



## The Longbrake Letter\*

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This month's letter begins with a discussion about the possibility that the global economy has reached an inflection point. An inflection point marks the point of transition from one state to another. Nouriel Roubini's recent discussion of the "**New Abnormal**" serves as a point of reference.

Recent U.S. data reports and prospects for real GDP growth, employment trends and personal income and consumption are reviewed in Sections II, IV and V. The relationship between employment, output and productivity is the subject of Section IV. Monetary policy and fiscal policy updates are included in Sections VI and VII.

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

### I. New Abnormal

Increasingly it is looking like the global economy is at an inflection point. Economic trends that have held sway for much of last four years appear to be giving way and whiffs of turbulence and change are emerging, such as China's short-lived liquidity crunch last month. The global equilibrium of sorts that developed in the wake of the global Great Recession was one engineered by massive public policy intervention. In China it was aggressive state stimulus of investment. In the U.S. it was a combination of Keynesian deficit spending initially and a flood of monetary policy driven liquidity. In Europe initial fiscal stimulus quickly led to sovereign solvency issues and a response to deal with these issues through a combination of austerity, bailouts and massive liquidity injections. The list of interventions goes on with Japan the most

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recent major economy to embrace significant government policy intervention in an attempt to revive a deeply troubled economy.

These interventions generally had two effects — one good, but the other was not because it involved denial. The interventions did lead to a semblance of normality, calmed financial markets and probably avoided global depression. So, in that sense the interventions were constructive. However, the policies pursued more often than not did not address deep-seated structural flaws and imbalances in the global economy. In effect, policies papered over problems.

## **1. European Union**

Europe steadfastly refuses to address fundamental governance flaws in the makeup of the European Union and its common currency, the euro. As a consequence it is only a matter of time before the European Project endures a great cataclysm.

## **2. Germany**

Germany's economic policies are self-serving and in the context of the euro currency union are contributing to the deep depressions gripping many peripheral European Union members. Even France is wobbling.

## **3. China**

China bootstrapped its phenomenal growth by linking its currency to the dollar and pursuing trade-based mercantilist policies. While those policies were essential in the early going to galvanize China's economic breakout, an economic model driven primarily by investment by repressing consumption, which is what China did, leads in the long run to unsustainable imbalances.

When the global Great Recession hit, Chinese policy makers doubled down by cranking up the state-driven investment economic model. Growth surged and many countries, particularly those that were resource rich, benefited handsomely. But as Hyman Minsky described in his "financial in-

stability hypothesis”, overinvestment leads first to “speculative financing” which is often followed later on by “Ponzi financing”. When cash flows from real economic activity are not sufficient to support servicing of interest and principal on the credit used to finance the investment, momentum and state support can sustain the situation at the cost of ever growing imbalances.

China pretty clearly has been in the Minsky “speculative financing” phase for a while. But the recent explosion in credit growth while real growth rates are actually slowing suggests that China may have entered the “Ponzi financing” stage. This is the stuff of bubbles and short of massive state intervention, bubbles always burst eventually. An ever increasing number of dollars (renminbi) is required to generate a dollar of output. This is a telltale sign of the Minsky “Ponzi financing” phase. And that is exactly what has been happening in China over the last several months.

China’s leaders understand the need to transition the economy from one in which investment and exports have driven growth to one in which domestic consumption will eventually dominate. Such a transition is typical in a developing economy as consumer incomes rise and a large middle class evolves. This transition is also necessary for sustaining social and political stability. However, the transition which is in its early stages already appears to be resulting in a slowing in the rate of GDP growth. China reported that year-over-year GDP growth edged down to 7.5% in the second quarter.

While what needs to happen is clear, the new Chinese leadership will face formidable implementation challenges. This means that there will be plenty of bumps along the way and it is possible that the transition process will stall or move too slowly. The possibility of a hard landing, though unlikely, cannot be ruled out.

#### **4. Resource-Based Economies**

Growth in China’s demand for raw materials has already slowed. At the same time substantial increases in capacity to supply commodities are coming on line in many resource-based economies. Not surprisingly, prices of most commodities are falling. This is not a short-term phenomenon. Until recently rising prices for commodities partially offset powerful deflationary forces; falling commodity prices will now reinforce deflationary forces.

## 5. United States

Policy makers in the U.S. prevented potential depression by instituting deficit spending and pursuing aggressive monetary easing. But, both sets of policies have been insufficient to galvanize a robust economic recovery.

Fiscal policy was probably insufficient in size and definitely did not have an optimal composition. Too many dollars were spent on low multiplier activities. Investment in infrastructure was totally inadequate. Then, when the recovery proved to be feeble and deficits grew apace, it became easy for deficit hawks to capture the political momentum and institute austerity. This “prudent” fiscal policy will extend the length of time required for closing the output gap. Worse, the recent blunt cutting of government expenditures through the sequester is starving investment with the likely long-run result that the potential rate of growth in the U.S. will decline.

Other structural imbalances, such as growing income inequality, concentration of financial resources, allocation of financial resources (historical overinvestment in housing), and the aggrandizement of politically well-connected elites, have not been addressed and the potential long-run consequences of these imbalances appear to be growing.

Monetary policy, although it has the appearance of having been extremely accommodative, may not have been accommodative enough (see the discussions of financial conditions in **Sections II and VI**). Here, too, just as has been the case for fiscal policy, the failure of monetary policy to accelerate recovery is leading to a loss of political support. Federal Open Market Committee members and other Federal Reserve officials probably do believe that the economy is poised to grow more rapidly and, therefore, monetary policy accommodation will need to be phased out sooner than later. However, an early exit also would relieve intense political pressure. There are economic risks both to maintaining accommodative monetary policy too long and to not maintaining it long enough. But the political risks are primarily concentrated on the side of maintaining accommodation. Thus, the U.S. increasingly faces the risk of adding premature withdrawal of monetary stimulus to the policy mistake of instituting fiscal austerity and failing to support investment in infrastructure and research.

## 6. Japan

Japan has yet to come to grips with the challenges of an economy whose population and work force are shrinking. Its failure to understand this problem and develop effective policies assured 20 years of malaise and deeply embedded deflation.

Now nearly all the policy stops have been pulled out. Developing “third arrow” policies, which involve increasing competitiveness and growing the size of the labor force, are essential for dealing with the consequences of an aging and shrinking population. These policies are mostly conceptual at this juncture and will soon need to be turned into concrete programs. Aggressive fiscal and monetary policies are already having favorable impacts on growth and deflation, but their effectiveness will wane in time without effective “third arrow” programs.

## 7. Other Countries

The list of global imbalances could go on. For example, the recent rapid growth of the Indian and Indonesian economies may turn out to be the product of liquidity-driven financial flows seeking yield, rather than to deliberate enabling economic policies. If that turns out to be the case, since both of these countries have large trade deficits the recent reversal of “hot money” capital flows, if sustained, will put intense pressure on their ability to finance themselves with the dual consequences of increasing inflation and slowing growth.

## 8. Nouriel Roubini’s “New Abnormal”

Nouriel Roubini, the economist who correctly foresaw the consequences of the U.S. housing bubble and the global speculative frenzy it spawned, recently penned an article titled the “*New Abnormal*”.<sup>1</sup>

Roubini notes that the theme of the “**New Normal**” has been embraced by many. The “New Normal” involves the presumption that economic

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<sup>1</sup>Nouriel Roubini. “Roubini and Bremmer on Charlie Rose: Unveiling New Abnormal,” *EconoMonitor*, June 27, 2013.

progress will be slow but steady and will be supported by an abundance of central bank provided liquidity. But this “New Normal” involves papering over significant structural imbalances. Policy intervention has sedated the disease but it has not cured it. But in the absence of crises policymakers have lost fear, complacency has taken over. Ignoring serious issues does not make them go away. In fact, history suggests that problems tend to get much worse by virtue of neglect.

Roubini puts it this way: “... *this situation is one that is not a stable equilibrium, is not even a stable disequilibrium. It’s an unstable disequilibrium. Take for example the Eurozone. You cannot have just a monetary union without banking, political, economic, fiscal union. Either you move towards more integration or you’re going to have more fragmentation and disintegration. So the situation we face right now in the global economy, same in the Eurozone, is of an unstable disequilibrium, therefore a new abnormal, that cannot be sustained. ... liquidity has been like a drug, a palliative, it doesn’t resolve the disease, you have to do fundamental, structural changes that’s going to increase the productivity.*”

Roubini concludes that: “*The deeper questions that created the recent convulsions have not been answered, and the easing of so much useful fear will make them much more difficult to address. That’s why **the uncertainty and volatility of the past half-decade is far from finished — and is almost sure to trigger new crises.** We have entered the **New Abnormal**, a period in which every market assumption must be questioned and the wise investor is prepared to be surprised.*” [I have supplied the bold type to emphasize Roubini’s key conclusion.]

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

Real GDP Growth during the first quarter of 2013 was very anemic and early indications are that growth will be even weaker in the second quarter. That is hardly surprising given the enormous negative impact of higher federal taxes and reduced spending. Perhaps the surprise is that growth has not been a lot worse. Consumer spending has held up better than expected and optimism has risen to the highest level since the Great Recession began. The stock market continues to perform well, which has increased consumer wealth to a new all-time high, wiping out the losses experienced during

and after the Great Recession. Employment gains have been better than expected, although the labor market remains very weak.

Over the last four quarters real GDP has increased 1.62%. This has not been sufficient to reduce the extremely large output gap. In fact, based on Congressional Budget Office (CBO) estimates of potential GDP, the gap has risen slightly from 5.66% in the first quarter of 2012 to 5.80% in the first quarter of 2013. From the perspective that “the glass is half full”, this could be considered to be good news because the output gap should begin to close, perhaps rapidly, as fiscal drag ebbs in coming quarters.

### 1. 2013 Q1 GDP — Final Estimate

As can be seen in **Table 1**, the “Final Estimate” of first quarter real GDP

**Table 1**  
**2013 and 2012 Quarterly GDP Growth**

	First Quarter Advance Estimate	First Quarter Preliminary Estimate	First Quarter Final Estimate	Fourth Quarter 2012	Third Quarter 2012	Second Quarter 2012
Personal Consumption Private Investment	2.24%	2.40%	1.83%	1.28%	1.12%	1.06%
Nonresidential	.22%	.23%	.04%	1.28%	-.19%	.36%
Residential	.31%	.30%	.34%	.41%	.31%	.19%
Inventories	1.03%	.63%	.57%	-1.52%	.73%	-.46%
Net Exports	-.50%	-.21%	-.09%	.33%	.38%	.23%
Government	-.80%	-.97%	-.93%	-1.41%	.75%	-.14%
<b>Total</b>	<b>2.50%</b>	<b>2.38%</b>	<b>1.76%</b>	<b>.37%</b>	<b>3.07%</b>	<b>1.25%</b>
<b>Final Dom. Sales</b>	<b>1.47%</b>	<b>1.75%</b>	<b>1.19%</b>	<b>1.89%</b>	<b>2.34%</b>	<b>1.68%</b>

growth was 1.76%, which was substantially lower than the “Advance Estimate” of 2.50%. But, this was old news and the market yawned because it is convinced that the economy will gather momentum as soon as the transitory impacts of higher tax rates and mandatory federal government spending reductions abate. The downward revision to “Final Domestic Sales” to an annual growth rate of 1.19% was especially disappointing.

Optimism stems from several months of relatively decent employment gains and rising consumer confidence, positive surprises in light of sharply higher taxes and substantial federal government spending cuts. The thinking seems to be that because consumer spending not only held up, but improved, in the face of such strong head winds, surely the economy is poised to take off once the fiscal shocks have been absorbed. According to most economists and to Federal Reserve projections, acceleration in growth should be visible as soon as the third quarter.

*Personal consumption expenditures*, which account for 71% of real GDP, were revised down substantially to an annualized contribution to real GDP growth of 1.83%. Nonetheless this much lower rate still exceeded contribution rates in all four quarters of 2012 and was the strongest growth rate since the first quarter of 2011. My sense is that consumer spending benefited from the transitory effects of the short-lived surge in disposable income in November and December courtesy of intentional timing decisions to avoid higher tax rates in 2013. Spending may also have been boosted temporarily during the quarter in response to Hurricane Sandy. This improvement in consumer spending is unlikely to be sustained in the second quarter. Second quarter estimates range from 1.1% to 1.3%, not much different than the pace of growth during 2012.

*Nonresidential investment* surged in the fourth quarter of 2012, but was not materially different from zero, according to the first quarter of 2013 “Final Estimate”. Nonresidential investment accounts for 11.1% of GDP. Annualized first quarter growth was 0.4% compared to 13.1% in the fourth quarter. Growth is expected to be a bit better in the second quarter around 2% to 4% and then is forecast to increase sharply during the second half of 2013 and in 2014. To a substantial extent, forecasts of a significant improvement in real GDP growth in coming quarters depends upon strong acceleration in all private investment spending including residential. Fundamentals, such as corporate profits, are supportive of acceleration in investment spending. Weak consumer spending is not supportive, but a strengthening labor market could change this.

Some feel that policy uncertainty has contributed to postponement of investment spending. As fiscal policy uncertainty diminishes, business confidence will improve and along with it investment spending will increase. However, the fly in the ointment may be the sharp escalation in interest rates, although the counter to this is that many businesses are cash rich



and are not dependent upon borrowing. With so many conflicting forces at work it is difficult to be sure just how strong investment spending will be. But, what is clear is that the forecasts of investment spending are optimistic, which suggests that the balance of risks may lead to actual investment spending in coming quarters that disappoints expectations.

*Residential investment* accounts for 2.9% of GDP but contributed 19.3% of GDP growth in the first quarter. This sector of the economy has been growing faster than the rest of the economy for the last six quarters. If growth in residential investment continues at its recent pace, it will add 0.3% to 0.4% to real GDP growth in 2013. Goldman Sachs (GS) and Bank of America/Merrill Lynch (B of A) are optimistic and expect housing to grow at a 15% to 20% rate during the remainder of 2013.

*Government expenditures* fell much more than expected during the quarter, taking GDP growth down by -0.93%. The decline appeared to be linked mostly to a reduction in war-related defense expenditures as the effects of the sequester had not yet taken hold during the first quarter. Unfortunately, declining government expenditures will continue to be a significant negative contributor to GDP growth during the remainder of 2013. Perhaps the bright side of this development is that the federal deficit is falling much more rapidly than anticipated.

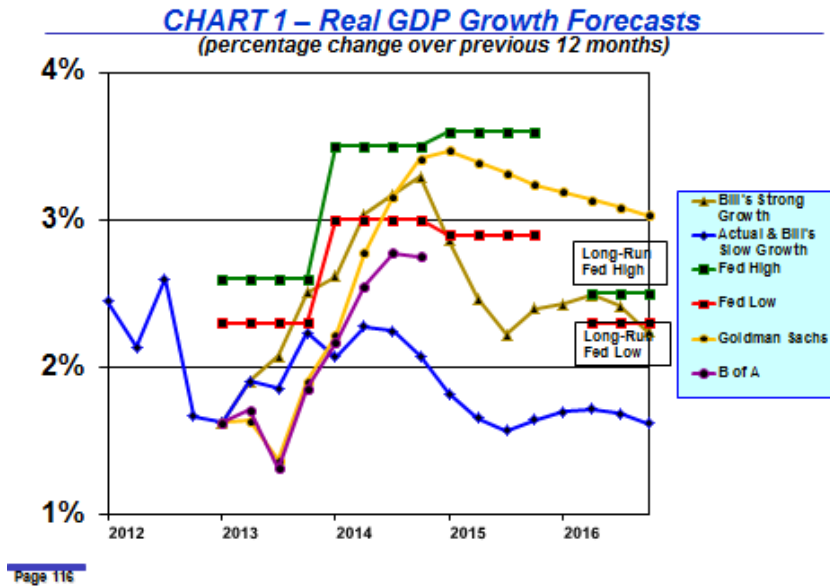
*Net exports* subtracted 0.09% from GDP growth in the “Final Estimate”. This was substantially better than the -.50% contribution to GDP growth reported in the Advance Estimate. The Advance GDP estimate frequently is revised substantially in the Preliminary and Final Estimates because trade data are reported with a long time lag and are often revised.

## 2. GDP Forecasts for 2013 Q2

As second quarter data reports have filtered in, most forecasts have shaved their expectations for second quarter real GDP growth. Goldman Sach’s (GS) currently expects second quarter GDP growth to be 1.3% and B of A forecasts second quarter of 1.0% or less.

