2.07	1.80	2.44	2.84	2.60
Bill's Slow Growth	1.66	2.36	2.07	1.87	1.76	1.89	2.10
Bill's Strong Growth	1.66	2.36	2.07	1.93	2.31	2.56	2.48

forecast real consumer spending growth rates.

GS's forecast is derived from a model that includes consumer disposable income, consumer sentiment, financial and housing wealth, credit availability, and deviations in the actual consumer saving rate from the long-run target level as variables. Real spending growth in GS's model accelerates in 2014 primarily because the drag of higher taxes in 2013 no longer impacts spending in 2014. It is not clear why this should happen as consumers tend to adjust their saving rate to maintain consumption when income growth varies rather than changing consumption. Notice that the real rate of growth in consumer spending only dropped about 25 basis points in 2013 in the face of increased taxes. Rising employment and a modest increase in wage rates to a range of 2.0 to 2.5 percent from 2.0 percent in 2013 results in a further modest increase in real spending.

Real consumer spending growth forecasts are lower in Bill's "***Slow Growth***" and "***Strong Growth***" scenarios than GS's forecasts. Bill's forecasts are derived from a model that includes hours worked, productivity, financial and housing wealth, and the saving rate as variables. Hours worked and productivity replace GS's consumer disposable income variable. The principal difference between GS's and Bill's models has to do with slower growth in disposable income in Bill's model because of low growth in productivity. Higher productivity growth in Bill's "***Strong Growth***" scenario narrows the shortfall and by 2016 the gap between GS's forecast and Bill's "***Strong Growth***" forecast is small.

6. Consumer Confidence

Measures of consumer confidence dropped sharply during the federal government shutdown. Weekly and daily surveys have recovered only partially since the shutdown ended.

The University of Michigan's consumer sentiment index fell to 75.2 in October from 77.5 in September. Its recent peak was 85.1 in July. Expectations fell further in October to 63.9 and are now at the lowest level since January when the year-end fiscal follies unsettled consumers.

According to the Conference Board's survey, overall consumer confidence fell to 71.2 in October from 80.2 in September; the present situation index fell from 73.5 to 70.7; the expectations index plummeted from 84.7 to 71.5. The differential between jobs easy to get minus jobs hard to get deteriorated from -22.2 in September to -24.5 in October. This is not indicative of a robust labor market.

ISI's weekly company surveys have been relatively stable over the last five months. Its diffusion index peaked at 52.3 in the week of June 7, edged down to 50.7 November 8, then rose a tad to 51.0 in the week of November 15. This is indicative of an economy that is neither gaining nor losing momentum.

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. After the shutdown ended, the index edged back up to 96 and then stalled. However,

to put matters into perspective, this index fell to the mid-60s during the federal debt crisis in July and August 2011.

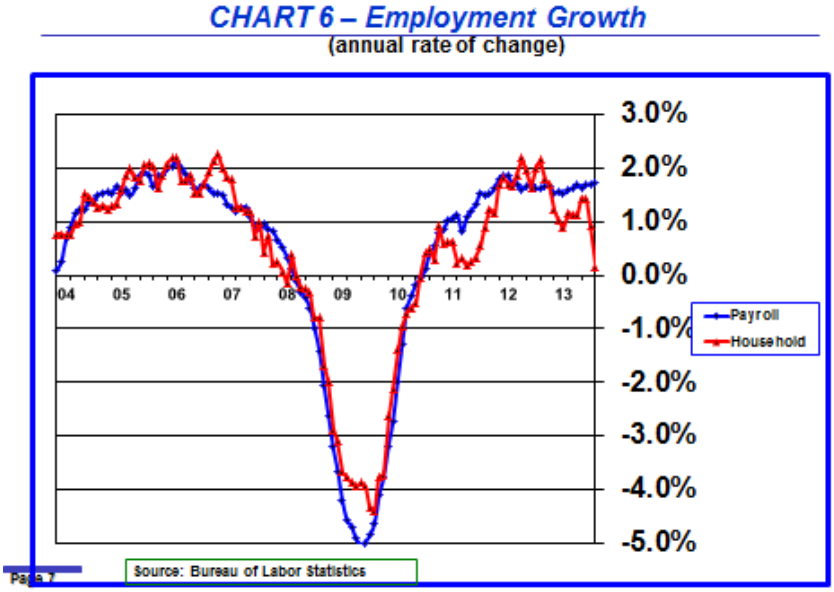
Overall, consumer confidence measures are not particularly robust, which reflects the on-going lethargic improvement in employment and incomes. Confidence measures do not suggest acceleration in economic activity but more of the same — an economy muddling along but showing gradual improvement.

III. Employment

October's payroll employment report was much stronger than expected, but the companion household survey was extraordinarily weak. Employment increased 204,000 according to the payroll survey but decreased 737,000 in the household survey. Furloughed federal government workers had no impact on the payroll survey, but depressed the household survey by 507,000. However, the employment decline in the household survey was 230,000 more than could be explained by the government shutdown. The participation rate fell precipitously to 62.85 percent from 63.19 percent in October. Rarely do these two employment surveys diverge to this great an extent. The consensus of opinion has been to accept the payroll report as indicative of an improving employment situation and to discount the flawed household survey. We will have to wait for the November household survey to see whether participation really fell so much. If it did, then the measured unemployment rate is likely to fall a lot in November.

Chart 6 shows growth trends in employment for the payroll and household surveys. Over the long-run the employment growth rate in the two surveys is generally the same. Over shorter periods of time, growth rates in the two surveys often diverge and that most definitely was the case in October. The household survey, from which the unemployment rate is calculated, is based on a monthly survey of 60,000 households and is never revised. The payroll survey is based on data from large employers and supplemented by extrapolation of recent trends for small employers. Payroll data are periodically updated based on detailed employment information from state-level employment statistics.

Chart 6 indicates that payroll employment is growing at an annual rate



of approximately 1.7 percent and household employment is growing at an annual rate of 0.2 percent. Payroll growth is above the long-term trend level of 0.7 to 0.8 percent, but household employment growth is below.

Yet, the labor market is still extremely weak. There are 1.5 million fewer people employed than in January 2008 according to October's payroll data and 2.8 million fewer according to the household survey. The unemployment rate is 7.3 percent versus a pre-Great Recession low of 4.4 percent. But, if approximately 2.8 million discouraged workers are counted, the current unemployment rate would be in the vicinity of 9.1 percent. According to CBO, full employment will be reached when the unemployment rate falls to 5.5 percent, which would require 2.8 to 5.5 million additional workers to be employed currently, depending upon how many discouraged workers actually exist.

In summary, the good news is that the labor market is healing gradually. It appears to be weathering reasonably well intensely negative fiscal policy. The bad news is that the labor market remains unusually weak and has a long ways to go to return to

robust health.

1. October Payroll Report

Employers added 204,000 jobs in October, considerably above expectations of 125,000. Revisions to August and September added another 60,000 jobs, resulting in a total increase of 264,000. This brought the recent three-month average monthly increase to 202,000 compared to a 12-month average monthly growth of 186,000.

2. October Household Jobs Report

Over the first ten months of 2013 household employment growth has increased 26,000 monthly compared to the 201,000 monthly average in 2012.

