



The Longbrake Letter*

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August, 2013

In the *June Longbrake Letter* I discussed whether the U.S. and other global economies will continue their **slow recovery** from the depths of the Great Recession or whether aggressive monetary policies are setting in motion the buildup in imbalances that could eventually lead to a **deflationary bust**. Then in the *July Longbrake Letter* I talked about the possibility that the global economy has reached an inflection point at which economic trends that have held sway for much of last four years may be giving way and as Nouriel Roubini posits: *“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”*.¹

Little of consequence has happened over the last two months that lends credence to these concerns. Should these concerns be dismissed or are we living on borrowed time? This question is discussed in **Section I — Slow Recovery or Deflationary Bust?**

Substantial data revisions for GDP, personal income, consumer expenditures and measures of inflation were released by the Bureau of Economic Analysis in late July and early August. These revisions covered 1929 to the present. Methodological changes raised the level of real GDP substantially, while updates to source data altered the picture of recent economic trends. Further data revisions for productivity and the Congressional Budget Office’s (CBO) estimates of potential GDP will be released in late August. Until data revisions are complete, I will not be able to calculate the size

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

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

of the GDP output gap, although it should be smaller based on the GDP revisions. Also, some of my forecasts and the implications of these forecasts, which are presented in this month's letter, may change once I have incorporated the missing data revisions.

These changes, as well as recent trends, are examined in **Section II — U.S. Economic Outlook — Real GDP Growth**; **Section III — Consumer Income and Spending**; and **Section IV Inflation**.

My expectations for future real GDP growth are somewhat more subdued than those of most forecasters. My view is driven primarily by slower productivity growth stemming from depressed private and government investment expenditures. If investment spending rises more than I expect, then both productivity and real GDP growth would be stronger over time. A candidate for such optimism is the emerging shale oil and shale gas energy revolution in the U.S. I explore these topics in **Section V Prospects for Productivity**. Because productivity data have yet to be updated, this discussion will be preliminary and will be updated in the **September Longbrake Letter**.

Recent U.S. data reports and prospects for employment trends, and monetary policy and fiscal policy updates are included in **Sections VI, VII and VIII**.

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. Slow Recovery or Deflationary Bust — Should One Pay Attention to the Potential for a “New Abnormal”?

While little of consequence has occurred over the past two months it would be a mistake to dismiss the potential for a **deflationary bust** and the notion of a **New Abnormal**. Economies can remain in an unstable equilibrium for a very long time, even as significant imbalances steadily accumulate.

Let me begin this update by reviewing the two economic scenarios that

are alternatives to the baseline scenario of slow growth and gradual elimination of the output gap and return to full employment — **deflationary bust** and **severe inflation**. While neither of these alternative scenarios seem very probable, neither is benign. They are predicated on the extraordinary monetary and fiscal policy interventions have occurred in the U.S. and other global economies in recent years and the possible long-run consequences of these interventions.

1. Deflationary Bust Scenario

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.²

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 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 and discuss further in Section V below, 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. (Gave refers to this process as “velocity”.)

²Charles 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.

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 for financial institutions.

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.

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. ***This is a very important point and the condition does not appear to be met currently.*** If real wealth falls short of financial wealth, a financial bubble builds. Hyman Minsky's "financial instability hypothesis" states that financial bubbles occur when speculative forces predominate and "Ponzi financing" emerges. Ponzi financing drives 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 due to animal spirits. 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 after interest rates rose sharply in late May and during June, stock

prices, after falling approximately 5%, quickly recovered and have risen to new highs. But, the U.S. is not a closed economy. We live in a highly interconnected global economy. Just because the risks appear to be limited in the U.S. does not in any way imply that the same is true elsewhere in the world.

Moreover, 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 the U.S. economy is 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. This risk applies to other global economies, which means that the U.S. need not be the country that triggers the **deflationary bust**. Once underway, financial asset prices will decline precipitously as real rates of interest return to positive levels that are consistent with actual potential economic growth.

2. Severe Inflation 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. 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 employment 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, modest employment and GDP growth could close the gap sooner than CBO's forecast of 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. Indeed, low-wage jobs apparently are growing more rapidly than high-wage jobs. However, there are those who think they see very early indications of nascent wage pressures.