### 3. GDP Forecasts for All of 2013

Most forecasters expect growth will pick up during the second half of 2013. **Chart 1** and **Table 2** show GDP forecasts/projections for 2013 through



2016.

B of A expects weak 1.5% growth in the third quarter but then growth picks up to 2.5% in the fourth quarter as fiscal drag diminishes. Its forecast for 2013 GDP fourth-quarter-to-fourth-quarter growth is 1.8% and is 1.7% year over year.

GS expects growth to strengthen in the third quarter to 2.0% and accelerate further to 2.5% in the fourth quarter as fiscal drag diminishes. Its forecast for 2013 GDP fourth-quarter-to-fourth-quarter growth is 1.9% and is 1.6% year over year.

In June the Federal Open Market Committee (FOMC), which has consistently been too optimistic, lowered the top end of the range for its 2013 GDP projections from 2.8% to 2.6%. The lower bound was unchanged at 2.3%. Note that all other forecasts in **Table 2** are below the lower end of

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

	2013:3	2013:4	2013 Q4 to Q4	2013 Y/Y	2014 Y/Y	2015 Y/Y	2016 Y/Y
<b>B of A</b>	1.5	2.5	1.8	1.7	2.7		
<b>GS</b>	2.0	2.5	1.9	1.6	2.9	3.2	3.0
<b>Global Insight*</b>	1.8	3.0		1.8	2.8	3.2	2.9
<b>Economy.com*</b>	2.1	3.0		1.9	3.4		
<b>Blue Chip*</b>	2.3	2.6		2.0	2.7	3.1	2.9
<b>Bill’s Slow Growth</b>			2.2	1.9	2.2	1.8	1.9
<b>Bill’s Strong Growth</b>			2.6	2.0	3.1	2.5	2.5
<b>FOMC — High</b>				2.6	3.5	3.6	
<b>FOMC — Low</b>				2.3	3.0	2.9	
<b>CBO</b>			1.7	1.5	2.6	4.1	4.4

\*Forecasts not updated from *June Longbrake Letter*

the FOMC’s projected GDP growth range for 2013.

As **Table 3** shows, the FOMC’s real GDP growth projections have been persistently overly optimistic. Even with the slight reduction in the top end of the range for 2013 at the June meeting, the revised estimate appears to be totally unattainable unless the economy encounters a strong growth spurt in the second half of the year.

Bill’s “**Slow Growth**” fourth-quarter-2012-to-fourth-quarter-2013 forecast shown in **Table 2** is 2.2% and 1.9% year over year. Bill’s “**Strong Growth**” fourth-quarter-to-fourth-quarter forecast is 2.6%, reflecting a strong finish to the year, but year over year growth would still be only 2.0%.

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

Meeting Date	2011	2012	2013	2014	2015	Long Run
Jan 2011	3.7	3.95	4.0			2.7
Apr 2011	3.3	3.65	4.0			2.7
June 2011	2.75	3.1	3.75			2.7
Nov 2011	1.7	2.9	3.35	3.6		2.6
Jan 2012		2.55	3.1	3.55		2.6
Apr 2012		2.55	3.1	3.6		2.6
June 2012		2.05	2.85	3.4		2.6
Sep 2012		1.8	2.9	3.4	3.35	2.6
Dec 2012		1.8	2.6	3.4	3.35	2.6
Mar 2013			2.5	3.2	3.15	2.5
June 2013			2.3	2.9	3.05	2.5
Actual Q4 to Q4	1.97	1.67	1.9*			
Actual Y/Y	1.81	2.21	1.6*	2.9*	3.2*	
Long Run Potential						2.1-2.4#

\*GS forecast

#Bill's "Slow Growth" long-run potential = 2.06%; Bill's "Strong Growth" long-run potential = 2.44%

#### 4. Recent Tightening in Financial Conditions Could Depress Real GDP Growth Over the Next Year By Approximately 0.4%

Recent economic research conducted by Goldman Sachs has established a strong linkage between changes in financial conditions and subsequent changes in real GDP growth.<sup>2</sup> Such a linkage has long been understood to exist, but Goldman Sachs 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

<sup>2</sup>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 and Shuyan Wu, Goldman Sachs US Daily: "Another Look at Financial Conditions vs. Growth," July 11, 2013.

financial conditions on real GDP growth.

GS's financial conditions index (GSFCI) includes eight components: the federal funds rate, the 5- and 10-year Treasury yields, the TED spread, the iBoxx domestic non-financials BBB 15 year +/-10-year Treasury spread, the ratio of the S&P 500 stock index to a 10-year average of earnings per share, a trade-weighted dollar index, and a house price/rent ratio. Each of these components is weighted relative to its individual impact on GDP growth. GSFCI is a monthly data series.

GSFCI has been computed back to 2000. Its values range between about 99, which occurred in the mid-2000's, and 103, which occurred at the height of the financial markets meltdown in late 2008 and early 2009. A 1 point (100 basis points) move in the index is correlated with a 1.5% change in GDP growth over the next year. Changes in GSFCI over the two most recent quarters give the best forecast of changes in GDP growth over the next year.

GSFCI has increased 30 basis points since May 22, 2013. On that date Chairman Bernanke testified before Congress. Ten-year US Treasury rates had already risen about 28 basis points from the 1.66% low reached on May 2, 2013, prior to Bernanke's testimony. But, they rose another 9 basis points that day to 2.03%. Although Bernanke's testimony was not particularly specific about forthcoming monetary policy steps, markets interpreted his remarks to mean that tapering, or scaling back large scale asset purchases, might be on the FOMC's agenda in coming meetings. In fact, the FOMC and Chairman Bernanke confirmed on June 19, 2013, that tapering could begin as soon as September. On that day the ten-year US Treasury rate jumped another 13 basis points to 2.33%. As of July 12, 2013, the ten-year rate had increased further to 2.61%. Expectations of better economic performance in coming months may also have contributed to the recent rate rise.

Whatever the exact causes, there is no ambiguity that financial conditions have tightened over the last several weeks. During this same time frame other GSFCI components have tightened. The tightening in financial conditions has been a global phenomenon and seems likely to persist for a while.

Assuming the recent increase in GSFCI is not reversed, GS's model,

which correlates changes in financial conditions to real economic activity, indicates that GDP growth should be about 0.4% lower over the next year. This is not factored into anyone's forecast yet. The policy implication is that the FOMC should not begin to taper in September as the market now expects. However, if the FOMC proceeds as expected then real GDP growth will most certainly fall short of the FOMC's projections for 2014.

Perhaps more troublesome is that tighter financial conditions could work to snuff out recent optimism about better economic performance later this year and in 2014. That optimism reflects recent "good" employment reports, rising consumer confidence and the easing of currently very tight fiscal policy. But, other data have been lackluster and have not corroborated the positive jobs data. US manufacturing has been weakening and will not be helped by a strengthening dollar. Housing activity is bound to be negatively impacted by the sharp escalation in mortgage rates. At the very least the recent sharp run up in prices is likely to moderate or could even reverse. Improvement in housing wealth is an important driver of confidence for higher-income consumers.

Just as tighter financial conditions can depress economic growth so too can a decline in optimism.

## 5. GDP Forecasts for 2014 and Beyond — Slow Recovery Scenario

Most forecasters expect GDP growth to accelerate in 2014 and 2015 as negative fiscal drag diminishes and unemployment gradually declines (see **Table 2**). My longer-term forecasts are depressed by slower than consensus productivity growth, which is caused primarily by weak private and public investment growth.

Both B of A and GS forecast strong residential investment growth as the housing market continues its recovery. Their forecasts appear to be reasonable. However, their forecasts for private nonresidential investment, which is more than four times larger than residential investment, appear to be extraordinarily optimistic compared to historical trends and recent weakness. GS argues that 8% to 9% annual real growth in nonresidential investment from the second half of 2013 through 2015 is likely because of high corporate profit margins, high real rates of return relative to cheap

funding, easier access to credit and declining policy uncertainty. If GS's view is correct, nonresidential investment growth at its forecast levels would add approximately 1% to real GDP growth in each of the next three years. This largely accounts for the difference between GS's forecasts for 2014-2016 and B of A's forecast for 2014 and my "**Slow Growth**" forecasts for 2014-2016 in **Table 2**. My "**Strong Growth**" forecast assumes a much faster rate of investment growth and, thus, the forecasts for that scenario are closer to GS's. There is still a divergence in 2015 and 2016. That is because after 2014, private fixed investment growth in my "**Strong Growth**" scenario reverts to historical averages, but GS continues to assume high investment growth in 2015 and 2016.

GS does acknowledge that weak aggregate demand is a headwind. Investment conditions may be very attractive financially but if demand is absent, will companies proceed with investments? Other research suggests that the answer is "No". Of course, we will know the real answer in time. If GS turns out to be more right than wrong, this would be good news as productivity would improve at a faster rate and the output gap would decline sooner. Such a development also would probably eliminate the possibility of a **deflationary bust** (see discussion of "**Deflationary Bust**" in the next section).

Although FOMC forecasts have been overly optimistic in the past, most forecasters are only slightly below the bottom end of the FOMC's range for 2014 and are well within the range for 2015. Notably, my forecasts are generally lower, primarily because of my pessimistic outlook for investment and productivity growth.

## 6. Deflationary Bust Scenario

There are two alternative economic scenarios. Neither is benign. One evolves into a deflationary bust; the other results in a serious breakout in inflation.

Currently, economic momentum appears to be building slowly in the U.S. To the extent this trend continues the U.S economy will strengthen gradually. However, the current fiscal and monetary policy mix might lead to another outcome, one that is not benign — a deflationary bust. How might that happen? The most articulate discussion of this possibility

has been penned by Charles Gave.<sup>3</sup>

Recessions occur when an increase in liquidity preference leads people to attempt to increase their savings by reducing consumption. Policy responses to combat recession are directed toward increasing demand through direct government purchases and by replacing lost spendable income through government transfers. Policy also attempts to stimulate demand by decreasing the attractiveness of saving by reducing interest rates. When nominal interest rates fall below the rate of inflation, real rates of return become negative and saving is discouraged.

But, remember, realized investment must equal saving. If saving is discouraged, realized investment must also fall. In the long run declining investment, as I have discussed in previous letters, depresses productivity growth and leads to lower potential real GDP growth. Unfortunately, this is exactly what appears to be happening in the U.S.

Private investment depends upon the availability of credit. The Federal Reserve can create liquidity through asset purchases but it cannot create credit. Creation of credit depends on the willingness of financial intermediaries to lend — to supply credit. Willingness to lend, while improving slowly, is still being held back by tight underwriting standards and conservative regulatory policies and supervisory standards and practices, as well as by increased capital requirements.

Demand for credit also depends upon the extent to which returns on investment are expected to exceed the cost of financing it. Demand for credit has been slack because of uncertainty about future growth. For example, the National Federation of Independent Businesses (NFIB) monthly survey continues to register high negative ratings about sales prospects; credit availability, in contrast, is not cited as a significant problem. In other words, very low borrowing interest rates appear to be insufficient to prompt investment in the face of enormous uncertainty about sales and revenue growth. In short, investors prefer safe assets, even though until recently they have had negative real rates of return, rather than capital investments with uncertain returns, which could turn out to be even more negative.

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<sup>3</sup>Charles Gave. “More on the Deflationary Bust Risk.” GKResearch, June 10, 2013. This commentary is proprietary and is not available for distribution without permission by GaveKal.



Negative or below normal real interest rates pump up the value of financial assets and create the illusion of greater wealth. And for a while this feels good. But, artificially induced financial wealth must eventually be ratified by an increase in real wealth. If that does not materialize, a financial bubble builds. You will recall from Hyman Minsky's "financial instability hypothesis" that financial bubbles occur when speculative forces predominate and "Ponzi financing" emerges, which drive up financial valuations to levels that greatly exceed those justified by likely cash flows from real economic activity. Ponzi financing activity can persist for a very long time and the risk in the present instance is that the Federal Reserve is feeding the beast with its large scale asset purchase policy. (Perhaps that is one of the reasons that an increasing number of FOMC members are anxious to curtail large scale asset purchases sooner than later.) But, eventually bubbles burst and when that occurs, a **deflationary bust** follows.

*This is not a foreordained outcome.* It is possible that policies currently in place will lead to gradual strengthening in economic activity which would ratify higher financial asset valuations. Stock valuations appear to be reasonable at the present time and the equity risk premium is inflated, which is holding back potential further increases in stock prices. In fact, even as interest rates have risen sharply over the last month, stock prices, after falling approximately 5%, quickly recovered and have risen to new highs in recent days.

Nonetheless, an economy whose real rate of growth is declining has a profound structural problem which over time could lead to an insufficient amount of real wealth creation to ratify the artificially inflated financial wealth. If that is the pathway we are really on, then the market will eventually realize that financial valuations are not supported by real economic growth. When, and if, this realization takes hold, a **deflationary bust** will unfold with a vengeance. Financial asset prices will decline precipitously as real rates of interest return to positive levels that are consistent with potential economic growth.

## 7. Inflationary Scenario

Alternatively, the current level of potential GDP could be considerably less than what CBO says it is, if the potential levels of full employment and real GDP are lower than CBO believes. As a reminder, the level of potential

GDP is determined by full employment and long-term trend productivity. Full employment is customarily derived by determining the level of unemployment that results in a stable (nonaccelerating) rate of inflation. CBO estimates that non-inflationary full employment currently is consistent with a short-term unemployment rate of 5.96% and a long-term unemployment rate of 5.5%.

But, suppose the long-run noninflationary rate of unemployment is actually higher than 5.5%. That could occur if many workers counted as unemployed are unlikely ever to qualify for a job. They simply don't have the requisite skills for available jobs. Economists refer to this phenomenon as "structural" unemployment. Higher structural unemployment means that the noninflationary rate of unemployment could be 6.5% or higher. And, if that turns out to be correct, then the noninflationary level of potential GDP, and by extension, the output gap would be a lot lower than what CBO assumes.

If potential GDP and the output gap are smaller than shown in **Chart 2** below, modest employment and GDP growth could close the gap sooner than 2017.

*Why is this important?* When the output gap closes, inflation risks escalate if employment and GDP growth exceed potential. Inflation risks could be exacerbated if the FOMC's quantitative easing program is not curtailed soon enough. This is essentially the scenario that those who expect an explosion in inflation foresee as likely.

Most analyses of cyclical versus structural unemployment conclude that the structural rate of unemployment has risen since the onset of the Great Recession, but only to a level that is consistent with CBO's assumptions. In addition, while there is debate about the size of the discouraged worker effect, which results in a lower reported rate of unemployment relative to the "true" underlying rate, again most of the analysis supports the legitimacy of a substantial discouraged worker effect. Low structural unemployment and a high level of discouraged workers are consistent with CBO's estimate of a high level for the output gap.

But, as logical as all of this may sound and notwithstanding the preponderance of evidence and analysis, economics is not a precise enough discipline that there can be assurance that the mainstream analysis and policy

response is right. If it is wrong, then the doomsayers and inflationists could turn out to be correct in their fears and warnings.

Behavior of the labor market holds the key to assessing the risks. And, probably the earliest warning signals that the labor market is tightening more rapidly than expected would involve skills shortages in certain categories of jobs and wage inflation in those categories. In a dynamic economy, skills shortages and wage pressures will always be present, which will make it difficult to pick up clear warning signals. What needs watching is the development of an expanding trend in the number of jobs that are in categories subject to skills shortages and upward pressure on wages. To date, there is little evidence such a trend is developing. But there are those who think they see very early indications of such a trend beginning to develop (see discussion of wages in **Section III** below).

## 8. Potential Impact of Immigration Legislation

S. 744, the Border Security, Economic Opportunity, and Immigration Modernization Act was recently passed by the U.S. Senate. This bill is currently waiting consideration in the U.S. House of Representatives where prospects for acceptance of S. 744 appear doubtful.

As part of the standard legislative process, CBO evaluated the potential economic impacts of this legislation. Usually CBO's analysis is confined to the impact of legislation on federal government revenues and expenses over the next ten years. However, in evaluating S. 744, CBO extended its customary analysis to include impacts on the U.S. economy over a two decade time period. The findings were significant and generally very favorable to the long-run outlook for the federal budget deficit and for the performance of the economy.

### Macroeconomic Effects:

- Population will increase an additional 10 million by 2023 and 16 million by 2033.
- The labor force would be 3.5% greater in 2023 and 5.0% greater in 2033.