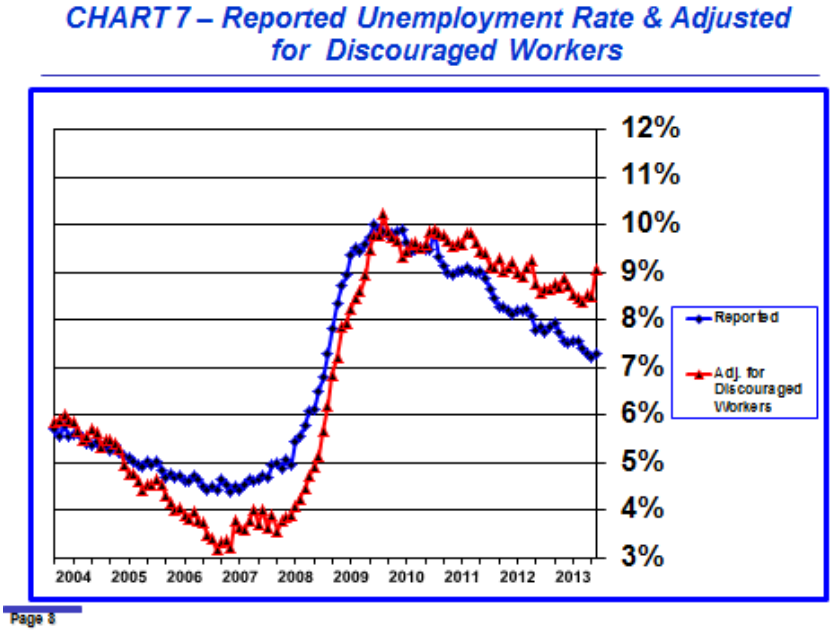
Average weekly hours worked were 34.4 in October compared to the 12-month average of 34.47. The length of the workweek appears to be relatively stable. When the length of the workweek is stable it generally indicates an absence of pressure to retain workers as output slackens (declining length of the workweek — weak labor market) and an absence of pressure to resort to overtime work (lengthening workweek — tight labor market).

3. Temporary Discouraged Workers or Permanent Structural Unemployment?

Household employment remains 2.81 million below the pre-Great Recession peak. The question of whether people are too discouraged to look for work in today's difficult labor market or whether they have chosen to leave the labor force permanently is of paramount importance to the conduct of monetary policy.Unemployment rose to 7.3 percent of the labor force in October — the number of unemployed workers rose 17,000, while 720,000 left the labor force — those eligible and willing to work. The participation rate (those willing to work — includes both employed and unemployed workers — relative to those eligible to work) declined from 63.19 to 62.85 percent. The employment-to-population ratio,

which measures the number of people who have jobs relative to the number eligible to work, fell from 58.62 to 58.27 percent.

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 7** shows my alternative unemployment measure, which adjusts for discouraged



workers. In October, my alternative unemployment rate was 9.07 percent compared to BLS's reported rate of 7.28 percent. This difference of 1.79 percent amounts to 2.8 million discouraged workers, or probably more accurately 2.3 million if furloughed federal employees are added back in.

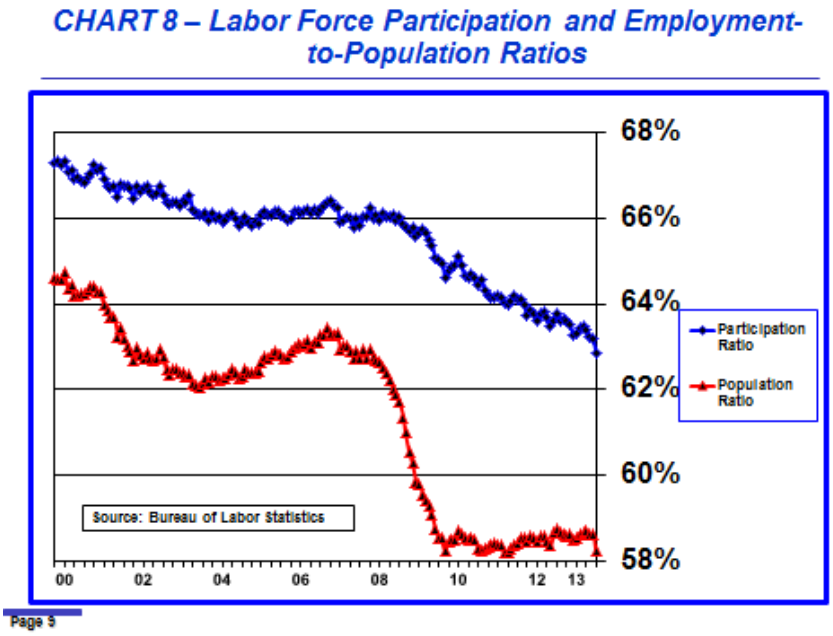
What is important from a policy standpoint is whether workers who have stopped looking for jobs, and thus are no longer counted as unemployed, will reenter the job market when jobs become more plentiful or whether their exit is permanent because there are no jobs that fit their skills and there won't 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 monetary policy guideline of 6.5 percent or to the full-employment rate of 5.5 percent. To date the preponderance of analysis supports the expectation that many discouraged 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 percent.

4. Labor Force Participation and Employment-to-Population Ratios

While the focus of debate has been on discouraged workers and the labor force participation ratio, another important measure of the health of the labor market is the employment-to-population ratio which measures the percentage of people eligible to work who have a job. Trends in both the **labor-force-participation ratio** and the **employment-to-population ratio** are shown in **Chart 8**. The denominator of both ratios is the same



— total number of people eligible to work. The difference in the numerators

of the two ratios is the number of unemployed workers — those who say they are looking for work.When the Great Recession hit, the employment-to-population ratio plummeted from 62.9 percent in December 2007 to 58.2 percent in December 2009. What is troubling is that this ratio has not recovered to any significant extent. It was 58.3 percent in October 2013. What this means is that almost all the new jobs created since December 2009 have only been sufficient to accommodate new entrants into the labor force. Or putting this differently, few jobs lost during and just following the Great Recession have been recovered.

5. Labor Market Slack — Goldman Sachs Estimate

In a recent study GS concluded that current labor market slack equals about 4 percent of the labor force plus marginally attached workers. (See the ***September Longbrake Letter*** for an explanation of GS's methodology.) GS believes the participation gap, which is approximately 2 percent of the labor force, will close much more slowly than the unemployment gap. GS also observed that since the late 1980s it has taken longer and longer for the participation gap to close once economic recovery is underway.

GS notes that there have been numerous studies and most indicate that between 50 and 75 percent of the decline in the participation rate is due to cyclical factors. GS concludes from the work of others and its own analysis that the total unemployment gap is about 4 percentage points, which is substantial.

For these reasons, GS argues that the FOMC's 6.5 percent unemployment guideline should not be considered to be the relevant 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 percent unemployment rate guideline. It seems likely that the FOMC will need to clarify the 6.5 percent guideline more explicitly 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.

6. 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 and less wealth. Americans are not as well off as they could be if a greater proportion of them were employed.

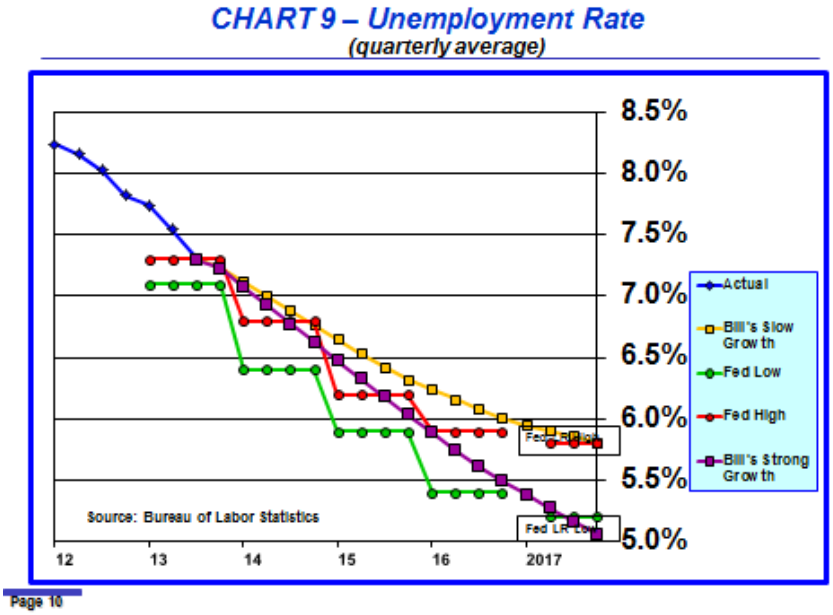
Second, the U.S. has no unemployment objectives other than "full employment". As discussed above, we are not even sure how to measure what "full employment" is. We do not know how to determine whether someone is discouraged. We do not have any objective for what the employment-to-population ratio ought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