3. Ruminations — Charles and Pierre Gave³⁴

Pierre Gave says that the jury is still out on the possibility of a **deflationary bust**. Data reports indicate recovery is proceeding but recovery is heavily dependent upon “cheap money, housing and consumption.” Growth remains positive but is in a slowing trend. Deflationary pressures persist and most measures point toward falling inflation pressures. Risk appetite is “robust” — a hint of the Minsky instability hypothesis? Pierre concludes by stating that “*If velocity (credit creation to support expansion of real economic activity) does not pick up, then falling prices will push up real rates to a point where this fragile recovery could be undone.*”

Charles Gave opines that “*The current financial situation reminds me of a Greek tragedy. Every step toward an international liquidity crisis is being followed on cue ...*” There are two steps in the developing global liquidity crisis. **Step one** — the U.S. trade and current account deficits are shrinking. This means that there are fewer dollars available globally. (When the world was on the gold standard, too little gold led inexorably to sustained deflation. To avoid such an outcome growth in global monetary reserves need to keep pace with growth in nominal economic activity.)

Step two — collectively foreign central bank reserves held at the Federal Reserve are declining. This is an indication that central banks are liquidating dollar reserves to finance current account deficits. India is already feeling the full brunt of an acute liquidity squeeze. India has been forced to raise short-term interest rates in an attempt to stop capital outflows so that it can continue to finance its current account deficit. However, higher interest rates, if sustained, will depress growth in India and could even lead to recession.

What is worrisome in the analysis of the two Gave brothers is that what they are saying is that growth in global financial flows has not been matched by real wealth creation. Rates of return on real, as opposed to financial, investment are inadequate or even negative. As investors begin to realize this, speculative finance is withdrawn and a liquidity crisis ensues. The

³Pierre Gave. “The Fork Thickens.” GK Research, August 2, 2013. This commentary is proprietary and is not available for distribution without permission by GaveKal.

⁴Charles Gave. “Greek Tragedies Always End the Same.” GK Research, August 8, 2013. This commentary is proprietary and is not available for distribution without permission by GaveKal.

Minsky financial instability hypothesis is at work.

This is heady and frightening stuff. We will know in time whether the analysis is on the mark.

4. Building Global Imbalances

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 in May. 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 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, the policies that were implemented papered over problems rather than fixing them.

5. 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*".⁵

⁵Nouriel Roubini. "Roubini and Bremmer on Charlie Rose: Unveiling New Abnormal," *EconoMonitor*, June 27, 2013.

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

There is substantial congruity between the analyses of the Gave brothers and Nouriel Roubini.

6. 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.

This is a risk that few see and fewer believe could happen. Current consensus thinking is that Europe is emerging from six quarters of recession. Growth may be quite slow for a while but the worst of the crisis is history. But, try to explain such a conclusion to people in Greece, Portugal, Spain and Italy or even in Ireland. The rate of economic decline may have exhausted itself in the European peripheral countries but their economies remain mired in depression with stunningly high rates of unemployment. The social contract in those countries is eroding and with it social stability. Political stability is also ebbing. It's hard to appreciate that the unraveling process is progressing because we are not hearing and seeing daily the kinds of sensational events that are tearing Egypt apart. For the time being the policy palliatives have created a sense that all is well. But, the cancer has not been cured and continues to spread. At some juncture a flash point will be reached when the palliatives no longer work.

7. 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. Germany continues to enjoy huge trade surpluses. This provides jobs and keeps unemployment low. But, Germany's good fortune and so-called prudence is the source of difficulties in other European countries.

8. 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 instability 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 is facing 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.

9. 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.

10. 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 **Section VII**). 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 appear to 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.

11. 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. Unfortunately, increasing it looks like “third arrow” policies will be limited in scope and slow to be implemented. Aggressive fiscal and monetary policies had favorable impacts on growth and deflation initially, but their effectiveness will wane in time without effective “third arrow” programs. Already there are multiple signs that “Abenomics” could fizzle.

12. 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. The rapidly developing liquidity and currency crisis in India is proof positive.

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

Real GDP growth during the second quarter of 2013 was 1.7%, which was stronger than the expected level of approximately 1.0%. But, data revisions pushed first quarter GDP growth down to 1.1% from 1.8%. Optimists have seized on this as evidence that the economy is gaining momentum. Such an

interpretation is a real stretch. First, the downward revision to first quarter GDP boosted statistical comparisons — in other words, it's all about the mathematics of calculating annualized GDP growth rates from quarterly data changes rather than any substantive improvement in the level of GDP. Second, second quarter data will be revised twice more in the next two months and then several additional times in coming years. Early indications are that second quarter GDP data will be revised sharply higher due to a much lower than expected trade deficit.

Before examining details of recent GDP trends let's explore the methodological changes.

1. GDP Methodological Revisions Raised the Level of Real GDP By 3.2%

Once a year, at the time of the release of the Advance Estimate for second quarter GDP in late July, the BEA revises the previous five years of GDP data to reflect refinement in primary source data.

Periodically, the BEA undertakes a comprehensive revision which involves changes in methodology in addition to updating the statistical data. This occurred with this year's data revisions and covered the period 1929 to the present.