- 
- Real GDP would increase 1% by 2017; 3.3% by 2023 and 5.4% by 2033.
  - Real GDP per capita would decline 0.7% by 2023 but rise 0.2% by 2033.
  - The capital stock would grow 2% by 2023 and 5% by 2033.
  - The growth rates in the labor force, real GDP and the capital stock imply a slight decline in productivity until 2023, which I estimate to be about -0.2%, and a slight increase thereafter.
  - My analysis indicates that the real GDP output gap would shrink a little faster.
  - Interest rates (ten-year U.S. Treasury Note) would increase 40 basis points by 2023 and 30 basis points by 2033.
  - Wage rates and per capita income would fall in the first decade but rise in the second decade.
  - The unemployment rate would rise slightly through 2020 and converge to CBO's baseline forecast thereafter.

#### **Federal Budget Effects:**

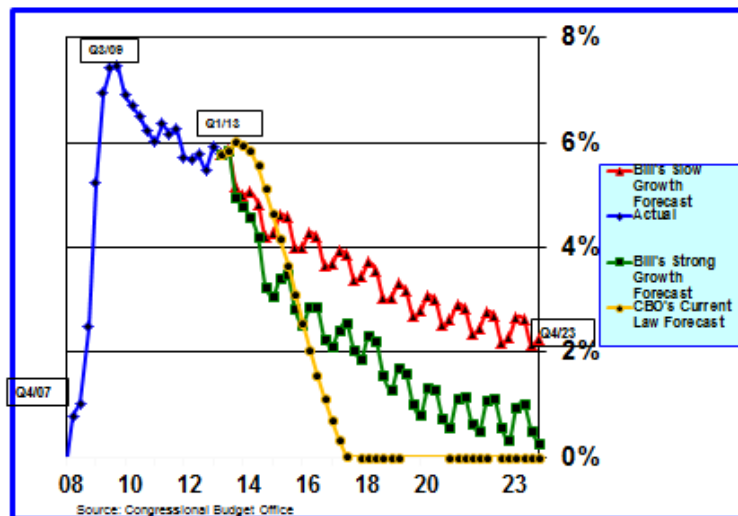
- \$200 billion reduction in cumulative deficit over ten years plus an additional \$30 billion in savings in interest and other discretionary expenditures; most of the savings would accrue to the Social Security trust fund.
- Spending increases \$260 billion, which would stimulate economic activity.
- Revenues increase \$460 billion as the population increases.
- In the second decade, due to favorable macroeconomic developments, revenues would increase \$1.5 trillion, spending would increase \$800 billion, and the cumulative deficit would decline by an additional \$700 billion.

As you can see, overall the economic and budgetary impacts of increased immigration are favorable.

## 9. GDP Output Gap

According to CBO's estimate of potential real GDP, the GDP output gap remains very large and increased during the first quarter to 5.80%, somewhat greater than the 5.66% gap recorded in the first quarter of 2012. CBO's output gap in **Chart 2** rises over the next few quarters but these projections

**CHART 2 – GDP Output Gap and Forecast: 2007-23**



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are out of date and too pessimistic because they do not incorporate fully tax and spending revisions that have taken effect during 2013. Revisions to the National Income and Product Accounts will also have an impact on potential GDP. Thus, CBO will be making significant updates in its forecast in late August. It is unclear at this writing whether this will result in a favorable or unfavorable change in the size of the GDP output gap.

**Chart 2** also shows output gap projections for my “*Slow Growth*” and “*Strong Growth*” scenarios. Forecast real GDP rises faster than potential real GDP in both scenarios with the result that the output gap shrinks gradually. Productivity increases in both scenarios but it rises faster in the “*Strong Growth*” scenario which results in the output gap closing more quickly. As can be seen in **Chart 2**, the output gap closes more slowly than

CBO expects and is approximately 0.3% in 2023 in my “*Strong Growth*” scenario and 2.3% in my “*Slow Growth*” scenario.

## 10. GDP Measurement Revisions To Raise Level of GDP By 3.3%

Once a year, at the time of the release of the Advance Estimate for second quarter GDP in late July, the Bureau of Economic Analysis (BEA) revises the previous five years of GDP data. At times these revisions have resulted in significant changes.

Periodically, the BEA undertakes a comprehensive revision which involves changes in methodology in addition to updating the statistical data. When this occurs, data revisions are carried back to 1929. The last comprehensive revision occurred in July 2009.

In March the BEA released a paper, “*Preview of the 2013 Comprehensive Revision of the National Income and Product Accounts*,” describing several changes. The reference year for calculating constant dollars will change from 2005 to 2009. Collectively, the changes are expected to increase the level of 2007 real GDP by about \$460 billion, or 3.3%.

**Capitalization of Research and Development and Creative Works.** The level of 2007 GDP will increase by approximately \$300 billion, or 2.2%, from capitalization of research and development expenditures and \$70 billion from the capitalization of creative works. Fixed business investment and government spending accounts will increase; consumption will decline slightly. Adjustments will occur for all years and will tend to be procyclical, which means that recessions will look worse and recoveries will be stronger.

**Pension Plan Accounting.** The methodology for defined contribution pension plans will shift from cash to an accrual basis. Cash basis accounting, which reflects the timing of employer contributions, tends to result in cyclical volatility. An accrual basis methodology will measure a pension plan’s obligations to beneficiaries as they are incurred. This adjustment will add about \$30 billion to 2007 GDP.

**Real Estate Ownership Transfer.** Currently only real estate com-

missions are included in the measurement of real estate investment transactions. The revision will add other real services such as title insurance, title fees, attorney fees, and state and local taxes. This will add about \$60 billion to 2007 GDP.

**Banking Services.** Changes in the methodology for estimating the value of banking services will reduce price volatility in this component of the personal consumption expenditures deflator.

Gross investment will rise as a share of GDP. No significant change is expected in total profits — capitalization of research and development and creative works will boost profits, but accrual accounting for pension plans will decrease profits.

Productivity will rise because output will increase while hours worked will remain unchanged. Also, the relationship between investment expenditures and productivity, which I have described in recent Longbrake Letters, will change and could alter the assessment of the future trajectory for productivity. This could change, for worse or possibly for better, the range of estimated future potential real GDP growth.

In addition to these significant methodological revisions, benchmarking will also involve updating source data. This is expected to raise the level of real GDP growth in 2012 by at least 0.2%. The principal drivers will be retail sales and durable goods.

***Overall the effect of revisions to GDP will increase real GDP growth, make the Great Recession look a little worse and the subsequent recovery stronger.*** Also, by boosting GDP, the federal government public-debt-to-GDP ratio will decline by about 2 percentage points.

So, while August is usually a slow month, there will be a lot of extra hours of work ahead for me because of massive amounts of revisions I will need to make in my data base, not to mention redoing much of my econometric analysis. It will also take time for others, such as CBO, to process the revised data. This means that for a while comparisons of the sort I frequently include in these letters will be difficult to make.

### III. Employment

In spite of higher taxes and the federal government's mandatory spending cuts, monthly payroll growth has exceeded expectations, rising nearly 200,000 each month for the last three months and averaging 202,000 monthly over the first six months of 2013 and 191,000 monthly over the last 12 months. This better than expected performance has spawned optimism that the labor market is healing and job growth will accelerate even more rapidly once the fiscal policy headwinds diminish later this year.

Yet, the labor market is still extremely weak. There are 2.2 million fewer people employed than in January 2008 according to June's payroll data and 2.3 million fewer according to the household survey. The unemployment rate is 7.6% versus a pre-Great Recession low of 4.4%. But, if approximately 1.6 million discouraged workers are counted, the current unemployment rate would be in the vicinity of 8.6%. According to CBO, full employment will be reached when the unemployment rate falls to 5.5%, which would require 3.2 to 4.8 million additional workers to be employed currently, depending upon how many discouraged workers actually exist.

Policy stimulus, both fiscal and monetary, is warranted as long as substantial underemployment persists. However, fiscal policy has been contractionary for the past two years and its impact is even more negative in the current year because of higher tax rates and mandatory cuts in federal spending.

While monetary policy has been accommodative, the policy issue for the Federal Open Market Committee (FOMC) as the labor market slowly recovers is normalization of monetary policy. If the normalization process is delayed for too long there is risk that inflationary pressures will emerge; but if normalization occurs prematurely there is an opposite risk of slowing economic recovery. This is the FOMC's challenge: how to adjust policy — not too much tightening too soon versus not too little too late. The FOMC rightly has focused on the health of the labor market as its guide. But its selection of the deeply flawed household survey-based unemployment rate as a guidepost is problematic. While FOMC members understand this shortcoming and emphasize that many other labor market measures enter into policy setting, this introduces considerable complexity into attempting to understand the timing and extent of policy normalization. Market partici-



pants have difficulty dealing with the opaqueness of complexity and appear to be more comfortable with simple decision rules. This means that the flawed measure of the unemployment rate and perceptions about how the FOMC might adjust monetary policy in response to improvements in this measure probably are having greater impact on interest rates and financial conditions than the FOMC intends.

*In summary, the good news is that the labor market is healing and somewhat more rapidly than expected. 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.* Let's explore details of recent developments.

## 1. June Payroll Report

Employers added 195,000 jobs in June. Revisions to April and May jobs added another 70,000 jobs, resulting in an overall increase of 265,000. The 12-month rate of growth rose from 1.64% in May to 1.72% in June.

There was no tangible evidence in the report to indicate that mandatory cuts in the federal budget are having an impact on employment levels.

Because a disproportionate share of second quarter job growth, about 49%, has been in low-wage and low-average-work-week retail trade and leisure/hospitality jobs, the impact of recent job growth on personal income will be limited. Hourly wage rates average \$16.60 for retail trade and \$13.44 for leisure/hospitality compared to approximately \$24.00 for all jobs. The length of the workweek averaged 31.4 hours for retail trade and 26.1 hours for leisure/hospitality compared to 34.5 hours for all jobs.

GS has constructed a "labor market tracker" which combines information from 24 labor market indicators to determine the likely range of monthly payroll employment gains. The tracker currently indicates jobs should increase between 150,000 and 175,000 monthly. This range is below the 202,000 monthly average over the first six months of 2013 and the 183,000 monthly average in 2012. This suggests either that payroll growth will slow as the year progresses or that other labor market indicators will strengthen in coming months to ratify the recently observed stronger payroll

employment growth.

## 2. June Household Jobs Report

Household employment has increased strongly in the last three months — 160,000 in June, 319,000 in May, and 293,000 in April. However, the 12-month growth rate is 1.13%, well below the 1.72% annual growth rate in payroll employment. The household survey is subject to large sampling errors and, therefore, the monthly data are more volatile than the payroll survey. Although growth in household employment has been considerably slower than growth in payroll employment over the last year, over longer periods of time the growth rates from both surveys have been similar. The recent divergence in growth rates is a mystery. In fact, the divergence is likely to grow when annual benchmark revisions to payroll employment data are made early in 2014. That is because during cyclical expansions payroll employment is typically initially underreported.

Average weekly hours worked was unchanged in June at 34.5. The 12-month average of hours worked is 34.46, which indicates that the length of the workweek is quite 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. Discouraged Workers or Structural Unemployment?

*Employment remains 2.15 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 was unchanged at 7.6% of the labor force in June — 17,000 were added to the number of unemployed workers, while 177,000 were added to the labor force — those eligible and willing to work. The increase in the labor force boosted the participation rate slightly (those willing to work — includes both employed and unemployed workers — relative to those eligible to work) from

63.44% to 63.46%. The employment-to-population ratio, which measures the number of people who have jobs relative to the number eligible to work, also edged up from 58.65% to 58.67%.

In recent months the unemployment rate has declined more than expected, partially because employment growth has been a little stronger but also because more workers have dropped out of the labor market than was expected.

What is important from a policy standpoint is whether workers who are dropping out of looking for jobs 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.

This issue is important because it bears on implementation of monetary policy. 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 would take longer for the unemployment rate to fall to the policy guideline of 6.5%.

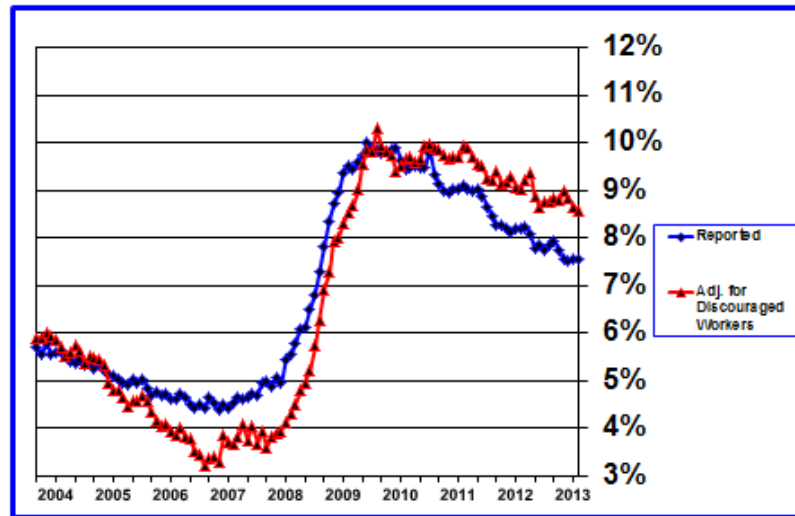
To date the preponderance of the analysis supports the expectation that many discouraged workers will re-enter the labor force as labor market conditions improve. My analysis of this phenomenon is shown in **Chart 3**. Over the business cycle there is a systematic pattern in labor force participation. When times are good some marginal workers join the labor force and when times are difficult some marginal workers drop out.

In June 2013, there were approximately 1.6 million discouraged workers who were not counted as unemployed. If the 1.6 million discouraged workers were counted, the unemployment rate would have been 8.59% rather than 7.56%.

In the *May Longbrake Letter*, I summarized research conducted by San Francisco Federal Reserve Bank economists, GS and B of A. All of these analyses indicate that much of the plunge in the participation rate is cyclical rather than structural. What this means is that once the labor market strengthens considerably, a lot of discouraged workers will seek to reenter the labor market. Or, put differently, the reported unemployment rate of 7.56% understates the extent of labor market weakness.

Both GS and B of A cautioned that the U.S. has not experienced such

**CHART 3 – Reported Unemployment Rate & Adjusted for Discouraged Workers**



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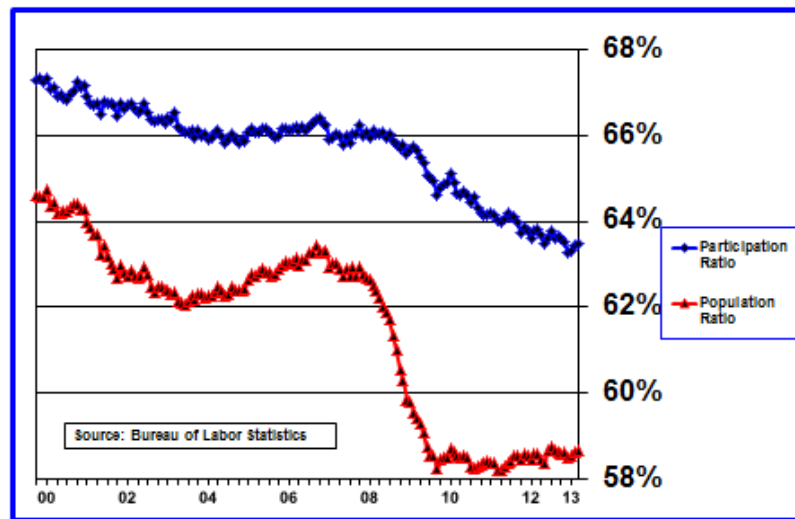
an extended period of labor market weakness since the Great Depression of the 1930s and the experience of that period doesn't provide any insight into whether cyclical unemployment will eventually turn into structural unemployment. Unfortunately, there is no method that will provide reliable insight into the question of whether cyclical unemployment will turn into structural unemployment. If a smaller proportion of discouraged workers would be able eventually to return to the labor force than historical analysis suggests, this would mean that the labor market would tighten sooner and, accordingly, monetary policy should be normalized sooner. This presents a dilemma for the FOMC and, thus, mandates close vigilance and continued study of each new employment report in coming months.

#### **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 4**. The denominator of both ratios is the same —

**CHART 4 – Labor Force Participation and Employment-to-Population Ratios**



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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% in December 2007 to 58.2% in December 2009. What is troubling is that this ratio has not recovered to any significant extent. It was 58.7% in June 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.