7. Unemployment Rate

Because the FOMC has linked monetary policy explicitly to the BLS's U-3 unemployment rate, it is important to track this data point and various forecasts of when the unemployment rate is expected to reach 6.5 percent, which is the FOMC's stated threshold for considering whether to raise the federal funds rate. And, as was discussed in the previous sections, the discouraged worker phenomenon and its impact on the participation rate is critically important in ascertaining just how meaningful the 6.5 percent unemployment rate guideline, as conventionally measured, is. The evidence, such as it is, suggests that the labor market will probably still be quite weak even when the U-3 6.5 percent rate is penetrated.

According to BLS, the number of unemployed workers is down 934,000 since 2013 began. The unemployment rate was 7.28 percent in October. Over the last year since October 2012 unemployment has decreased 1.0 million and the unemployment rate has decreased from 7.87 to 7.28 percent.

Chart 9 shows the FOMC's high (red line and circles) and low (green



line and circles) unemployment rate projections for 2013, 2014 and 2015. The FOMC's projections imply that the first increase in the federal funds rate will occur in early 2015. That presumes, of course, that as soon as a 6.5 percent unemployment rate is reached the FOMC would start raising the federal funds rate. That, however, is far from certain, particularly since the labor market is considerably less strong than the current 7.3 percent unemployment rate implies.

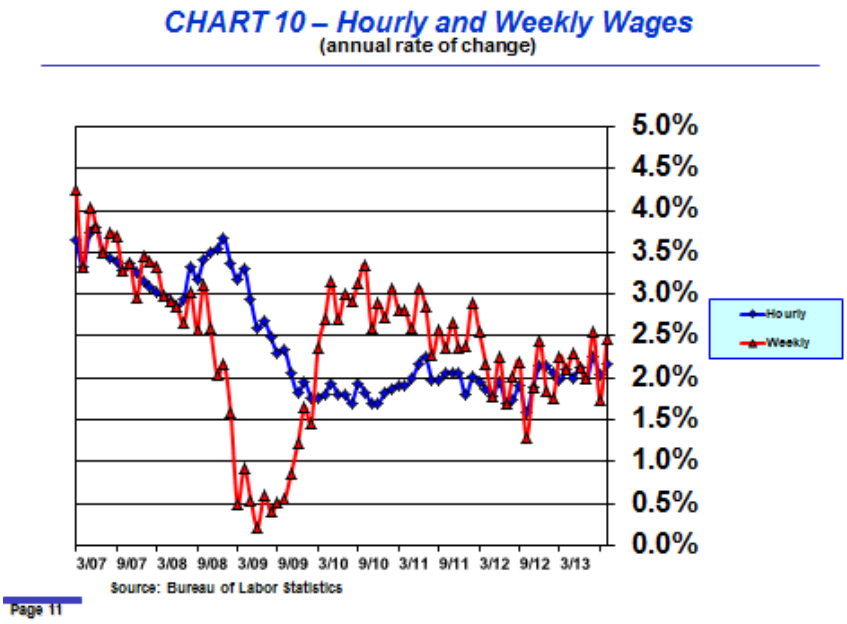
I have included in **Chart 9** unemployment rate forecasts for both my "***Slow Growth***" (yellow line and squares) and "***Strong Growth***" (purple line and squares) scenarios. The "***Slow Growth***" unemployment rate projection is slightly above the upper end of the FOMC's range and the "***Strong Growth***" unemployment rate tracks slightly above the lower end of the FOMC's range. The unemployment rate forecast in the "***Strong Growth***" scenario reaches the 6.5 percent threshold in early-2015. However, the unemployment rate in the "***Slow Growth***" scenario does not reach 6.5 percent until mid-2015. Should the FOMC elect to reduce the guidance unemployment rate to 6.0 percent, Bill's scenarios indicate that the first increase in the federal funds rate would occur between early 2016

and early 2017.

San Francisco Federal Reserve economists in a recent study concluded that recovery in the labor market has more momentum than it did a year ago and expressed optimism that improvement in the labor market could accelerate in coming months.[3]

8. Growth in Wages

Growth in hourly wages is an important measure of labor market strength. An increasing rate of growth would be evidence of a strengthening labor market in which labor, particularly in scarcer job categories, is gaining more bargaining power. As can be seen in **Chart 10**, the rate of growth in hourly

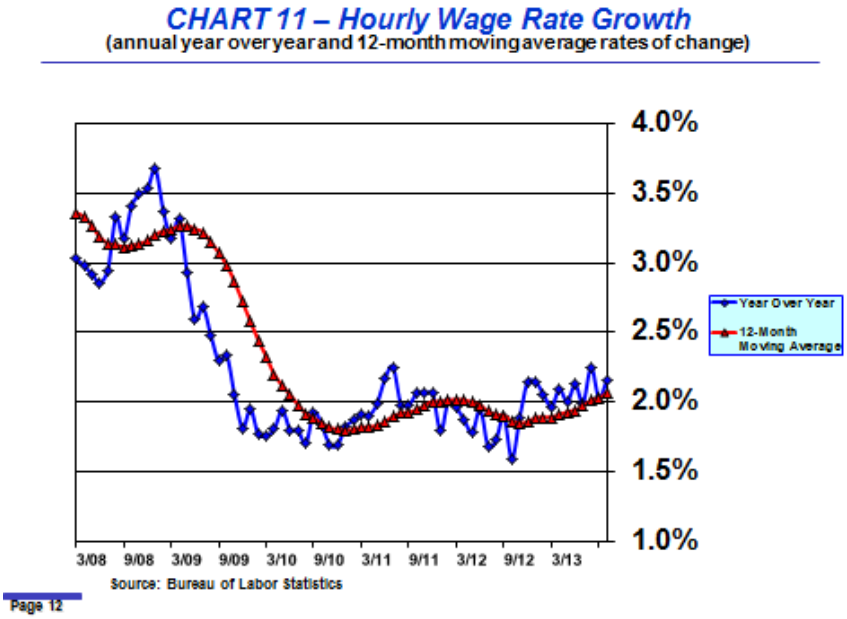


wages has fluctuated in a narrow band in the vicinity of 2.0 percent for the last four years. This is good news because the large output gap and high

[3]Daly, Mary D., Hobijn, Bart, and Bradshaw, Benjamin. *"Gauging the Momentum of the Labor Recovery,"* Federal Reserve Bank of San Francisco Economic Letter, 2013-30, October 15, 2013.

unemployment rate, which have persisted for several years, have not put further downward pressure on wage rate growth.

Chart 11 shows a slight improvement in the 12-month moving average



rate of growth from 1.85 percent in November 2012 to 2.07 percent in October 2013. The 12-month rate of change in weekly wages rose to 2.46 percent in October. The comparable measure for hourly wages was 2.16 percent in October. **Chart 11** compares monthly hourly wage rates with a 12-month moving average. Although the recent upward trend seems to be gaining some traction, a similar acceleration in early 2011petered out and reversed. We can hope that the recent acceleration will be sustained. GS believes that it will, but the rate of increase will be subdued and will be in the 2.0 to 2.5 percent range at the end of 2014.

IV. 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 56.4 in October from 56.2 in September. Values of this index above 50 mean that manufacturing activity is expanding. The production subcomponent held at a high level of 60.8 and the new orders subcomponent was 60.6, indicating continuance of relatively strong manufacturing growth. The employment subcomponent deteriorated from 55.4 to 53.2. Manufacturing continues to be a bright spot in an otherwise lackluster economy.

ISM Services Index rose a bit in October to 55.4 from 54.4 in September. The business activity subcomponent rebounded to 59.7 from 55.1 and employment rose to 56.2 from 52.7. However, new orders eased to 56.8 from 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)** dropped in October in response to the federal government shutdown. This measure remains at an historically depressed level.

GSAI (Goldman Sachs Activity Index) was unchanged in October at 50.0. As is the case for the ISM indices, a value above 50 connotes business expansion. Importantly, the employment index was a sub-50 reading of 48.1, up from 44.5 in September. While this is not positive, it is tempered by the fact that this measure has been below 50 for several months.

2. Manufacturing Renaissance?

Manufacturing has been one of the brightest sectors of an overall lethargic economic expansion. This has prompted a narrative that manufacturing will continue to be a driver of U.S. economic growth because of low natural

gas prices, rising wages in China and some other countries, and production efficiency gains. It's a good story, but the data don't really support the narrative.

First and foremost, manufacturing is a small segment of the U.S. economy accounting for 9 percent of U.S. employment and 20 percent of GDP, and it has been shrinking for decades. This trend remains intact. Thus, strength in manufacturing will help growth a bit, but it will not be a significant factor.

Low natural gas prices will help the chemical industry but will have little impact elsewhere for two reasons. First, natural gas accounts for only 0.6 percent of manufacturing sales revenue and 5.6 percent of manufacturing wages. What this means is that a substantial increase in natural gas usage would have limited impact on manufacturing costs. Second, except for chemicals, the cost of converting infrastructure to take advantage of low natural gas prices is not a high rate of return on capital investment for many manufacturers.

As for rising wages in China, U.S. hourly manufacturing wages were $35.34 in 2012 compared to $1.74 in China in 2009. Even allowing for substantial growth in Chinese wages since 2009, the wage gap in absolute terms has shrunk very little. So-called "reshoring" has more to do with the total costs of doing business than with wage rate differentials.

Manufacturing production efficiency has been improving rapidly and the cost benefits have improved the competitiveness of U.S. exports marginally. But, the more powerful driver of export growth has been the 33 percent decline in the trade-weighted value of the dollar over the last ten years. Over that period U.S. exports of goods has risen from 6.5 percent of nominal GDP to 9.5 percent, but imports have also risen from 10.5 percent to 13.5 percent, leaving the U.S. trade deficit, which also includes services, relatively constant at approximately 3.0 percent. In other words, the international component of the U.S. economy has been growing gradually, but competitiveness, as measured by the trade deficit, has changed little.

Manufacturing efficiency gains have resulted in declining employment and higher profits. Capital investment has occurred almost entirely to improve operations and not to expand capacity. Capital spending on structures is weak and growth in the aggregate capital stock is at the lowest level in

decades.

In summary, the manufacturing renaissance narrative doesn't hold up to scrutiny. Manufacturing's strength has largely been the result of a weak dollar. There is ongoing weakness in both global and U.S. aggregate demand. Efficiency gains have gone to owners and not to labor as evidenced by rising profit margins and declining employment. Investment has focused primarily on cost efficiencies and not on expanding capacity.

In essence, the strength in manufacturing is contributing to the hollowing out of middle class, high-wage blue collar jobs. There are counterarguments, such as policy uncertainty is delaying hiring decisions and there is a lack of skilled workers. The lack of skilled workers is reported by many companies, but it is a problem that should correct over time through higher wages and educational and training programs. Saying there is a lack of skilled workers is not the same thing as saying that employment would be higher in manufacturing if this problem did not exist.

3. 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 percent in the mid-1950s to 1.2 percent. Growth was a marginally higher 1.4 percent in 2012. 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.

All three components of private investment — equipment/software, structures (residential and nonresidential), and intellectual property have grown more slowly in the current economic expansion than in past expansions. Growth in structures has been especially weak. The pattern of weak growth has impacted most all industries — construction, finance and retail being among the worst.

However, GS expects private investment spending to ramp up in coming

quarters.[4] For reasons I have articulated I remain skeptical (see **Section I**). However, it is useful to provide a counterpoint to my pessimistic viewpoint by summarizing GS's argument for stronger capital expenditures growth since it is key to GS's forecast that real GDP growth will climb to an above potential growth rate of 3 percent or greater over the next three years. GS expects private investment growth to average approximately 8 percent annually over the next three years. Because private investment is 15.7 percent of real GDP, an 8 percent growth rate would add about 1.25 percent to annual real GDP growth. If, instead, investment grows at its 30-year average of about 3.0 percent, the boost to real GDP growth would only be about 0.50 percent. This differential of 0.75 percent is very significant and will spell the difference between a rapid closing of the output gap and ongoing economic stagnation.

First, GS finds that some, but not all, of the slowdown in investment growth is due to slowing population growth. Growth in the capital stock, when adjusted for population growth, should have been 1 percent annually in the current expansion; instead it has only been 0.1 percent. Only 3 of 19 industries — agriculture, mining, and transportation — have experienced above average growth in the capital stock.

GS has constructed an econometric model of investment activity. Variables include lending underwriting stringency, as measured by the Federal Reserve's Senior Lending Officer survey; the lagged profit rate on domestic capital; two lags of consumption growth; the lagged growth rate of the capital stock; and potential labor force growth. Over the next 12 months the model forecasts 10.0 percent growth in equipment/software, 8.0 percent in structures, and 5.5 percent in intellectual property, which averages out to 8.0 percent overall.

GS's forecast model indicates that the current low rate of investment spending is due to the consumption component. Thus, GS's forecast that investment will rise to 8.0 percent depends upon its assumption that real consumption growth will ramp up to 3.0 percent by the end of 2014. This is the chicken and egg problem. GS's model clearly confirms the virtuous feedbacks between consumption and investment growth. The question is one of what will be the catalyst that stimulates consumption growth and ignites

[4]Mericle, David. *"US Daily: A Closer Look at the Capital Spending Drought,"* Goldman Sachs Research, October 14, 2013; and *"US Daily: Capex: The Fundamentals Remain Strong,"* Goldman Sachs Research, November 12, 2013.

the virtuous circle.

As I explained in **Section II**, I am not as optimistic as GS is about a strong increase in real consumer spending growth in 2014. ***Obviously, the lynchpin to consensus forecasts of 3.0 percent real GDP growth in 2014, including the FOMC's, depends critically on a strong increase in consumption growth.***

V. Monetary Policy, Inflation and Interest Rates

After surprising the markets in September with its decision not to commence tapering of large scale asset purchases, the FOMC was expected to do nothing at its October meeting and that is what it did — nothing.

For much of the month of October attention focused on fiscal policy issues and the shutdown of the federal government. During that period President Obama nominated Janet Yellen to be the next chairman of the Board of Governors of the Federal Reserve System, which means, when she is confirmed by the Senate, she will also be Chairman of the FOMC.

Naturally, attention has shifted to trying to divine Yellen's monetary policy views and what that might mean for the timing of tapering and rate guidance, including either explicit timing guidance or refinements to economic variable guidance, including, importantly, whether the 6.5 percent unemployment rate remains the threshold for actively considering whether to raise the federal funds rate.