If the employment-to-population ratio were the same today as it was in early 2000, about 64.5%, there would be 14.3 million more Americans employed today, which would be approximately 10% more than the actual number employed currently. GDP, personal income, consumer spending and tax receipts would all be higher by roughly 10%, the unemployment rate

would be about 3.75%, and the federal deficit would be much lower.

Putting 14.3 million to work is not particularly realistic because of demographic changes in the workforce such as aging and later entry of younger people into the labor force. These changes account for about 3.2 million which lowers the number from 14.3 million to 11.1 million, which is still a very large number.

Further, while getting back to a 3.75% unemployment rate would be outstanding, CBO's estimate of the long-run non-accelerating inflation rate of unemployment (NAIRU) is 5.5%. The difference between the 3.75% early 2000 rate of unemployment and 5.5% would subtract an additional 4.6 million, leaving 6.5 million as the "optimal" number of additional workers. That 6.5 million is composed of 4.9 million who are currently looking for work (difference between 7.6% and 5.5% rate of unemployment) and 1.6 million discouraged workers.

What does all of this mean? First and foremost, the collapse in the employment-to-population ratio means that the U.S. economy is a lot smaller than it could be based on historical relationships. That means there is less income per capita and less wealth. Americans are not as well off as they could be if a greater proportion of them were employed. Second, the U.S. has no unemployment objectives other than "full employment". 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. *The question is: should policy be focused on finding jobs for 4.9 million, 14.3 million or some number between these two?*

## 5. Unemployment Rate

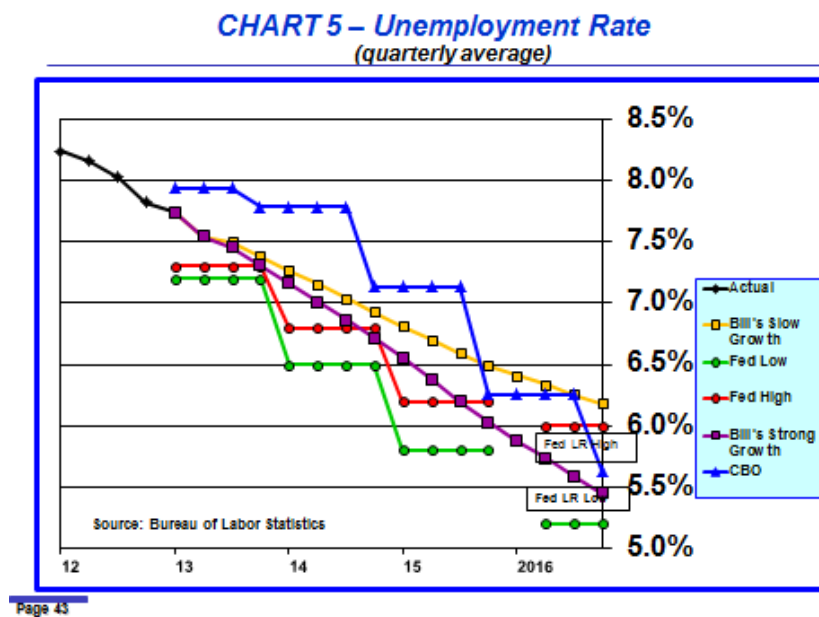
Because the FOMC has linked monetary policy explicitly to the unemployment rate, it is important to track this data point and various forecasts of when the unemployment rate is expected to reach 6.5%, which is the FOMC's stated threshold for considering whether to raise the federal funds rate. And, as 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% unemployment rate guideline,

as conventionally measured, is. The evidence, such as it is, suggests that the labor market could still be quite weak even if the 6.5% rate is penetrated.

According to BLS, the number of unemployed workers increased 17,000 in June but is still down 429,000 since 2013 began. Some of the decline in unemployed workers earlier this year may have stemmed from the progressive expiration of extended unemployment benefits.

The unemployment rate was stable at 7.56% in June. Over the last year since June 2012 unemployment has decreased 924,000 and the unemployment rate has decreased from 8.19% to 7.56%.

**Chart 5** shows the FOMC's high (red line and circles) and low (green



line and circles) unemployment rate projections for 2013, 2014 and 2015. The central tendency range of FOMC projections was revised downward by approximately 0.2% in 2013, 2014 and 2015 at the June FOMC meeting (see **Table 7** below). The revised projections moved slightly the timing of the first implied increase in the federal funds rate to late 2014 from early 2015. That presumes that as soon as a 6.5% unemployment rate is reached the FOMC would start raising the federal funds rate. That, however, is

far from certain. According to a *New York Times* article, “Mr. Bernanke echoed recent remarks by other Fed officials in suggesting that the Fed was likely to maintain its suppression of short-term interest rates for some time after unemployment dropped below that threshold, and that officials were considering lowering the threshold.”<sup>4</sup>

I have also included in **Chart 5** 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 above the upper end of the FOMC’s range and the “*Strong Growth*” unemployment rate tracks the upper end of the FOMC’s range. The unemployment rate forecast in the “*Strong Growth*” scenario reaches the 6.5% threshold in early 2015 which is consistent with the FOMC’s projection range. However, the unemployment rate in the “*Slow Growth*” scenario does not reach 6.5% until late 2015.

## 6. 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 6**, the rate of growth in hourly wages has fluctuated in a narrow band in the vicinity of 2.0% for the last three and a half years. This is good news because the large output gap and high unemployment rate, which have persisted for several years, have not put downward pressure on wage rate growth.

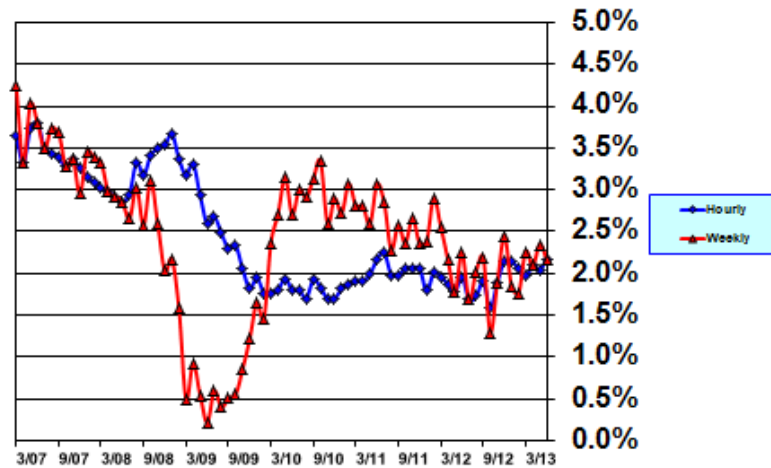
There is some evidence that the rate of growth in hourly wages is beginning to edge up. The growth rate in hourly wages has increased from 1.95% in June 2012 to 2.17% in June 2013. Because year over year changes can be volatile, this small increase does not provide incontrovertible evidence that hourly wage growth rates are rising. A 12-month moving average of the rate of change eliminates month-to-month volatility, but is slow to pick up changes in trends. That said, **Chart 7** shows a slight improvement in the 12-month moving average rate of growth from 1.85% in November 2012 to 1.95% in June 2013, but note that the growth rate was 1.98% in June 2012.

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<sup>4</sup>Binyamin Appelbaum. “Diverging Debate at Fed on When to End Stimulus,” *New York Times*, July 10, 2013.



**CHART 6 – Hourly and Weekly Wages**  
(annual rate of change)



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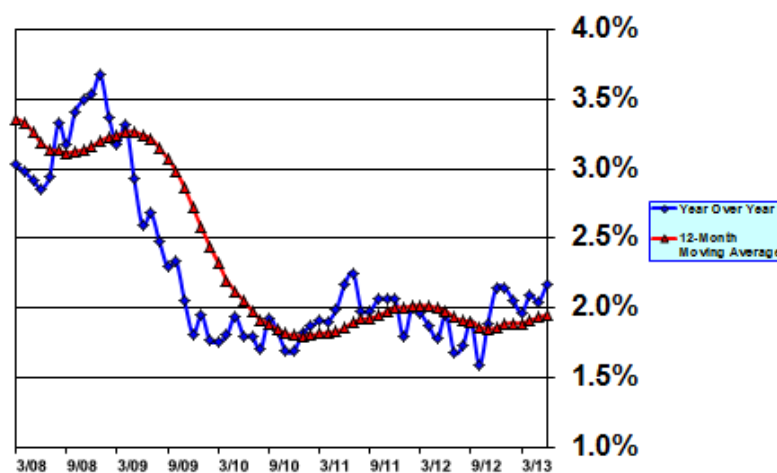
Thus, while there are nascent signs of improving labor bargaining power, the evidence is by no means conclusive at this juncture.

Average hours worked has stabilized at 34.46 over the last year, which means that both hourly and weekly wages are growing at similar rates. This is a sign of labor market stability.

#### IV. Employment, Output and Productivity

Practically no one has focused on a data relationship which has been badly out of kilter recently. The relationship in question is growth in hours worked and growth in output. Since 1947 annual real GDP growth has averaged 3.21%, hours worked growth has averaged 1.22% and nonfarm productivity growth has averaged 2.19%. Over the last four quarters annual real GDP growth has averaged only 2.01%, hours worked growth has averaged 1.89%, reflecting labor market recovery. As a result, productivity growth has plunged to an average of 0.97%. In the current quarter, hours worked are rising at about a 1.4% annual rate. If second quarter GDP growth is

**CHART 7 – Hourly Wage Rate Growth**  
(annual year over year and 12-month moving average rates of change)



Source: Bureau of Labor Statistics

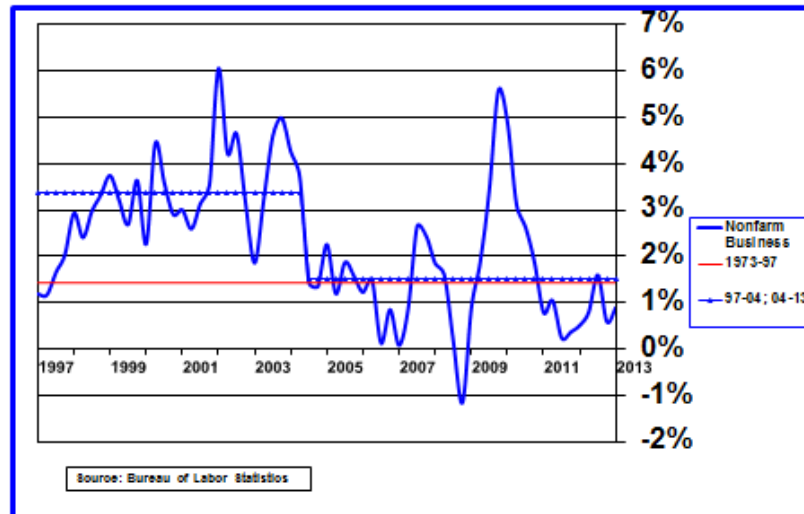
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below 1.4%, which is what the consensus now expects, this implies that productivity will be zero or negative.

Barring the possibility of a collapse in productivity, either hours worked will be revised downward, which is unlikely, or output will be revised upward, which is more likely. However, if productivity is collapsing, this does not bode well over the longer run for improving standards of living. Worse, it is likely to worsen the income inequality gap between the wealthiest persons and the middle and lower class.

**Chart 8** shows patterns in nonfarm productivity growth from 1997 through the first quarter of 2013. Average productivity since mid-2004 has been about 1.5%, not materially different from the level that prevailed from 1974 to 1997. Between 1997 and 2004 the technology boom temporarily boosted productivity to about 3.4%. What is worrisome is that over the last nine quarters productivity has averaged less than 0.8%.

I continue to worry that weak private and government investment spending will severely depress future productivity. If the economy strengthens, private investment spending is likely to rebound. But, in an era when “deficit”

**CHART 8– Productivity – Nonfarm Business**

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is a dirty word and few politicians are willing to talk openly about increasing government spending for any purpose let alone spending on infrastructure and research, there is little hope that government will play its historic role of engaging in public investment any time soon. This is very unfortunate because the lack of investment will contribute to lower productivity, slower growth in the standard of living and might even contribute to worsening the divide between the “haves” and “have nots”.

## V. Consumer Income and Spending

Personal income, consumption expenditures and saving have been very volatile in recent months. This was caused primarily by timing of income recognition 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.

These data have always been subject to large revisions in subsequent reports, but the revisions have been more substantial in recent months. These developments make it harder than usual to assess trends in household income and spending and their implications for broader economic activity.

For these reasons, it is difficult to discern developing trends from monthly data. Accordingly, the data presented in **Table 4** show the annual results

**Table 4**  
**Change in Personal Income and Its Disposition for 2011, 2012**  
**and 12 Months Ending May 2013**  
(in billions of dollars)

	Nominal 2011	Annual Pct. Change	Nominal 2012	Annual Pct. Change	Nominal May 12- May 13	Pct. Change May 12- May 13
Personal Income	<b>\$458.1</b>	<b>3.64%</b>	<b>\$1071.9</b>	<b>8.23%</b>	<b>\$442.1</b>	<b>3.32%</b>
<b>Compensation</b>	269.2	3.34%	558.8	6.70%	309.4	3.63%
<b>Proprietors' Inc.</b>	21.0	1.83%	62.3	5.33%	75.9	6.34%
<b>Rental Income</b>	70.7	19.50%	49.2	11.35%	60.9	13.45%
<b>Asset Income</b>	25.9	1.56%	376.8	22.32%	81.1	4.68%
Government Transfers	<b>4.3</b>	0.19%	87.3	3.75%	80.5	3.40%
Less: <i>Personal Taxes</i>	-112.7	5.05%	-204.4	8.72%	-349.4	14.51%
Disposable Income	<b>278.5</b>	<b>2.46%</b>	<b>930.0</b>	<b>8.01%</b>	<b>258.4</b>	<b>2.18%</b>
Less: <i>Consumption</i>	<b>435.8</b>	<b>4.04%</b>	<b>398.5</b>	<b>3.55%</b>	<b>328.3</b>	<b>2.88%</b>
Personal Saving	<b>-157.4</b>	<b>-28.63%</b>	<b>531.7</b>	<b>135.53%</b>	<b>-69.9</b>	<b>-15.28%</b>
Personal Saving Rate	<b>4.24%</b>		<b>4.05%</b>			<b>3.72%</b>

for 2011 and 2012 and the 12 months from May 2012 through May 2013.

## 1. Personal Income and Disposable Income

What immediately stands out is the more than doubling in the growth of nominal personal income from 3.64% in 2011 to 8.23% in 2012. The contrast between 2011 and 2012 is even more dramatic for disposable income growth which increased to 8.01% in 2012 from 2.46% in 2011.

Income was inflated during 2012 by policy and timing. Income in January 2012 was boosted by bonus and incentive payments. Impending tax

rate increases led to acceleration in the timing of these same sources of income to November and December of 2012 to avoid higher tax rates in 2013. In addition, distribution of dividends and other sources of income were accelerated to November and December.

Personal income rose 3.32% over the 12 months ending in May 2013 and disposable income rose 2.18%. The impacts of the payroll tax rate increase from 4.2% to 6.2% and repeal of lower income tax rates for high income taxpayers are clearly visible in the 14.51% increase in personal taxes over the same 12-month period. The average saving rate declined from 4.05% in 2012 to 3.72% in the 12 months ending in May 2013 and was 3.20% for the month of May.

Because the recent data volatility makes it difficult to discern trends, I have added **Table 5** which compares averages for 2011 and 2012 with the

**Table 5**  
**Percentage Change in Personal Income and Its**  
**Disposition for 2011, 2012 and 12 Months Ending**  
**February, March, April and May 2013**

	2011 Pct. Change	2012 Pct. Change	Pct. Change	Pct. Pct.	Pct. Pct.	Pct. Pct.
			Feb 12- Feb 13	Mar 12- Mar 13	Apr 12- Apr 13	May 12- May 13
Personal Income	<b>3.64%</b>	<b>8.23%</b>	<b>3.09%</b>	<b>2.85%</b>	<b>2.95%</b>	<b>3.32%</b>
<b>Compensation</b>	3.34%	6.70%	3.24%	2.92%	3.27%	3.63%
<b>Proprietors' Inc.</b>	1.83%	5.33%	6.60%	6.91%	6.83%	6.34%
<b>Rental Income</b>	19.50%	11.35%	13.14%	14.31%	13.88%	13.45%
<b>Asset Income</b>	1.56%	22.32%	3.91%	3.15%	3.85%	4.68%
Government Transfers	<b>0.19%</b>	3.75%	3.78%	3.62%	2.74%	3.40%
Less: <i>Personal Taxes</i>	5.05%	8.72%	13.34%	13.30%	13.92%	14.51%
Disposable Income	<b>2.46%</b>	<b>8.01%</b>	<b>2.11%</b>	<b>1.82%</b>	<b>1.84%</b>	<b>2.18%</b>
Less: <i>Consumption</i>	<b>4.04%</b>	<b>3.55%</b>	<b>3.09%</b>	<b>2.98%</b>	<b>2.42%</b>	<b>2.88%</b>
Personal Saving	<b>-28.63%</b>	<b>135.53%</b>	<b>-24.60%</b>	<b>-28.43%</b>	<b>-14.01%</b>	<b>-15.28%</b>
Personal Saving Rate	<b>4.24%</b>	<b>4.05%</b>	<b>3.87%</b>	<b>3.80%</b>	<b>3.74%</b>	<b>3.72%</b>

twelve-month periods ending in February, March, April and May 2013.

Growth in personal income and disposable income has been weaker so far in 2013 than it was in 2011, although the month-to-month trend may be

improving based upon preliminary May data. This appears to be particularly the case for “Compensation”, which makes up 64% of personal income. Government transfers are at about the same level of growth as in 2012. However, growth in personal taxes is sharply higher reflecting increases in personal income tax rates for the wealthy and higher payroll taxes.

## 2. Consumption

When the data are viewed on a year-over-year basis in **Table 5**, the rate of growth in consumption spending slowed from 4.04% in 2011 to 3.55% in 2012. The slowing pattern has continued into 2013 and was 2.88% over the twelve months ending in May and averaged 3.13%.

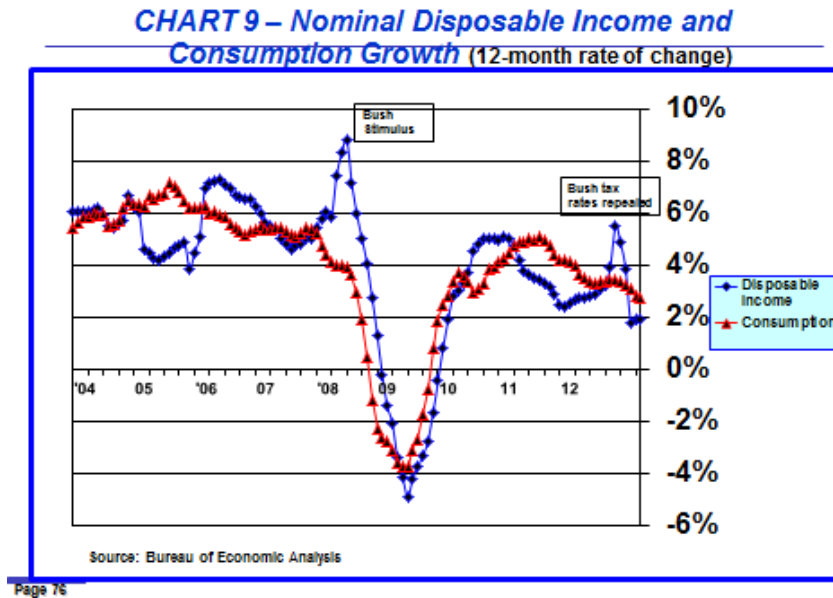
Prospects for acceleration in income growth in coming months will depend primarily upon employment growth and to a lesser extent on wage rate growth. There is reason to be hopeful about favorable trends in both of these. However, because consumption growth exceeds income growth, the risks remain tilted in the direction of slower consumption 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, matters could get ugly quickly. Spending growth would collapse 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 poised to accelerate, and credit for consumer goods, especially autos, is readily available.

## 3. Saving

Consumption growth has exceeded income growth persistently over the last 29 months with the consequence that the saving rate has declined steadily. Stabilization of the saving rate near 3% will require consumption growth to slow and match income growth or income growth to rise and match consumption growth. What seems more probable is that the saving rate will remain depressed as households attempt to maintain consumption in the face of slow income growth.

#### 4. Disposable Income and Spending

Chart 9 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 5.1% in February 2011 to 2.4% in February 2012, but then rose to 3.2% in October 2012, surged to 5.5% in December, and fell back to 1.9% in May.

Chart 09 shows that growth in consumer spending, after peaking at 5.1% in September 2011, subsequently slowed to about 3.4% in July 2012, then stabilized at that level for eight months before resuming a declining pattern to 2.8% in May 2013.

## 5. Outlook for Disposable Income and Spending

As can be seen in **Charts 10A** and **10B**, I expect consumer disposable income growth will slow in coming months. This trend is not in doubt because of the 12-month moving average calculation method.

However, there is less certainty about how higher taxes will affect consumer spending since consumers have the choice to try to maintain spending by dipping into savings or alternatively to maintain savings by cutting spending. The result is likely to lie somewhere in the middle, but the question is where. The extent of any pullback in consumer spending will affect real GDP growth and the speed with which labor market conditions improve.

**Chart 10A** shows my “*Slow Growth*” scenario forecast for growth in nominal consumer disposable income and consumption through 2016. The story **Chart 10A** 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.

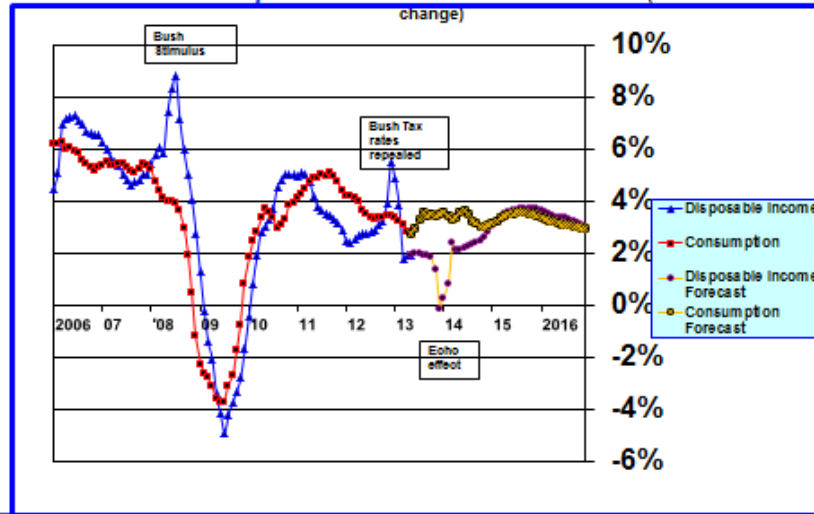
**Chart 10B** shows my “*Strong Growth*” scenario forecast for growth in nominal consumer disposable income and consumption through 2016. Higher rates of growth in employment and productivity in the “*Strong Growth*” scenario lead to stronger growth in nominal disposable income and consumption by about 0.4% to 1.2% during 2014-2016 with the improvement widening over time. Importantly, most of the effect of the faster growth in employment on inflation is offset by the benefits of increased productivity. This means that the improvement in real income and consumption growth is about the same in the “*Strong Growth*” scenario as the improvement in nominal income and consumption growth.

First quarter spending growth was the strongest in two years and exceeded initial expectations. With the benefit of hindsight, the reason for the relatively good performance is clear. During the first quarter consumers spent part of the surge in income received in November and December, while dipping into savings to maintain normal spending patterns.

Both B of A and GS badly underestimated first quarter 2013 consumer spending growth, which was 2.58%. My consumer spending model’s estimate of the consumer spending growth rate was 2.69%. In my model, real consumer spending growth depends upon hours worked, productivity,

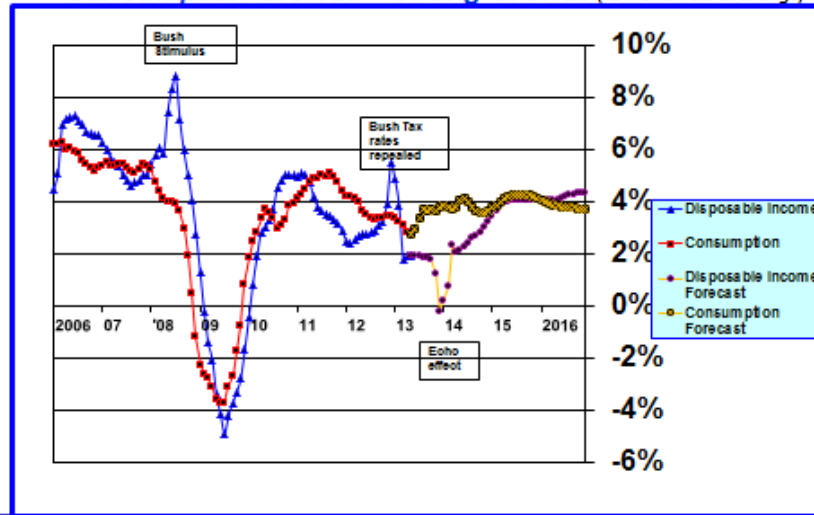


**CHART 10A – Forecast Nominal Disposable Income and Consumption Growth – Slow Growth** (12-month rate of change)



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**CHART 10B – Forecast Nominal Disposable Income and Consumption Growth – Strong Growth** (12-month rate of change)



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the inflation-adjusted federal budget deficit, changes in real housing prices,

changes in real stock prices and the saving rate. With the exception of hours worked, which has an average lagged impact of 2.8 months, and the saving rate, which impacts spending with an average lag of 7.1 months, the lagged impact of all other variables is much longer. As can be seen in **Table 6**, a reduction in the savings rate and an increase in stock market wealth

**Table 6**  
**Contributions to Changes in Real Consumer Spending and**  
**Forecast Annual Growth Rates**

Variable	Lagged Impact (in months)	Contribution		Projected Contribution*		
		Q1 2013	Q2, Q3, Q4 2013	2014	2015	2016
<b>Hours Worked</b>	<b>2.8</b>	<b>15.5%</b>	<b>24.0%</b>	<b>33.6%</b>	<b>26.7%</b>	<b>20.3%</b>
<b>Productivity</b>	<b>14.5</b>	<b>17.7%</b>	<b>36.7%</b>	<b>51.2%</b>	<b>55.6%</b>	<b>44.9%</b>
<b>Federal Deficit</b>	<b>27.0</b>	<b>1.5%</b>	<b>8.9%</b>	<b>-9.1%</b>	<b>-2.4%</b>	<b>10.8%</b>
<b>Housing Prices</b>	<b>33.0</b>	<b>-5.9%</b>	<b>-10.0%</b>	<b>-10.4%</b>	<b>-7.5%</b>	<b>-8.2%</b>
<b>Stock Prices</b>	<b>18.4</b>	<b>32.4%</b>	<b>37.2%</b>	<b>26.9%</b>	<b>25.5%</b>	<b>31.0%</b>
<b>Savings Rate</b>	<b>7.1</b>	<b>38.7%</b>	<b>3.2%</b>	<b>7.9%</b>	<b>2.1%</b>	<b>1.1%</b>
<b>ANNUAL GROWTH RATES</b>						
<b>Bill's Slow Growth</b>		<b>2.69%</b>	<b>2.14%</b>	<b>1.68%</b>	<b>1.90%</b>	<b>1.96%</b>
<b>Bill's Strong Growth</b>		<b>2.69%</b>	<b>2.53%</b>	<b>2.19%</b>	<b>2.63%</b>	<b>2.61%</b>
<b>GS</b>		<b>2.58%</b>	<b>1.74%</b>	<b>2.23%</b>	<b>2.89%</b>	<b>2.65%</b>
<b>B of A</b>		<b>2.58%</b>	<b>1.94%</b>	<b>2.30%</b>		

\*Projected Contributions based on Bill's "*Slow Growth*" scenario

contributed 71.1% of the increase in first quarter consumer spending.

During the remainder of 2013 my model forecasts consumer spending growth will slow to an annualized rate of 2.53%. The major contributors to growth will be hours worked and productivity, which account for 60.7% of the increase throughout the remainder of 2013. The lagged effect of the recent rise in stock prices also has a significant favorable impact. However, as the saving rate stabilizes at a low level its contribution to consumer spending, while still positive, will be greatly reduced.

Rising stock prices have had and will continue to have a significantly favorable impact on consumer spending. This provides support for the efficacy of the Federal Reserve's monetary policy goal of increasing consumer spending by boosting financial asset values via large scale asset purchases.

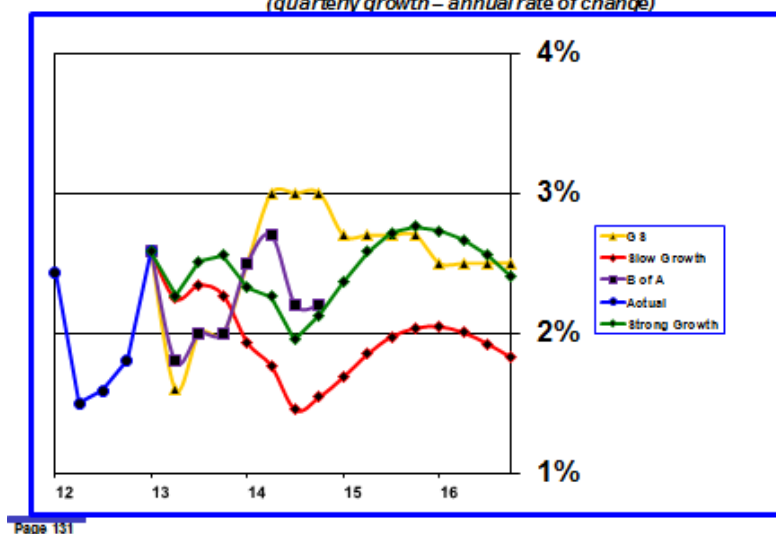
Note that the recent increase in housing prices does not contribute positively to consumer spending because of the long lag time of 33 months. This corroborates with the continuing difficulty in obtaining mortgage financing and home equity loans. Until the recent sharp increase in mortgage rates, refinancing activity had been brisk, but did not involve a material amount of equity cash out. Increases in housing construction will raise real GDP growth in coming quarters, but there is unlikely to be any material increase in consumer spending and GDP growth via the housing wealth effect.

There is another salient point embedded in **Table 6**. The difference in the forecast growth rates in real consumer spending between Bill's "***Slow Growth***" and "***Strong Growth***" scenarios results primarily from greater employment and productivity gains. For example, 68.9% of 2016's projected \$274.3 billion increase in real consumer spending, or \$189.0 billion, in the "***Strong Growth***" scenario comes from increases in employment and productivity; 65.2% of 2016's projected \$204.2 billion increase in real consumer spending, or \$133.1 billion, in the "***Slow Growth***" scenario comes from increases in employment and productivity. The difference is significant and points out the importance of pursuing policies that increase both employment growth and productivity.

*Currently, policy generally is not directly targeting employment and productivity. Policy, principally monetary policy, is indirectly targeting employment by attempting to stimulate spending. Without more direct policy intervention, the risks are greater that the "***Slow Growth***" scenario, rather than the "***Strong Growth***," scenario will prevail.* **Chart 11** shows forecasts for quarterly real consumer spending growth at an annualized rate. B of A and GS expect consumer spending growth to slow to a 2% or less annual rate during the remainder of 2013. Bill's "***Slow Growth***" forecast indicates growth of 2.2% in the second quarter and an annual growth rate of 2.14% for the three remaining quarters in 2013.

Both my "***Slow Growth***" and "***Strong Growth***" scenarios forecast weaker consumer spending growth in 2014 than either GS or B of A. My "***Strong Growth***" forecast closely tracks GS's 2015 and 2016 forecasts (also see **Table 6**).