While there is some thinking that the FOMC could begin tapering at its December or January meetings, that might be awkward unless the Senate confirms Yellen's appointment prior to those meetings. Even then, Yellen's term as Chairman will not begin until February 1, 2014. Timing becomes even more complicated because of the FOMC's policy position that tapering is data dependent. After the September FOMC meeting, the market uncritically extended the start date of tapering to March or later in 2014. However, the strong October payroll employment report threw a monkey wrench into this expectation.

1. Monetary Policy Objectives and FOMC Communications

By law, monetary policy's objectives are to maximize employment consistent with maintaining price stability. When the labor market is weak, as it has been since late 2007, the FOMC eases monetary policy in an attempt to stimulate aggregate demand.

There are four ways in which the FOMC can implement monetary policy.

- First, historically, the FOMC's primary policy instrument was changing the federal funds rate. Changes in this rate affected interest rates and the cost of capital. By easing monetary policy through reductions in the federal funds rate, the FOMC expects to stimulate business investment spending and consumer spending on durables such as homes and cars.
- A second transmission mechanism involves boosting financial wealth and stimulating additional consumer spending.
- A third transmission mechanism is to change market and household expectations through policy statements. This is where the credibility of the FOMC's communications becomes important. If communications lack credibility, this transmission mechanism will not work as intended.
- A fourth mechanism is prudential supervision of the activities of financial firms and markets. This fourth mechanism was seldom used while Alan Greenspan was Fed chairman. Its efficacy has been restored in the aftermath of the Great Recession, but it is too soon to tell yet whether this policy mechanism will be deployed effectively. To be effective, prudential supervision must be tied to incentives. When incentives are lacking prudential supervision will probably be ineffective. For example, jawboning banks to make more loans did not result in them actually making any more loans. Banks simply continued to make loans based on borrower demand and risk considerations. Moreover, there is reason to be concerned that revised capital and liquidity regulations and credit underwriting supervision, in an attempt to promote financial stability and reduce the potential for financial panics, might reduce risk appetite to an extent that depresses the potential real rate of GDP growth.

When interest rates hit the zero boundary in early 2009, the primary policy instrument of cutting the federal funds rate ceased to be effective. In an attempt to overcome this problem the FOMC has implemented nontraditional policy tools including large scale asset purchases, calendar-based guidance, and economic variable based guidance.

Nontraditional tools have been studied in theoretical academic papers and analyzed using econometric models. However, when they were first implemented their real world impacts were untested. Behaviors in the real world are not tidy in the ways that models usually assume. The effectiveness of nontraditional tools relies to a considerable extent on what market participants expect the tools to accomplish. This highlights the importance of the FOMC providing clarity about the intent of the tools. However, the economy is dynamic and ever changing, which is why forecasters don't do a very good job in predicting the future beyond a few quarters. FOMC members are no better forecasters than anyone else. For that reason they feel it imperative to retain flexibility to adjust policy to changing conditions, thus the "data dependency" policy. Unfortunately, flexibility to adjust policy is in opposition to providing policy clarity. Basically, it puts the FOMC in a no-win position.

There is general agreement in the market that the FOMC's policy communications have become less transparent over the course of 2013. How a Yellen chairmanship will deal with this problem remains to be seen. In the meantime, lack of policy clarity and data dependent guidance implies that the bond markets will probably be volatile.

If the objective of large scale asset purchases was to reduce long-term interest rates, that objective no longer appears to being achieved. Following Bernanke's congressional testimony in May and the June FOMC meeting the ten-year Treasury yield soared from 1.66 percent on May 2 to 2.98 percent on September 5. This rate fell only to 2.69 percent on September 18, the day of the FOMC's meeting, but has changed little since then. For example, the 10-year Treasury rate was 2.71 percent November 15. During this time period the core rate of PCE inflation has been stable at 1.2 percent, which means that the real rate of interest has increased from about 0.5 percent to 1.5 percent.

Clearly, the objective of large scale asset purchases to reduce long-term interest rates has been impaired. Except for residential housing, it is not

clear that low long-term interest rates were having much of an impact.

However, if the objective of quantitative easing was to lift prices of financial assets so as to stimulate consumer spending, then the policy must be judged to be a huge success. The S&P 500 stock average has risen 11 percent since May 2. Stock prices depend on the discount rate and the discount rate falls when long-term interest rates fall. Thus, the failure of quantitative easing to depress long-term rates should have had a negative impact on stock prices. So far, however, stock prices have continued to rise. Quantitative easing also has an expectations effect and that effect appears to be dominating stock price performance. In that respect a policy to taper or not to taper has an effect on expectations similar to policy guidance. Market participants appear to believe that large scale asset purchases support market liquidity and diminish downside risks. ***What is important is not whether this is actually true but that the market believes it is true.*** As long as that belief prevails continuation of large scale asset purchases will support stock prices, while tapering will threaten them.

2. Is A New Stock Market Bubble Building?

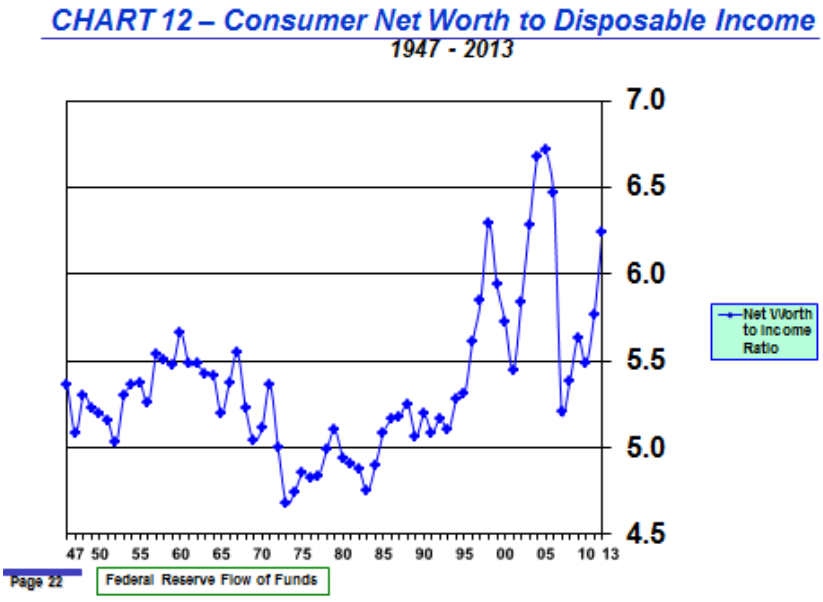
Because of the belief that quantitative easing is market friendly and because economic growth is lethargic (stock prices are rising much faster than nominal GDP growth) there is some risk that another financial asset bubble may be in the making. Over very long periods of time stock prices rise in line with growth in corporate profits. And, profit growth tracks growth in the economy.

Profits are growing at a faster rate than the economy. That is because profit margins are rising as the share of national income shifts toward investors and away from workers. Currently, the distributional income shares of investors and workers are at historical extremes. There is risk of reversion to the mean, but changes in America's social system may have locked in either permanently or for an extended period of time the new income shares. In other words, current income shares may not be extremes but the new normal.

But, even given expanding profit margins, stock prices have been rising faster than profits, which means that price-earnings multiples are expanding. Price multiples always eventually revert to the mean, but it can take a

long time for that phenomenon to emerge and speculative forces can drive multiples even further from the mean in the interim. At the moment price multiples do not appear to be overly above where they theoretically should be if one factors in the favorable economic growth forecasts and modest further expansion of profit margins.

Chart 12 shows the ratio of consumer net worth (wealth) to disposable



income. Over the last 65 years a "normal" level for this ratio has been between 5.0 and 5.5. There were two periods when the ratio exceeded 6.0. Both of these periods in retrospect involved substantial price bubbles which led eventually to spectacular price collapses. The first bubble occurred in the late-1990s and burst in 2001. If was propelled primarily by stock price speculation in technology and dot.com stocks. The second bubble occurred in the mid-2000s and burst in 2008. The defining feature of this second bubble was massive home price inflation.