**CHART 11 – Real Consumer Spending Growth - Forecast**  
(quarterly growth – annual rate of change)



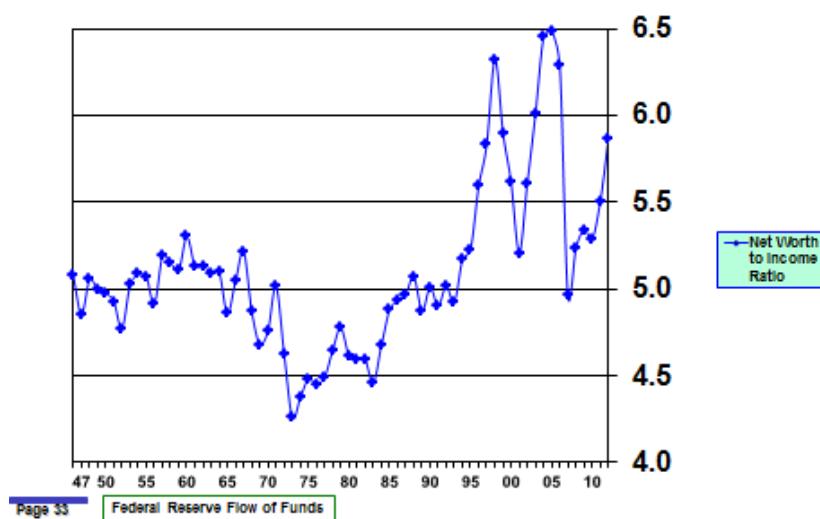
## 6. Household Wealth Rises To a New High Level — Or, Does It?

Household wealth rose to \$70.3 trillion in the first quarter of 2013. This level now exceeds the previous peak reached in 2007 prior to the Great Recession. As can be seen in **Chart 12**, the ratio of household net worth to disposable income has moved up sharply over the last year and is headed in the direction of the two recent bubble peaks — dot.com/technology and housing. Increasingly wealth bodes well for supporting growth in consumer spending. Since that is one of the Federal Reserve’s stated monetary policy objectives, the wealth data indicate the policy has been successful. Nonetheless, the fact that the wealth-to-income ratio is approaching bubble territory needs to be noted — is this truly good news or are we in the early stages of yet another financial bubble?

But, perhaps the data are incomplete and the wealth-to-income ratio is overstated. That is what Kevin Hassett suggested in a recent article in the *National Review*.<sup>5</sup> First, Hassett points out that even though household

<sup>5</sup>Kevin A. Hassett. “Net Worthless”, *National Review*. Reprinted by the American

**CHART 12 – Consumer Net Worth to Disposable Income**  
1947 - 2013

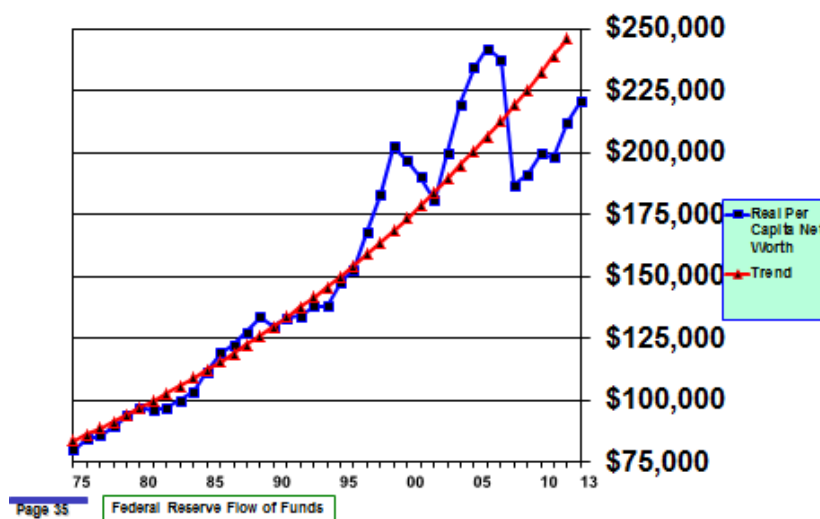


net worth has risen to a new high, if it is restated on a per capita basis and adjusted for inflation, it has yet to attain the previous high in terms of real value per person. Inflation adjusted net worth in 2012 constant dollars amounted to \$240,790 in 2007 and \$214,538 in 2012, a decrease of 11% in the real value of wealth per person. **Chart 13** shows that per capita net worth is not only below the 2007 peak it is also below its long-term growth trend.

But, more importantly according to Hassett, household liabilities include only directly held obligations such as loans and mortgages. Hassett argues that household debt should also include the present value of future tax obligations to pay off the accumulated federal debt. That obligation amounted to \$70,143 per capita in 2007 but ballooned to \$152,216 per capita in 2012. Thus, Hassett concludes, real net worth person, netting out the present value of the federal debt burden, has fallen from \$170,647 in 2007 to just \$62,322 in 2012. It is unlikely that consumers give any consideration to their future obligations as taxpayers, so it is unlikely that this hidden liability has any direct impact on consumer spending decisions. Nonetheless, Hassett's

Enterprise Institute, July 1, 2013.

**CHART 13 – Real Per Capita Consumer Net Worth**  
1975 - 2013



analysis points out the substantial deterioration which has occurred in the aggregate to financial wellbeing in the United States.

## 7. Revisions to Income, Spending and Saving Data

Significant data revisions to the National Income and Product Accounts, which will be released on July 31, 2013 and August 2, 2013, will not only boost GDP, they will also raise personal income, personal saving and household wealth.

Methodological revisions involving pension plans will boost personal income and personal savings considerably. The methodology for defined contribution plans will shift from cash to an accrual basis. Cash basis accounting, which is based on the timing of employer contributions, tends to result in cyclical volatility. An accrual basis methodology will measure a pension plan's obligations to beneficiaries as they are incurred. This adjustment will increase disposable income by about 2% and reduce the cyclical volatility of this measure. Because the revisions to consumer expenditures will be

limited, most of the increase in disposable income will boost the personal saving rate by about 1.5 percentage points. Household wealth will also increase considerably.

## 8. Consumer Confidence

Measures of consumer confidence held their recent gains in June and are at the highest levels since the onset of the Great Recession. For example, the University of Michigan's consumer sentiment index was 84.1 in June compared to 84.5 in May. ISI's company surveys diffusion index peaked at 52.3 in the week of June 7 and has edged down slightly since then to 51.5 in the most recent week.

These surveys imply that even though disposable income is likely to grow modestly over the next few months greater optimism about the future could prompt consumers to dip into savings to sustain spending patterns. Improving consumer optimism also lends support to growing expectations among forecasters that GDP growth will accelerate in 2014 once the negative effects of federal tax increases and spending cuts have been absorbed. Forecasters are also increasingly optimistic that the economy is approaching a point at which positive feedbacks will lead to sustained increases in growth and steady decreases in the size of the output gap.

*Let us hope that this emerging optimism survives expected extremely dismal second quarter results and bolsters increases in actual economic activity over coming quarters.*

## VI. Monetary Policy

Since May 22, 2013, when Chairman Bernanke testified before Congress, the Federal Reserve's policy statements and commentary have taken a slightly more hawkish tone. In response the interest yield on the ten-year U.S. Treasury Note has soared from 1.94% on May 21, 2013, to 2.61% on July 12, 2013. And, financial conditions, as measured by the GSFCEI, have tightened considerably.

These are significant developments, which will impact economic activ-

ity, probably negatively in the near term. However, the longer-run issue is whether this recent tightening in monetary policy will turn out to be constructive in corralling animal spirits in financial markets and in limiting the potential for acceleration in growth that leads to an *inflationary outbreak* sometime in the future. The alternative is that this monetary policy shift and especially the market's reaction to it will slow growth and increase the probability of an eventual *deflationary bust*.

## 1. Monetary Policy Tools

Federal Reserve policy makers have four sets of tools which they can use to influence economic activity and inflation. Three are elements of monetary policy. The fourth is bank regulation and supervision. The three categories of monetary policy tools include managing interest rates, influencing expectations, and providing liquidity.

**Managing Interest Rates.** Most of the time the Federal Reserve's primary monetary policy tool is managing the level of the federal funds rate. By raising or lowering this rate the Federal Reserve changes the cost of credit and in so doing influences consumer decisions to buy durable goods, such as cars and houses, on credit and business decisions to invest.

Raising or lowering short-term interest rates feeds into changes in the level of long-term rates because long-term rates are determined by the short-term rate and expectations for the changes in short-term rates in the future (the expectations component of monetary policy). Long-term rates generally link to stock prices, although the timing of Federal Reserve policy changes and changes in stock prices is imprecise at best. Changes in stock prices impact wealth and optimism. Changes in wealth and optimism generally impact the timing and quantity of consumer spending.

Once the federal funds rate hit zero in early 2009, this traditional monetary policy tool was no longer available. However, the Federal Reserve can still manage long-term interest rates through large scale asset purchases. Such purchases change the supply of publicly-available securities, thus driving up their prices and depressing their yields. In this way the Federal Reserve can continue to influence borrowing and investment decisions and can boost stock market wealth.



Overall, the effectiveness of interest-rate management depends upon two factors. The first has to do with consumer and investor expectations. The Federal Reserve can influence expectations through the second category of monetary policy tools.

The second factor is the effectiveness of the transmission of changes in interest rates to spending and investment activity. Most believe that the transmission mechanisms are severely impaired currently. Credit-granting intermediaries have tight underwriting standards which limit availability of credit, even at reduced interest rates. This has resulted partly from greater risk aversion on the part of lenders. But, this behavior has also been reinforced by tighter regulations covering liquidity and capital requirements and stricter supervision by bank examiners.

Borrowers are less willing to take on debt because of uncertainty about future prospects. Thus, risk aversion has increased both for the demand and supply of credit. These behavioral changes blunt the effectiveness of lowering interest rates in stimulating economic activity.

**Influencing Expectations.** The Federal Reserve can have a significant influence on consumer and investor activity simply by stating what it might or might not do in the future. Human psychology is a powerful driver of actual behavior. The recent sharp run up in long-term interest rates and tightening in financial conditions is almost solely a mass reaction to recent fuzzy statements by Federal Reserve officials about the timing of exiting large scale asset purchases.

Emerging collective beliefs about strengthening economic activity in coming quarters simultaneously intersected with the Federal Reserve's open and confusing discussion about the future course of large scale asset purchases. The old belief of weak economic activity and highly accommodative monetary policy was replaced by a new belief that economic activity is on the cusp of strengthening considerably and the Federal Reserve will be withdrawing monetary accommodation sooner than later.

This fundamental change in belief about the future is based on flimsy evidence of an improving labor market. The Federal Reserve has not changed its current asset purchase program. The changes that have occurred in financial markets are almost entirely due to changes in expectations.

This recent sea change is instructive of the power of expectations and

human behavior to change outcomes. In that sense it presents both an opportunity and a risk to Federal Reserve monetary policy makers. By what the Federal Reserve says about the outlook for the economy and inflation and by what it says it might, or will likely, do in the future, it can influence current consumer and investor decisions. But, if its communications are imprecise or its own beliefs are biased (consistently overoptimistic forecasts of GDP growth, or, possibly, recent statements that very low inflation is due to temporary technical factors), it can influence outcomes in ways it didn't intend and that be harmful.

For the time being the market is firmly convinced that the Federal Reserve will begin tapering asset purchases in September and will curtail them altogether relatively quickly. Moreover, the market has advanced its forecast that the FOMC will begin raising the federal funds rate in late 2014 rather than early 2015. This belief appears to have taken deep root and will not change unless there is convincing evidence that the belief is wrong. Such a development would require two things. First, the FOMC would need to be very specific about its intent with respect to tapering. That could occur at the time of the September meeting if the FOMC decided not to begin tapering at that time. Second, incoming economic data will have to disappoint expectations of a strengthening economy. Employment data probably are the most important in that respect.

**Providing Liquidity.** Usually, providing liquidity is tied to the Federal Reserve's role as lender of last resort. But, it can be used more broadly to ease conditions in financial markets. The Federal Reserve pursued such a role aggressively during the height of the financial markets crisis from 2007-09 through a plethora of liquidity facilities.

Provision of liquidity can be direct or it can be a stated intended policy in response to certain events. Either way, liquidity serves to maintain financial market confidence and underpins unimpeded functioning of financial transactions, particularly among financial intermediaries.

Both aspects of market liquidity management intervention have been utilized by the European Central Bank (ECB) over the last two years. First, as interbank liquidity dried up and many European banks began to have difficulties in funding daily operations, the ECB provided euro1 trillion in low cost funding based on very liberal collateral requirements. This stopped a developing panic and lowered the cost of borrowing considerably.

Second, in August 2012, ECB president Mario Draghi announced the intent of the ECB to purchase sovereign debt instruments in the open market, provided that certain conditions were agreed to by the countries in question. This announcement immediately ended speculative activities and reduced interest rates substantially. To date, the ECB has not acted on its stated intent. Although there is question about whether the ECB really can follow through on its promise, no one has been willing or able to test the ECB's resolve or political ability to implement the stated policy. Thus, European financial markets remain relatively quiet.

In late May and early June China experienced a short-lived financial market liquidity event when the People's Bank of China (PBoC) withheld liquidity from the interbank market. Interest rates soared. The intent apparently was to rein in the explosion of wealth management credit instruments that were being largely funded by short-term wholesale funds. This is reminiscent of what happened to Bear Stearns and Lehman Brothers in 2008 in the U.S. The episode was short-lived because the PBoC began providing liquidity again on June 20. It is unclear whether the PBoC accomplished its intended objectivity or whether it pulled back because of the severe chaos that developed in the interbank market and the possibility that difficult to control contagion might take hold. This is another recent example of how a monetary authority can influence activity in financial markets through liquidity management. But, it is also an example of how a policy can be reinforced or turned on its head by behavioral responses.

## 2. FOMC Economic Activity and Inflation Outlook

**Projections.** Table 7 shows the central tendency range of projections by the 19 FOMC members for real GDP growth, the unemployment rate, the total PCE inflation rate and the core PCE inflation rate. The central tendency is constructed by eliminating the three highest and three lowest projections, so that the range reflects 13 of the 19 members.

Real GDP growth for 2013 was marked down a little and the range for 2014 was boosted by 0.1%. This modest increase appears to reflect an upward revision in the staff's projection for stock prices and home prices, which boosted the staff's estimate of consumer spending.

Few forecasters agree with the FOMC's 2013 GDP growth range, con-

**Table 7**  
**Economic Projections of Federal Reserve Board Members**  
**And Federal Reserve Bank Presidents, June 2013**

Variable	Central Tendency				
	2012	2013	2014	2015	Longer Run
<b>Real GDP %</b>	<i>June</i>	<i>2.3 - 2.6</i>	<i>3.0 - 3.5</i>	<i>2.9 - 3.6</i>	<i>2.3 - 2.5</i>
	Mar	2.3 - 2.8	2.9 - 3.4	2.9 - 3.7	2.3 - 2.5
	Dec	1.7 - 1.8	2.3 - 3.0	3.0 - 3.7	2.3 - 2.5
	Sept	1.7 - 2.0	2.5 - 3.0	3.0 - 3.8	2.3 - 2.5
<b>Unemp. Rate %</b>	<i>June</i>	<i>7.2 - 7.3</i>	<i>6.5 - 6.8</i>	<i>5.8 - 6.2</i>	<i>5.2 - 6.0</i>
	Mar	7.3 - 7.5	6.7 - 7.0	6.0 - 6.5	5.2 - 6.0
	Dec	7.8 - 7.9	7.4 - 7.7	6.8 - 7.3	5.2 - 6.0
	Sept	8.0 - 8.2	7.6 - 7.9	6.7 - 7.3	5.2 - 6.0
<b>PCE Inflation %</b>	<i>June</i>	<i>0.8 - 1.2</i>	<i>1.4 - 2.0</i>	<i>1.6 - 2.0</i>	<i>2.0</i>
	Mar	1.3 - 1.7	1.5 - 2.0	1.7 - 2.0	2.0
	Dec	1.6 - 1.7	1.3 - 2.0	1.7 - 2.0	2.0
	Sept	1.7 - 1.8	1.6 - 2.0	1.8 - 2.0	2.0
<b>Core PCE %</b>	<i>June</i>	<i>1.2 - 1.3</i>	<i>1.5 - 1.8</i>	<i>1.7 - 2.0</i>	
	Mar	1.5 - 1.6	1.6 - 2.0	1.8 - 2.1	
	Dec	1.6 - 1.7	1.6 - 1.9	1.8 - 2.0	
	Sept	1.7 - 1.9	1.7 - 2.0	1.9 - 2.0	

sidering it to be much too high based on recent data reports. Perhaps the FOMC knows something about the impending Bureau of Economic Analysis' revisions to the National Income and Product Accounts that the rest of us do not yet know.

Unemployment rate projections were marked down for all years. Essentially this was a "mark to market" exercise reflecting the recent decline in the unemployment rate. These downward adjustments beg the dependability of the 6.5% unemployment rate guideline since much of the recent decline in the unemployment rate appears to have been caused by discouraged workers dropping out of the labor force rather than there being truly significant improvements in employment. *Importantly, the downward adjustments to the unemployment rate leave intact the first quarter of 2015 as the implied date when the FOMC might raise the federal funds rate.* Chairman Bernanke has said publicly that the federal funds rate would probably not be increased as soon as the 6.5% guideline is reached and further suggested that the FOMC is considering reducing the

guideline.

Both total and core PCE inflation rate projections were marked down sharply in 2013 reflecting the unexpected large decline this year in inflation. Inflation rates for 2014 and 2015 were adjusted downward slightly but still rapidly converge to the FOMC's long-run target of 2.0%. Except for St. Louis Federal Reserve Bank President James Bullard, other FOMC members have been dismissive of the recent decline in the core PCE inflation rate to 1.06% in May. The June 19 FOMC policy statement says the following: *"Partly reflecting transitory influences, inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable."* This statement is consistent with a belief that economic activity will improve considerably later this year and in 2014. It also reflects a belief that technical measurement issues, which are expected to be short-lived, are artificially depressing the total and core PCE inflation rates. Other analysts are skeptical and so President Bullard's dissenting FOMC vote resonates with them. This matters because if the FOMC is underestimating downward pressures on inflation, its policies, by not focusing on disinflation risks, could unintentionally contribute to the possibility of a *deflationary bust*.

### 3. FOMC Policy Guidance

On balance the market's impression was that the FOMC modestly upgraded its outlook for the economy at its June 19 meeting. However, the only change in language on economic conditions was the change in one word from "some" to "further" in the assessment of the labor market: *"labor market conditions have shown further improvement in recent months."* But this single word change coupled with the updated economic projections and the moderation of the FOMC's assessment of risks — *"The Committee sees the downside risks to the outlook for the economy and the labor market as having diminished since the fall."* — was sufficient for the market to conclude that the FOMC is now more optimistic about the future. It is interesting how the removal of a negative has been reinterpreted to be a positive.

As mentioned above, the FOMC acknowledged the recent decline in inflation but dismissed that development as a temporary phenomenon.

There were no changes in the policy part of the FOMC's statement.

However, in Chairman Bernanke's press conference following the meeting it became clear that the FOMC discussed options for reducing and eventually ending large scale asset purchases. Specifically, Chairman Bernanke suggested that if the economy and labor market continued to improve, tapering could begin as soon as September and end by mid-2014 when the FOMC expects the unemployment rate to reach 7.0%. Although Chairman Bernanke's guidance was conditional, it is totally consistent with the outlook embedded in the FOMC's economic projections.

Release of the June 19 FOMC meeting minutes on July 11th revealed that in a survey of FOMC members prior to the meeting: *"About half of these participants indicated that it likely would be appropriate to end asset purchases late this year."* In recent speeches key Federal Reserve officials have reiterated that policy is conditional on the performance of the economy. However, the market has concluded that tapering will commence in September, regardless of uncertainty about the economic outlook.

All of this has led many Federal Reserve observers to conclude that policy communication has become less transparent and more opaque. As a result, the FOMC's ability to manage market expectations has declined with the consequence that financial conditions have tightened significantly, which is probably neither what the FOMC expected nor desired.

#### **4. Market and Analyst Expectations for Tapering and Timing of First Federal Funds Rate Increase**

Based on the outlook embedded in the FOMC's economic projections, Chairman Bernanke has indicated that tapering could begin in September and end in the summer of 2014. The projections, themselves, imply that the first increase in the federal funds rate will occur in early 2015.

Not only has the market embraced the FOMC's economic projections, it appears to be even more bullish as it expects the first increase in the federal funds rate to occur in late 2014.

It is interesting that economic analysts generally are less optimistic than either the FOMC or the market.

According to the primary dealer survey conducted by the Federal Reserve

Bank of New York with responses due by June 24, 2013, dealers expect tapering to begin in September. The first increase in the federal funds rate is expected in the second quarter of 2015.

B of A expects tapering to begin in December rather than September, but acknowledges that a September start is a distinct possibility. B of A also does not expect the first increase in the federal funds rate to occur until mid-2015.

GS expects tapering to commence in September. But, the first increase in the federal funds rate will not occur until the first quarter of 2016. This is quite a divergence from the market's late 2014 expectation. GS thinks that part of the difference in timing has to do with an increase in the term risk premium because of heightened market uncertainty about the future timing of increases in short-term rates. An increase in the term premium has the effect of shifting forward in time the implied date of the first increase in the federal funds rate. Thus, the second quarter date in the primary dealer survey rather than the late 2014 date implied by financial futures contracts probably makes more sense as a fair representation of market expectations. This would reduce the disparity in timing to two to three quarters, a not unreasonable spread given differences in views about the strength of economic activity and an increase in the rate of inflation.

## **5. Global Impacts of U.S. Monetary Policy and Market Response**

We tend to think that U.S. economic activity and financial markets are driven exclusively by what happens within our own borders. In an increasingly interconnected world that is a gross oversimplification. What happens in the U.S. affects what happens in other countries and what happens there, in turn, feeds back into the U.S. economy and financial markets. The recent sharp increase in long-term interest rates has been a global phenomenon. Financial conditions have tightened not just in the United State but around the globe as well.

For example, a relatively immediate consequence of higher interest rates in the U.S. has been an increase in the value of the trade-weighted dollar. This will make U.S. exports less attractive and will have negative consequences for U.S. manufacturers over time. Ordinarily, the mirror reflection

of this phenomenon would be favorable to foreign exporters. But this is not true for countries that have tied the values of their currencies to that of the U.S. dollar.

From a financial markets perspective, the long period of low nominal interest rates and negative real interest rates in the U.S. spawned “carry trades” in foreign currencies, particularly those of emerging economies. But, as interest rates have spiked in the U.S. real yields have gone from -0.6% to +0.6% and made the carry trade much less attractive financially.

This has occurred at the same time as it is increasingly apparent that the Chinese economic model really is in transition to more of a consumer focus and less of an investment focus. Emerging economies have benefited enormously over the last several years from insatiable Chinese demand for commodities. That demand has now subsided as indicated by falling prices for commodities. Thus, growth prospects have changed dramatically for the worse for those economies heavily dependent on China.

Put both sets of developments together and the result is massive reversals in the flows of hot money. Indonesia and India will be severely impacted because both countries run large trade deficits and are highly dependent upon favorable capital flows which are now drying up. Consequences for these two countries will involve slower economic growth and higher inflation.

Emerging economies with large trade surpluses are not dependent upon capital inflows but their economies tend to be tightly tied to the strength of China’s economy and those of developed countries. China’s economy is slowing; in spite of optimism about the end of recession in Europe, this remains a glimmer in the eyes of the beholder; and in the U.S. the apparent acceleration in economic activity may fall short of expectations as tighter financial conditions and a more expensive U.S. dollar depress U.S. domestic demand and as slower foreign economic growth causes negative feedbacks for U.S. economic activity.

This is not yet a gloom and doom scenario. In other words, a *deflationary bust* is not yet an inevitability. But, recent developments do suggest that U.S. economic activity is likely to disappoint.

In light of all of this, it is especially curious that the FOMC chose this moment in time to pronounce that downside risks to the economy have diminished. In fact, the opposite appears to be the case. But, perhaps



it was a fair assessment when the FOMC released its statement on June 19. But, since then, the global market response to the FOMC's statement indicates that risks have not diminished at all but may be increasing.

*Remember from the experience of the mid-2000s that risks can be hidden from view and appear to be minimal. But the accumulating underlying economic and financial market imbalances slowly and inexorably build until the dam bursts. This is not to assert that we are approaching such a moment once again. But, it is to suggest that caution is warranted.*

## 6. Financial Conditions

As I mentioned above in the section discussing the outlook for U.S. real GDP growth, recent economic research conducted by Goldman Sachs has established a strong linkage between changes in financial conditions and subsequent changes in real GDP growth. Since May 22, 2012, the GSFCI has increased 30 basis points which implies a decrease in real GDP growth equal to 40 basis points within one year.

GS has developed a monetary policy rule patterned after the famous Taylor rule. The Taylor rule is an equation for determining the appropriate level of the federal funds rate. It posits that the appropriate federal funds rate equals the neutral rate (presumably the long-run stable real rate of interest), plus a coefficient times the gap between the observed rate of inflation and the policy rate (now stated explicitly by the FOMC to be 2.0%), minus a coefficient times the gap between the observed rate of unemployment and the long-run stable structural rate of unemployment (currently 5.5% according to CBO).

There are several challenges embedded in the Taylor rule. First, the coefficients of the inflation and employment gaps are not known with certainty and must be derived. Researchers differ considerably on what the values of these coefficients should be and thus there can be a considerable range in the estimated value for the appropriate federal funds rate.

Second, notwithstanding CBO's econometric analysis, there is not agreement about the value for the structural unemployment rate. That debate also impacts agreement on the appropriate way of measuring the observed

rate of unemployment. This has to do with demographic trends in the labor force and cyclical impacts on discouraged workers.

Third, there is not agreement about how best to measure inflation. Should it be the most recent 12-month rate of change or a measure of inflation expectations? If it is a measure of inflation expectations, what is the most appropriate measure — a survey of consumers, a survey of market professionals or a market measure derived from the prices of various maturities of Treasury Inflation Protected Securities (TIPS)?

But, there is another critical and perhaps fatal flaw. The recent extended period of zero interest rates has made the federal funds rate meaningless as a policy tool. But, even if interest rates were not at the lower zero boundary, a case can be made that the federal funds rate does not reflect well the complexity of economic and financial markets activities. GS proposes that its GSFCI measure should take the place of the federal funds rate target. Its advantages are that it is based on a much more comprehensive set of financial market indicators and is not limited by the zero lower boundary.<sup>6</sup>

GS's framework is an interesting one and has merit. For those who have an interest in the technical aspects of GS's research and models, I encourage the reader to study the documents referenced in the footnote.

GS concludes that its measure of the appropriate GSFCI indicates that more accommodative monetary policy has been needed over the last several years. The recent tightening in the observed GSFCI only increases that need.

**Chairman Bernanke is on record recently as stating that “...if financial conditions were to tighten to the extent that they jeopardized the achievement of our inflation and employment objectives, then we would have to push back.”** Unless the FOMC majority is dead set about beginning tapering in September recent events suggest that the FOMC may well have to “push back”.

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<sup>6</sup>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 and Shuyan Wu, Goldman Sachs US Daily: “Another Look at Financial Conditions vs. Growth,” July 11, 2013.

## 7. Prospects for Inflation

Core PCE inflation was 1.06% in May, tied with April as the lowest level ever recorded since this data series began in 1959. Total PCE inflation was 1.02% in May. This measure is much more volatile and has been negative for short periods of time in the past. For that reason the FOMC prefers to focus on the core PCE inflation measure.

PCE inflation is well below the FOMC's target level of 2% and is lower today than it was in late 2010 when the FOMC was deeply concerned about the threat of deflation. But with the exception of James Bullard, president of the St. Louis Federal Reserve Bank, other members of the FOMC do not evince much concern. That is because, as the FOMC's policy statement explicitly records, the current low level of inflation is viewed as temporary. When asked at the press conference following the FOMC meeting on June 19 about what temporary entailed, Chairman Bernanke responded that temporary distortions in the PCE inflation measure are due to medical costs and non-market prices.

Closer examination of these so-called "temporary distortions" suggests that the FOMC may be too blas about the recent decline in core PCE inflation. First, the Bureau of Economic Analysis publishes a separate market-based PCE measure that eliminates imputed prices from the index. The annual rate of change in the market-based measure in April was 1.10% compared to the 1.05% change in the conventionally-measured core PCE index — not much difference there.

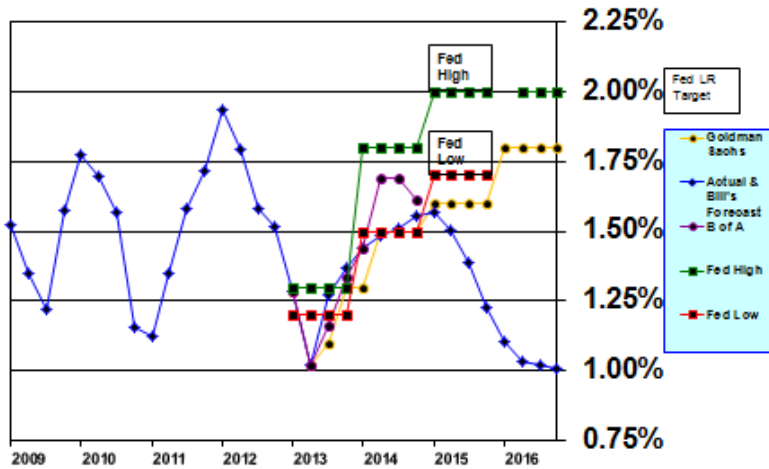
Second, elimination of transitory factors of the sort that Bernanke mentioned, such as medical prices, would add only about 0.25% to PCE core inflation. That would mean that the "stable" core PCE index in April was 1.30% rather than the reported rate of 1.05%. In May the PCE core index was 1.06%.

As can be seen in **Table 8** (**Chart 14** shows historical core PCE price index data and data from **Table 8** in graphical form), all forecasts of the core PCE inflation index indicate that inflation should rebound from its current low level of 1.06% to 1.5% to 1.6% in 2014, which is consistent with the lower bound of the FOMC's central tendency range for 2014. However, GS's forecast of core PCE inflation moves up only a little in 2015 and 2016 and my forecasts move down. The slight decline in core inflation in my

**Table 8**  
**Core PCE Inflation Forecasts — B of A, GS, Bill’s “Slow Growth”, Bill’s “Strong Growth” and FOMC High and Low**

	2013	2014	2015	2016
B of A	1.3	1.6		
GS	1.3	1.5	1.6	1.8
Bill’s Slow Growth	1.4	1.6	1.2	1.0
Bill’s Strong Growth	1.4	1.5	1.1	1.1
FOMC - High	1.3	1.8	2.0	
FOMC - Low	1.2	1.5	1.7	

**CHART 14 – Core PCE Inflation Forecasts**  
 (percentage change over previous 12 months)



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forecasts occurs because of the large and persistent gap between actual and potential real GDP.

None of these forecasts moves into deflation territory but they are not consistent with the FOMC’s longer-term projections or claims that current low inflation is a transitory phenomenon.

All measures of inflation have been trending down for several months. This is a global phenomenon. Initially, declining inflation stemmed from substantial excess global supply capacity which was reinforced by slack aggregate demand following the financial crisis of 2007-09. More recently, three deflationary forces have been reinforcing the downward trend — lower commodity prices, the European recession, and Japan’s aggressive yen devaluation and reflation policies, which is transferring Japan’s deflation to the rest of the world.

Inflation that is “too low” is not welcome because it discourages spending. Prices could be lower tomorrow, so why buy today. This kind of psychology tends to be self-fulfilling. When prices deflate, as they have in Japan, this becomes a very serious problem which drags down economic growth. Also, low inflation and low growth in nominal incomes that accompanies low inflation makes it harder to pay down debt. As Paul Krugman puts it, a weak economy becomes caught in a “... *vicious circle, in which a weak economy leads to too-low inflation, which perpetuates the economy’s weakness.*”<sup>7</sup> What is needed is higher inflation, which, of course, is one of the objectives of the FOMC’s monetary policy.

In fact, several developments indicate that downward pressure on inflation is likely to continue. First, inflation expectations, as measured by the TIPS (Treasury Inflation Protected Securities) 5-year, 5-year forward breakeven, have dropped 55 basis points since March. The Cleveland Federal Reserve’s measures of inflation expectations, which cover a variety of time periods, have been dropping and are well below 2% for longer time periods.

Other survey measures of expectations, presumably those that are referenced in the FOMC’s statement, have indeed been stable. That is good from the standpoint that behavioral patterns are unlikely to change. But, if the underlying trend in core inflation really is downward, that will become increasingly apparent as time passes and eventually survey-based expectations, and perhaps behavior as well, will adjust. It would be better not to risk that outcome because, as Krugman has pointed out, once deflation takes hold it is extremely difficult to reverse course, as Japan discovered. GS research indicates that the recent decline in the TIPS 5-year, 5-year forward measure of inflation expectations should eventually lead to a 5 to 10

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<sup>7</sup>Brian Lucking and Daniel Wilson. “Fiscal Headwinds: Is the Other Shoe About to Drop?” FRBSF Economic Letter 2013-16, June 3, 2013.

basis points decline in survey measures of expected inflation. Again, this is a small impact but one which is headed in the wrong direction.