An uncritical interpretation of **Chart 12** is that a third price bubble is in the making currently. It is the product of stock price appreciation. Although home prices have risen at double digit rates during 2013, national nominal

housing prices, as measured by the Federal Housing Finance Agency, are still 12 percent below the peak registered in the first quarter of 2007. The current bubble, if it really is one, is the product of rising stock prices. History may record that the FOMC's monetary policies and, in particular, quantitative easing aided and abetted the building of a third financial assets price bubble. We won't know whether this is so for several years.

In the meantime, what we know for sure right now is that this hefty increase in wealth is concentrated among a few at the top of the wealth distribution. There is reason to question the wisdom of a policy intended to stimulate aggregate demand that has its greatest favorable impact on the few who have least need and are more likely to save the proceeds rather than increase consumer purchases. Although it is unpopular to ask the following question, is it possible that current monetary policy, rather than accelerating economic growth, is contributing to widening income and wealth disparities, depressing the potential rate of real GDP growth, and reinforcing deflationary pressures? Perhaps the answer is "No" and perhaps monetary policy is on the right track, although with a rather feeble impact. But, it is worth pondering whether the answer might be "Yes" because, if it is, future consequences will be significant and troublesome.

3. October FOMC Meeting

After the surprising September meeting, the FOMC made virtually no changes in its October meeting policy statement.

Assessment of the Economy. There were a few relatively nonsubstantive wording changes in the October statement. There was acknowledgement that the economic situation was slightly weaker but the phrase expressing concern about financial conditions was eliminated. Also, concern about rising mortgage rates was replaced with a more direct statement that the "housing market has slowed somewhat." It maintained the sentence that "fiscal policy is restraining economic growth" and did not change the assessment that downside risks have diminished.

Monetary Policy Statement. October's policy statement was exactly the same as September's. The FOMC is still in a data dependent wait and see mode.

4. Transition at the Board of Governors

Janet Yellen in her Senate confirmation hearing for Chairman of the Board of Governors of the Federal Reserve System defended the FOMC's current approach to monetary policy, including large scale asset purchases, which she asserted have benefited the economy. She did not discuss timing of tapering but reaffirmed that that decision would be guided by economic data, particularly developments in the labor market and accelerating GDP growth, and not by the size of the Fed's balance sheet. She explicitly rejected concerns that quantitative easing poses a threat to financial stability, stating that "*I do not see evidence at this point in major sectors of asset price misalignments, at least of a level that would threaten financial stability.*" She also emphasized her belief that the best way to deal with excesses in financial institutions and markets is through macro-prudential regulatory policy rather than through monetary policy. She acknowledged that an ever growing Fed balance sheet could eventually become a problem but indicated that the benefits still outweigh any costs.

Yellen is likely to be confirmed by the Senate well before the end of Bernanke's term. Her testimony and responses to questions made it clear that monetary policy will stay on its present course.

5. Optimal Control Approach to Monetary Policy — Potential Policy Adjustments

Several months ago Janet Yellen made a number of speeches outlining an "optimal control" approach to monetary policy. Optimal control policy involves applying the various monetary policy tools in ways that minimize the deviations over time from the two policy mandates — the unemployment rate and the rate of inflation. The target unemployment rate is currently 5.5 percent and the target PCE inflation rate is 2 percent. Deviations currently are very large for both policy targets.

Before the federal funds rate hit the zero boundary, monetary policy generally was guided by the Taylor Rule which specifies what the federal funds rate should be given deviations in unemployment and inflation from their target levels. There were two shortcomings of the Taylor Rule. First, while the rule was simple in concept there were differences of opinion as to

how to measure the quantitative inputs in the policy equation. This led to differences of opinion as to what the federal funds rate should be at a particular moment in time. Second, the rule described a static situation and implied that the federal funds rate should be adjusted instantly. Optimal control theory acknowledges that monetary policy impacts unemployment and inflation over a fairly long time period and involves feedback loops between the two targets. In other words, an optimal policy might involve intentionally missing one of the two targets for a short period of time to ensure that satisfactory progress is made on the other target. This is usually interpreted as meaning that it might be appropriate to permit inflation to exceed the 2 percent target by a little bit for a short period of time if that resulted in a faster reduction in the unemployment rate to the 5.5 percent target.

Federal Reserve economists have been hard at work analyzing an optimal monetary control framework, constructing models, and conducting simulations. Two papers were presented at the International Monetary Fund conference on November 5, 2013. The first paper, *"The Federal Reserve's Framework for Monetary Policy — Recent Changes and New Questions,"* was authored by William English, head of the Fed's Monetary Affairs Division, David Lopez-Salido, and Robert Tetlow, which is referred to as the "English" paper.[5] The second paper, *"Aggregate Supply in the United States: Recent Developments and Implications for the Conduct of Monetary Policy,"* as authored by David Reifschneider, William Wascher, and David Wilcox, Director of the Division of Research & Statistics, which is referred to as the "Wilcox" paper.[6]

The English paper reviews monetary policy developments and communications strategies and uses model simulations to examine alternative policy rules and implementation strategies. The key finding is that by delaying raising the federal funds rate until late 2016, the unemployment rate would fall an additional 0.5 percent by 2015-16 at the cost of a small increase in

[5]English, William B., Lopez-Salido, J. David, and Tetlow, Robert J. ***"The Federal Reserve's Framework for Monetary Policy — Recent Changes and New Questions,"*** Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C., 2013-76.

[6]Reifschneider, Dave, Wascher, William, and Wilcox, David. ***"Aggregate Supply in the United States: Recent Developments and Implications for the Conduct of Monetary Policy,"*** Finance and Economic Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C., 2013-77.

the inflation rate. The implication is that the unemployment rate threshold for considering raising the federal funds rate should be reduced below the current guidance level of 6.5 percent.

The Wilcox paper analyzes the possibility that the Great Recession may have reduced the long-term potential growth rates in employment and real GDP because of increases in structural unemployment and reductions in productivity due to reduced capital investment. The paper makes a case for more aggressive monetary policy to mitigate these adverse developments. Based on model simulations the authors conclude that substantial improvements in labor and output growth can be achieved by delaying raising the federal funds rate for one to two years longer than a standard Taylor Rule dictates. This implies that the first increase in the federal funds rate would not occur until 2017. The Wilcox paper also discusses the potential consequences of an extended period of zero interest rates and suggests that there is risk of credit and financial bubbles and financial instability. In other words, what is optimal now, may not be optimal in the long run, if a policy of delaying raising the federal funds rate leads to a new financial crisis in a few years.

It is interesting that both these papers are consistent with a later increase in the federal funds rate that my own model has projected for some time (see **Chart 14** below) than indicated by FOMC projections and market expectations. Neither paper should be treated as reflecting FOMC monetary policy. However, both are indicative of the debate that is underway inside the Fed. The FOMC still is faced with the tasks of deciding what to do about quantitative easing and in improving communication of policy intentions.

Goldman Sachs has built its own set of simulations to test optimal monetary policy pathways.[7] The GS paper adds an interesting twist by calculating the net welfare gain or loss of various alternative pathways. The authors conclude that a policy linked to 6.0 percent unemployment rate and 2.5 percent inflation rate thresholds achieves an optimal welfare outcome. However, they also note that the model's results depend upon the assumptions used to construct it, which may or may not be a reasonable reflection of how the real world would work. In other words, the model is an interesting exercise, but it does not eliminate uncertainty surrounding specification and implementation of a policy framework. The same caution applies to the

[7]Stehn, Sven Jari, and Mericle, David. *"Thresholds and Thereafter,"* Goldman Sachs US Economics Analyst, Issue No: 13/46, November 15, 2013.

findings of the English and Wilcox papers.

Refinement of monetary policy seems likely in coming FOMC meetings. It could occur as soon as the December meeting but March seems a more likely timeframe. Elements that are likely to be addressed include:

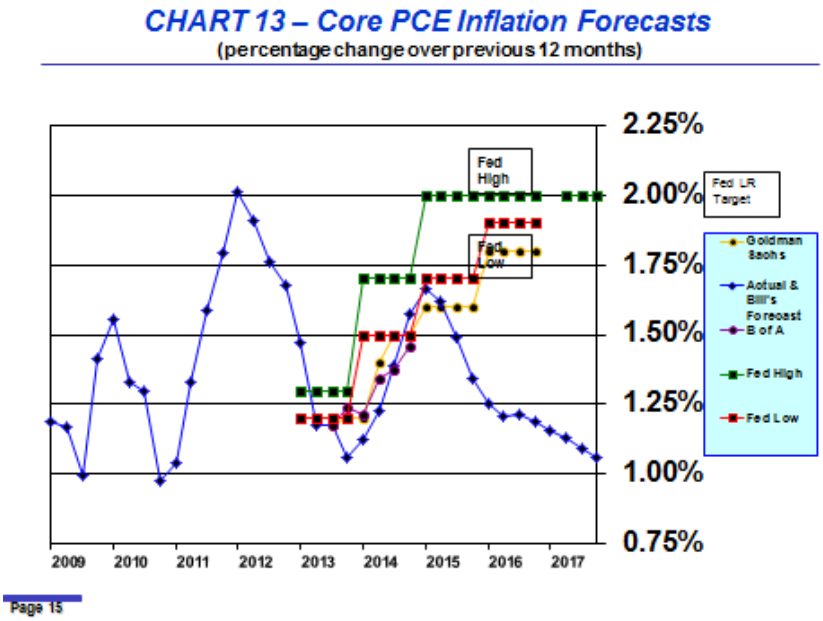
- Commencement of tapering of large-scale asset purchases — amounts and timeframe for tapering or guidance metrics in a data-dependent environment will need to be specified.
- Policy guidance for raising the federal funds rate — there is increasing discomfort with the 6.5 percent unemployment rate threshold; the threshold could be lowered or the 6.5 threshold could be linked to the inflation target. In the latter approach the FOMC would state that if the unemployment rate falls below 6.5 percent, the federal funds rate would not be raised as long as the inflation rate was below some stated level.
- Inertial Taylor Rule guidance — this would involve stating that federal funds rate increases would be limited not to exceed a specific amount, say 50 basis points a year, until the unemployment rate reached the next guidance threshold or inflation rose above a certain level. This kind of guidance could improve communications transparency by providing more explicit conditions for raising the federal funds rate.

Other policy tools, such as targeting nominal GDP growth, are possible but unlikely.

6. Prospects for PCE Inflation

Core PCE inflation was 1.19 percent in September and total PCE inflation was 0.92 percent (see **Chart 13**). Compared to core PCE inflation, total PCE inflation is 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.

Core PCE inflation is well below the FOMC's target level of 2 percent 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, repeated word for word in the October 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 13** 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 September level of 1.2 percent to 1.5 to 1.6 percent in 2014, which is consistent with 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 percent.

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, Economy.com, and Blue Chip Average

Core CPE	2013	2014	2015	2016	2017
B of A	1.2	1.5			
GS	1.2	1.5	1.6	1.8	
Bill's Slow Growth	1.1	1.6	1.3	1.2	1.1
Bill's Strong Growth	1.1	1.6	1.3	1.3	1.3
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**	**2017**
Global Insight	1.5	1.6	1.7	1.9	
Economy.com	1.4	1.8			
Blue Chip Average	1.5	1.9	2.2	2.3	2.4

7. Federal Funds Rate

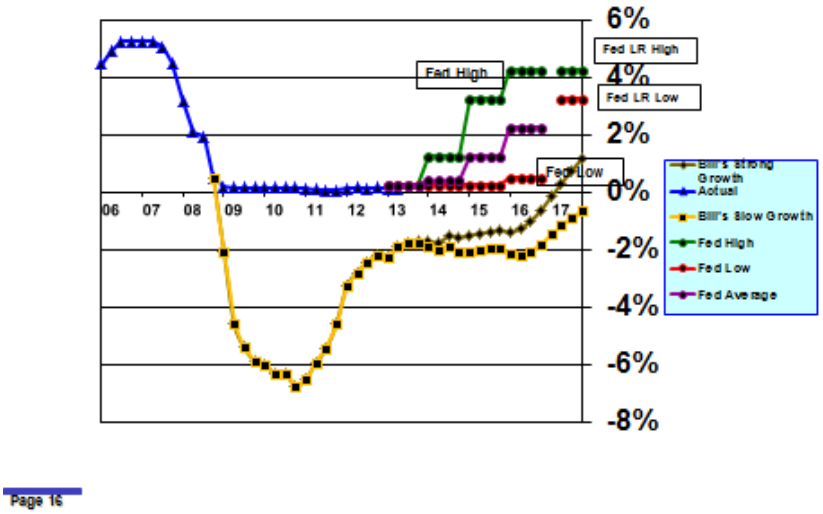
Chart 14 shows the FOMC's central tendency range for high and low projections for the federal funds rate for 2013, 2014, 2015, and 2016. The purple line (circles) is the average of projections for the 19 FOMC members (7 governors and 12 presidents). The projections imply that the first increase in the 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***" 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 percent in mid-2015. In my "***Strong Growth***" forecast, the first increase in the federal funds rate occurs in early 2017.

However, if the unemployment rate guidance is reduced to 6.0 percent,

CHART 14 – Federal Funds Rate Forecast



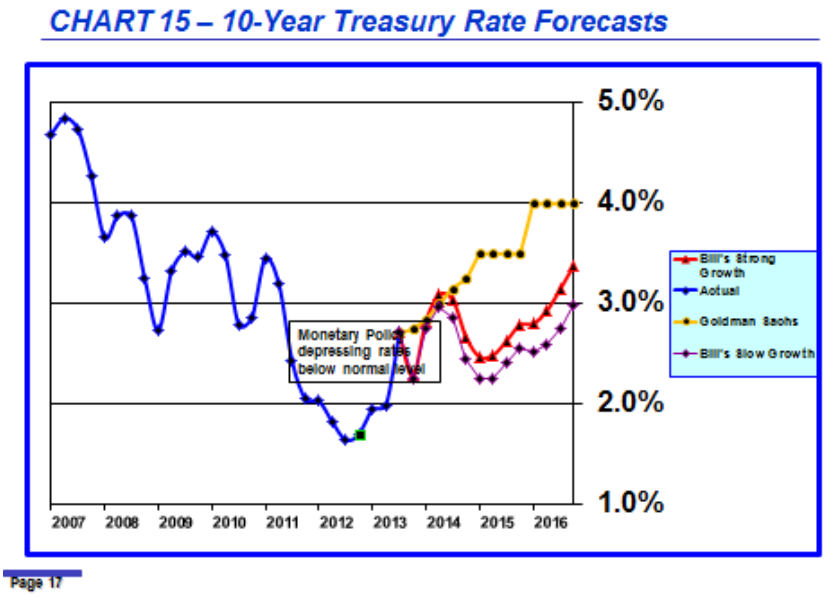
Page 16

Bill's "***Slow Growth***" scenario indicates that consideration of the first increase in the federal funds rate would move from mid-2015 to late 2016, which is more in line with the federal funds rate forecast in **Chart 14**. Consideration of the first increase in the federal funds rate would move from early 2015 to early 2016 in Bill's "***Strong Growth***" scenario. These later dates are more consistent with the "optimal control" monetary policy analysis.