Second, huge increases in commodities production capacity, slower global growth, and, especially, the nascent transition of the Chinese economy from an infrastructure/trade focus to a consumer focus have combined to put downward pressure on commodity prices. As mentioned above the recent reversal of hot money financial flows may worsen pressures. It is clear that this is a secular, not a cyclical trend, which means that it will persist for a long time.

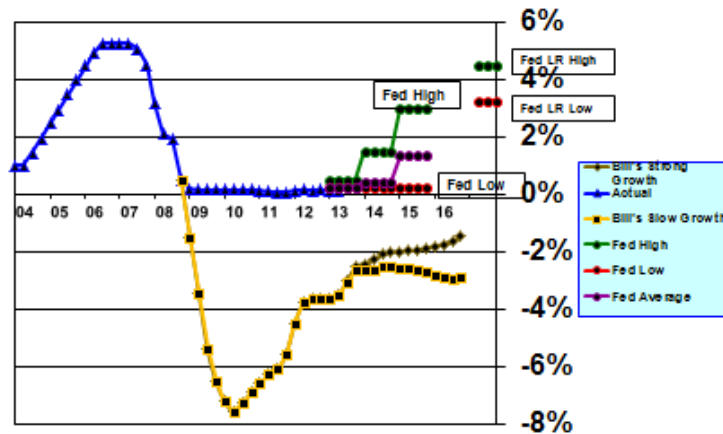
Recent research conducted by GS indicates that for every 100 basis points decline in commodity prices, core PCE inflation declines 6 to 9 basis points. With core PCE inflation already down to 0.95%, this impact is not as trivial as it might seem. GS also finds that about 53% of the change in inflation expectations finds its way eventually into core inflation. This means that if the recent decline in inflation expectations persists, it, too, will place downward pressure on the core PCE inflation rate. However, in other work GS found that about 5% to 15% of low measured inflation passes through into inflation expectations and concluded that this is evidence that inflation expectations are well anchored. These two studies raise an issue of the directionality of cause and effect and whether asymmetries exist. However, whatever the answer might be, a decline in measured inflation expectations, if it persists, seems very likely to place downward pressure on measured inflation.

There is yet another measure that is worth monitoring. The Atlanta Federal Reserve Bank calculates a deflation probability measure. This measure has risen from a near zero probability to about 12% in recent weeks. This is not a high probability but what is important is that it is moving in the wrong direction.

## 8. Federal Funds Rate

**Chart 15** shows the FOMC's central tendency range for high and low projections for the federal funds rate for 2013, 2014 and 2015. The purple line (circles) is the average of projections for the 19 FOMC members (7 governors and 12 presidents). There was only a small increase in the 19-member average rate for 2015 from 1.30% in the March projections to 1.34% in the

**CHART 15 – Federal Funds Rate Forecast**



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June projections. However, the overall range tightened considerably with several of the low estimates moving up and several of the high estimates moving down. In March, 7 members expected the federal fund rate to be .25% in 2015; that number fell to only 2 in June. That shift has spurred commentary that the FOMC is likely to begin raising the federal funds rate sooner.

Bill's "*Slow Growth*" and "*Strong Growth*" forecasts are shown by the yellow line (squares) and brown line (diamonds). My forecasts indicate that the federal funds rate is not likely to increase at all until after 2016, which is inconsistent with FOMC guidance and my forecast that the unemployment rate should fall below 6.5% sometime during 2015. FOMC projections imply that the first federal funds rate increase will occur in early 2015. Most others accept this view (see discussion in **section 4** above). However, GS believes the first federal funds rate increase will not occur until early 2016.

## VII. Fiscal Policy

As we entered 2013 there were three significant fiscal policy issues in play — delayed implementation of automatic spending cuts to March 1, 2013, referred to as “sequestration”, increasing the federal debt ceiling and passing a budget or, alternatively, a continuing resolution to fund the government. The expected contentious political fights in Congress between Republicans and Democrats did not materialize. What happened instead was that Congress took no action on sequestration so it became effective on schedule. The debt ceiling was suspended until May 18. And, a continuing resolution was passed to fund the government through the end of the fiscal year on September 30.

As we pass the mid-year point, the budget deficit outlook has improved enormously. The U.S. Treasury recorded an enormous surplus of \$116.5 billion in June. This brought the deficit to GDP ratio down to 4.32%. The 2013 fiscal year deficit is expected to fall further to between 3.8% and 4.0% of GDP compared to 6.9% in 2012.

Because of the large decline in the deficit, raising the debt ceiling, which still requires legislation, is no longer a major policy issue. The debt ceiling is currently binding but the U.S. Treasury can maintain operations through mid-October to early-November before matters become critical.

Congress will still need to deal with the fiscal year 2014 budget. However, this can be done without the parties having to face off over long-run issues of tax, spending and entitlement reforms. What seems likely is that Congress will opt for a continuing resolution, perhaps accompanied by selective appropriations bills. Thus, it appears that fiscal issues will not dominate the legislative agenda in coming months.

Although Congress appears to be making a serious effort to explore tax reform, the odds of anything of significance occurring this year seems very unlikely. My sense is that there will be talk, but no action, until either we have one-party government or a crisis forces tough issues to be faced. If the economy’s potential growth is less than believed and if growth continues to fall short of potential, the moment of crisis will come sooner than later. However, even modest improvements in the economy of the sort that most expect, declining deficits, slower increases in medical prices, passage of immigration legislation and favorable revisions to GDP will buy time.



Nonetheless, flaws in the structure of entitlement programs, particularly Medicare, will eventually need to be dealt with.

There is also need to have candid discussions about tax preferences and whether they are driving behaviors that have broad public benefits or alternatively are simply rent-seeking accommodations to special interests that have limited, or even negative, public benefits.

### **1. Automatic Spending Cuts (Sequester)**

Although the mandated spending cuts are being carried out, to date there have been no highly visible consequences. Employment levels have yet to be affected and there is little evidence that hours worked have been adversely impacted. This may change over time as the impacts of spending cuts gradually ripple through the economy.

However, there will be a direct negative impact on second and third quarter real GDP because government expenditures will continue to decline. Total expenditures fell 8.1% in the first quarter of 2013 compared to the first quarter of 2012; expenditures fell an even greater 9.6% in the second quarter. Federal government spending subtracted 0.68% from GDP growth in the first quarter — the annualized rate of decline was -8.7%. (Note government expenditures included in GDP do not include transfer payments, so the dollar amount is considerably less than total expenditures reported in the monthly Treasury statement.)

GS expects federal spending to shrink 1.5% in the second quarter and 10% in the third quarter. GS recently revised its second quarter decline from 5% to 1.5%. This may be consistent with careful study of trends in government spending categories that enter into GDP, but seems inconsistent with the rising rate of overall spending decreases. If GS is correct, declining federal spending would subtract about 0.10% from second quarter real GDP and 0.70% from third quarter. Additional negative impact from the sequester would enter into real GDP through lower consumer spending and gross private domestic investment.

## 2. Debt Ceiling

On May 18, 2013, the debt ceiling, which had been temporarily suspended, went back into effect at \$16.699 trillion. As of June 30, 2013, the reported deficit was \$16.738 trillion. Treasury cannot extend net additional debt until Congress raises the debt ceiling. As in the past, the Treasury will be able to extend the day of reckoning through a variety of short-term adjustments.

It seems likely that the debt ceiling will be raised in conjunction with either the adoption of the fiscal year 2014 budget or yet another continuing resolution, although it could come in a separate action since the date when the Treasury is likely to run out of cash appears to be well after the beginning of the new fiscal year on October 1. There seems to be little appetite on either side of the aisle for engaging in brinksmanship over the debt ceiling. However, Speaker Boehner has suggested that spending cuts over the next ten years be mandated equal to the amount of the increase in the debt ceiling. But, because Republicans do not appear to be interested in engaging in a cliffhanger as they did in the summer of 2011, it's difficult to speculate whether Boehner will pursue such a bargaining position aggressively.

With the substantial improvement in the deficit over the next couple of fiscal years, the debt ceiling may not need to be raised by a great deal. The sum of the remaining deficit in 2013 and the projected deficits for 2014 and 2015 is approximately \$950 billion.

## 3. Potential Consequences of Rapid Fiscal Consolidation

We seem to be experiencing a Goldilocks situation in which the federal deficit is falling much more rapidly than expected but there have been little adverse consequences for economic activity that are directly traceable to the sequester or tax increases. It might be that we are simply living on borrowed time and that the full extent of the negative impact has been delayed.

Brian Lucking and Daniel Wilson, economists at the San Francisco Federal Reserve Bank, recently published a study with the somewhat ominous title: *"Fiscal Headwinds: Is the Other Shoe About to Drop?"*<sup>8</sup> They note

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<sup>8</sup>Brian Lucking and Daniel Wilson. "Fiscal Headwinds: Is the Other Shoe About to Drop?" FRBSF Economic Letter 2013-16, June 3, 2013.

what we all know. Fiscal policy was “extraordinarily expansionary” by historical comparison during and immediately following the Great Recession, but has become “unusually contractionary” over the last two and a half years. But what is discouraging about their research is their conclusion that over the next three years federal fiscal policy “... *could restrain economic growth by as much as 1 percentage point annually beyond the normal fiscal drag that occurs during recoveries.*” This negative outcome will occur because the federal budget deficit is likely to fall faster than it has historically, primarily because tax revenue is expected to rise faster than it has historically.

This analysis is hardly optimistic and poses real risks in an environment in which potential real GDP growth is already depressed by slower labor supply growth and by weak productivity growth. Lucking and Wilson’s study accentuates my worry about the possibility of a **deflationary bust**.

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

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

### 1. U.S.

- **Q4 real GDP** growth projections range from 0.5% to 1.8%; tracking estimates based on October and November data are consistent with growth of approximately 1.0%.  
*✓ - “Final Estimate” was +0.37%; weaker than expected due to data anomalies.*
- **2013 real GDP** growth projections range from 1.5% to 3.0% but with a preponderance of the forecasts falling in the lower end of the range. The drag from tighter fiscal policy will offset gradual improvement in the household and business sectors. Growth should improve gradually over the course of the year. The balance of risks, particularly U.S. fiscal policy but also global growth, is weighted toward slower GDP growth.  
*✓ + First quarter GDP growth was a much weaker than expected 1.76%; second quarter growth is expected to be approximately 1.0%; forecasts for all of 2013 are clustered between 1.5% and 2.0%; the Federal Reserve continues to be more optimistic with an expected range of 2.3% to 2.6%.*
- **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.*
- **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 six months of 2013 payroll growth has averaged 202,000 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 7.56% in June, but it appears that a substantial number of discouraged workers have dropped out of the labor force so that the employment rate is artificially lower.*
- *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 May both disposable income (8.01% in 2012; 2.18% in 2013) and consumer spending growth (3.55% in 2012; 2.88% 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 year end primarily because of acceleration in capital gains realization to avoid higher tax rates in 2013, but the saving rate has been sharply lower over the first five months of 2013 (2.71% in 2013 vs. 4.10 in 2012).*
  - ✓ *(Note: revisions to the National Income and Product Accounts to be released in late July and early August will raise the saving rate by 2 to 3 percentage points.)*
- *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 3.37% of GDP in December to 3.15% in May; both export and import growth are slowing.*

- ✓ *(Note: a strengthening trade-weighted dollar will depress export growth and boost import growth in coming months.)*
- **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 back to marginal expansion (50.6) in June; the strengthening trade-weighted dollar will make U.S. manufactured products less competitive in world markets and will weigh adversely on manufacturing activity.*
- **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, but slowed sharply in the first quarter and it appears it will be somewhat better, but still weak in the second quarter.*
  - ✓ *(Note: revisions to the National Income and Product Accounts to be released in late July and early August will boost the level of business investment considerably.)*
- **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 928,400 over the first five months of 2013, up 18.5% from 783,170 in 2012.*
  - ✓ *- Housing prices are rising much, much faster, but the recent sharp rise in mortgage rates probably will slow the rate of increase or stop it altogether.*
- **Monetary policy** — the Federal Reserve has committed to purchase \$85 billion in securities every month including \$40 billion in mortgage backed securities and \$45 billion in U.S. Treasury securities.

- ✓ + *Monthly purchases of \$85 billion are likely to continue until September at which time the Federal Reserve may begin to taper the amount of monthly purchases.*
- *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.
  - ✓ + *May PCE inflation was 1.02% and core PCE inflation was 1.06%, the lowest in 53 years of record keeping.*
- *Federal Funds rate* is not likely to increase before mid-2015 and might not increase until late 2016 or early 2017.
  - ✓ ? *Too early to tell, but sometime between early-2015 and early-2016 appears most likely at this time. My models suggest the federal funds rate will not be raised until 2017.*
- *Fiscal policy* will be contractionary in 2013, but will become less of a factor in ensuing years.
  - ✓ + *Fiscal policy is likely to be more contractionary during the first half of 2013 than most had expected because Congress permitted automatic spending cuts to take effect as scheduled on March 1st; fiscal policy is now expected to subtract -2.0% from GDP in 2013 and -0.5% in 2014; the deficit is shrinking more rapidly than expected and could be only 3.8% to 4.0% for fiscal 2013.*
- *Potential structural rate of real GDP growth* has declined significantly and could decline further in coming years unless a concerted public initiative is undertaken to invest in education, research and public infrastructure.
  - ✓ ? *Too early to tell, but I remain firm in my conviction; productivity increased at a disappointing annual rate of 0.5% in the first quarter and is up only 0.9% over the last year.*

## 2. Rest of the World

- *European financial markets* are likely to remain relatively calm thanks to the activist role of the European Central Bank.

- ✓ + *To date calm has prevailed but political uncertainty is rising in Italy and Spain; the Cyprus bailout/bail-in was a significant negative development; however, markets have downplayed its significance.*
- *European recession* is spreading to stronger countries and worsening in peripheral countries.
  - ✓ + *Data reports are generally worse than expected; however, hope persists that recession will end soon.*
- *European banking union* will do little to solve deep-seated European and Eurozone structural problems.
  - ✓ + *Germany has persuaded other EU members to eventually amend treaties to require a separation of the ECB's monetary and supervisory responsibilities — this move is seen by some as a delaying tactic on the part of Germany; insurance protocols have been recommended, but no action is likely any time soon.*
- European political dysfunction, populism and nationalism will continue to worsen gradually.
  - ✓ + *Coalition governments in Italy and Greece appear increasingly fragile; political crisis is brewing once again in Portugal; German parliamentary elections are scheduled for September 22 — Alternative for Germany is a new party in Germany which favors changing Germany's relationship to the EU and EZ.*
- *China* appears to have achieved a *soft landing* and economic activity will strengthen modestly.
  - ✓ + *Soft landing achieved, but recent data suggest it might be short-lived.*
  - ✓ ? *Second quarter growth forecasts have been revised modestly lower.*
- *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 second half of 2013.*



- *Global growth* is likely to be fairly steady in 2013 but will depend on developments in the U.S. and Europe.
    - ✓ + *Global growth is trending at last year's level of about 3%, but risks appear to be building that growth may slow a bit in the second half of 2013.*
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 are not likely to be modified.*
    - ✓ + *The federal budget is falling much more quickly than expected.*
  - *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 indicate that the recession is worse than expected, although hope prevails that modest growth will resume in 2014.*
    - ✓ - *financial markets have remained calm and weathered the Cyprus episode surprisingly well.*
    - ✓ ? *political instability and social unrest are not yet serious, but the trend is unfavorable.*
  - *Chinese* leaders have difficulty implementing *economic reforms*; growth slows more than expected.
    - ✓ ? *Too early to tell about implementation of reforms.*
    - ✓ + *Growth forecasts are being revised lower.*
  - *Global growth* slows more than expected.
    - ✓ + *The trend in global growth is about the same as last year, but risks appear to be tilted toward slightly slower growth (B of A revised its global growth forecast for 2013 from 3.2% to 3.0%).*
  - Severe and, of course, unexpected *natural disaster* occurs.
    - ✓ ? *Nothing has happened so far this year.*
  - *Disruption of Middle East oil supply*, stemming from hostile actions involving Iran and Israel, occurs.

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- ✓ ? *Political turmoil in Egypt has contributed to a recent increase in global oil prices, although no disruptions to supply have occurred.*
  - *New North Korea attacks South Korea*, which shakes global financial markets.
  - ✓ ? *There has been a lot of saber rattling, but nothing has happened yet; the crisis has dropped out of sight in the last month.*

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