8. 10-Year Treasury Rate

Chart 15 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).

As can be seen in **Chart 15**, my 10-year forecast for the "***Slow Growth***" scenario remains near its current level for the next year and then falls about 50 basis points to approximately 2.25 percent by early 2015 and then gradually increases to 3.00 percent by 2017. The forecast for the "***Strong***



Growth" scenario tracks the forecast for the "***Slow Growth***" but rises a little faster reaching 3.50 percent by late 2017.

In contrast, GS's forecast does not decline, but rises only about 50 basis points to 3.25 percent by the end of 2014 and rises a further 25 basis points to 3.50 percent by the end of 2015 and 4.00 percent by the end of 2016. The principal difference between my forecasts and GS's is that I forecast inflation to be about 25 to 50 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 percent for at least the next year and moves only modestly higher after that.

VI. Fiscal Policy Developments

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. In March the sequester took effect and forced cuts in federal spending. Then the government shutdown in October had short-lived negative impacts on economic activity but amplified policy uncertainty remained in place after the shutdown ended. Studies indicate that increases in policy uncertainty, when sustained for a period of time, reduce economic activity.

1. The Next Act in the Ongoing Budget and Debt Ceiling Drama

Republicans ultimately capitulated and the federal government shutdown ended with a simple fiscal year 2014 continuing budget resolution providing for funding at fiscal year 2013 levels until January 15, 2014.

As was the case in January, Congress decided to suspend the federal debt ceiling until February 7, 2014. That means that the U.S. Treasury can borrow as much as it needs until then. The legislation expressly limits the ability of the U.S. Treasury to overborrow and stockpile cash. A new debt ceiling will commence instantaneously on February 7, 2014 at whatever debt level exists on that date. Past experience suggests that Congress will probably not raise the debt ceiling until the U.S. Treasury has exhausted all available methods to continue financing operations. That is not likely to occur until some time between mid-March and May. So, policy uncertainty seems likely to continue well into calendar year 2014.

Because both the Senate and House of Representatives had passed 2014 budgets prior to the government shutdown, the legislation ending the shutdown established a House-Senate conference committee to reconcile the two versions. The last time there was a budget conference committee was in 2009. There hasn't been one since then because Congress has operated on continuing budget resolutions ever since then.

The Senate and House budgets are both philosophically and numerically

so far apart that failure of the conference committee to achieve agreement is a high probability. The deadline for the conference committee to conclude its work is December 13, 2013. If the conference committee does achieve agreement, both the Senate and House of Representatives must vote on the conference report. No amendments will be permitted and passage requires only a simple majority, which means 51 votes in the Senate rather than the customary supermajority of 60 votes.

There is talk, however, that the conference committee might be able to agree to a small compromise. The most likely deal would be to approve funding at the fiscal year 2013 levels. Such a deal would actually involve eliminating additional spending cuts of $19 billion that are scheduled to take effect on January 15, 2014 and which were mandated by the 2011 Budget Control Act. It is also possible that the conferees will agree to provide discretion over how to allocate mandated spending cuts rather than retaining the blunt across the board pro rata cuts required by the original sequestration legislation. Any decisions regarding the sequester would be subject to supermajority voting rules rather than simple majority rules. This may not become an issue if the conference can reach agreement because Republicans control the House and Democrats control the Senate. Because of that fact, presumably conference agreement would garner a substantial majority vote so that the supermajority rule would not matter.

There are several other pending significant fiscal policy issues that take effect on January 1, 2014 unless Congress acts before that time. First, the so-called "doc fix" unless extended will cut provider payments by 24 percent. Second, the farm bill expires and subsidy prices will revert back to the 1949 levels. Third, extended unemployment benefits will expire. Fourth, a variety of small "tax extenders" will expire.

2. Impact on Fourth Quarter Real GDP

By most accounts the now-ended federal government shutdown will subtract about 0.5 percent from real GDP growth in the fourth quarter. This shortfall should reverse in the first quarter of 2014. It is less certain whether the negative consequences of higher policy uncertainty will reverse fully in the first quarter.

3. 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.

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

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 2012real 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%; much weaker than expected.***

   - ***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%; the "Advance Estimate" of third quarter growth was 2.85%; forecasts for all of 2013 Q4/Q4 are approximately 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 the level in the first quarter of 2012. (Because of substantial GDP data revisions, CBO***

will 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 ten months of 2013 payroll growth has averaged 186,000 per month.***
- ***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 October, but a substantial number of additional discouraged workers has dropped out of the labor force, bringing the labor force participation rate to 62.85%, the lowest level since February 1978.***
- ***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 September both disposable income (7.52% in 2012; 2.91% in 2013) and consumer spending growth (3.73% in 2012; 2.73% 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 nine months of 2013 (4.99% 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 2.89% in September; export growth is stable and import growth rate has slowed.***

- ***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, September, October.***

- ***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, growth has risen at a 2.5% annual rate over the first nine months of 2013 from a year earlier, key fiscal issues remain unresolved and policy uncertainty remains high.***

- ***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 15.7% 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 at least through December and perhaps as long as March 2014.***

- ***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.

  ✓ + ***September PCE inflation was 0.92% and core PCE inflation was 1.19%.***

- ***Federal Funds rate*** is not likely to increase before mid-2015 and might not increase until late 2016 or early 2017.

  ✓ + ***My models suggest the federal funds rate will not be raised until late 2016 or sometime during 2017; market expects the fed funds rate to increase in early 2015.***

- ***Fiscal policy*** will be contractionary in 2013, but will become less of a factor in ensuing years.

  ✓ +***Fiscal policy has been more contractionary during 2013 than most had expected because Congress permitted automatic spending cuts to take effect as scheduled on March 1st; fiscal policy is now expected to subtract at least -2.0% from GDP in 2013 and -0.4% in 2014; the deficit is shrinking more rapidly than expected 4.0% for fiscal 2013 and is expected to decrease to 3.2% in fiscal 2014.***

- ***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 this increasingly appears to be a correct call; productivity growth is near zero through the first nine months of 2013.***

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 quarterly GDP growth of 0.3% in the second quarter and 0.1% in the third quarter; however, peripheral countries, Italy, and France remain 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.***
  - ✓ ***The ECB is preparing to conduct rigorous bank stress tests.***
  - ✓ ***Net new bank credit extension is nil.***
- 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; as expected, the Third Plenum of the 18th Central Committee adopted policies that will lead eventually to 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 down slightly from 3.2% in 2012 to 2.9% in 2013; slower growth in emerging countries has been offset by modestly better growth in developed economies.***
  - ✓ ***The IMF expects global growth to rise to 3.6% in 2014.***

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.***
     - ✓ ***+ No fiscal year 2014 budget has been adopted; a continuing resolution is funding the federal government at fiscal year 2013 levels; additional automatic spending cuts are scheduled to take effect on January 15, 2014, unless Congress changes the sequester legislation.***
   - ***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 and an even smaller increase in the third 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 potentially significant reforms were approved in November.***
  - ✓ ***+ Growth forecasts are being revised lower; growth likely to decelerate very gradually as economic reforms are implemented.***
- ***Global growth*** slows more than expected.
  - ✓ ***+ The trend in global growth is slightly slower than last year.***
  - ✓ ***+ 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.
  - ✓ ***? Devastating typhoon killed thousands in the Philippines; however negative global economic impact is likely to be immaterial.***
- ***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 spokes global financial markets.

  ✓ ***- There was a lot of saber rattling early in 2013, but this potential crisis has disappear from view.***

Bill Longbrake is an Executive in Residence at the Robert H. Smith School of Business at the University of Maryland.