In addition, price deflators were revised and the benchmark year was reset from 2005 to 2009. Thus, real GDP is now benchmarked to 2009.

First quarter 2013 real GDP rose about \$505 billion, or 3.2%, due to changes in methodology.

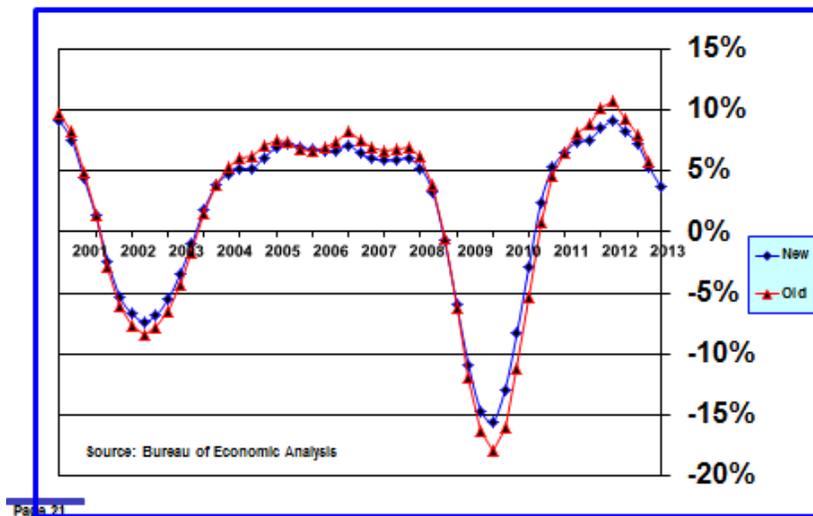
Changes in methodology affected primarily nonresidential investment, real estate investment and government expenditures and investment. There were other methodological revisions but their collective impact was minor.

Intellectual Property Products — Capitalization of Research and Development and Creative Works (Approximately 54% of Total Increase). There is a new GDP nonresidential investment category which amounted to \$620.6 billion in the first quarter. However, because nonresidential investment increased a smaller \$274.8 billion, evidently some

data previously included in the “Equipment” category were reclassified into the new “Intellectual Property Products” category.

Revised data for nonresidential investment and new data for intellectual property products are available beginning with the first quarter of 1999. Revised data have reduced slightly the cyclical volatility (see **Chart 1**).

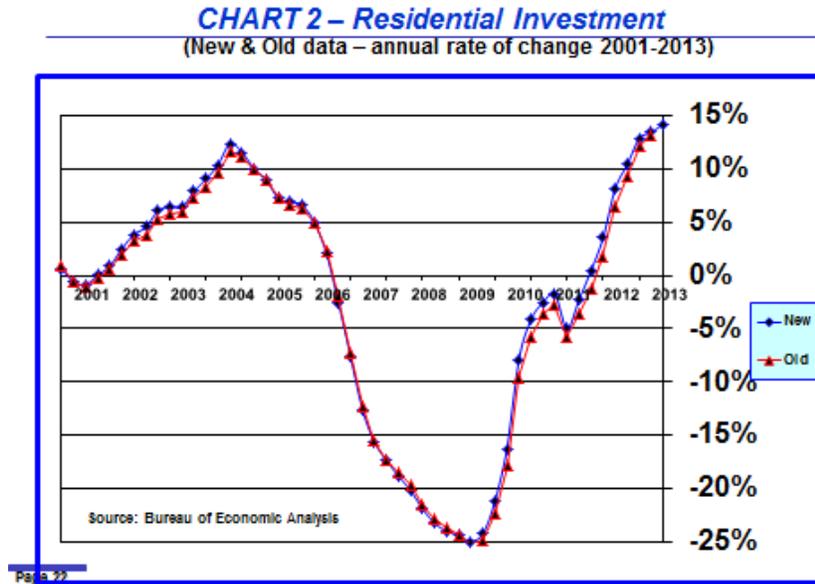
CHART 1 – Nonresidential Investment (New & Old Data)
(annual rate of change 2001-2013)



Growth in nonresidential investment, which accounts for 78% to 80% of “Gross Private Domestic Investment”, slowed sharply to 3.7% in the second quarter of 2013 since peaking in the second quarter of 2012 at 9.1%. The average annual growth rate in “Gross Private Domestic Investment” since 1949 has been 3.73%.

Residential Real Estate — Addition of Ownership Transfer Fees (Approximately 6% of Total Increase). This revision added other real estate services such as title insurance, title fees, attorney fees, and state and local taxes to construction and real estate agent commissions. This added about \$33 billion to first quarter 2013 GDP.

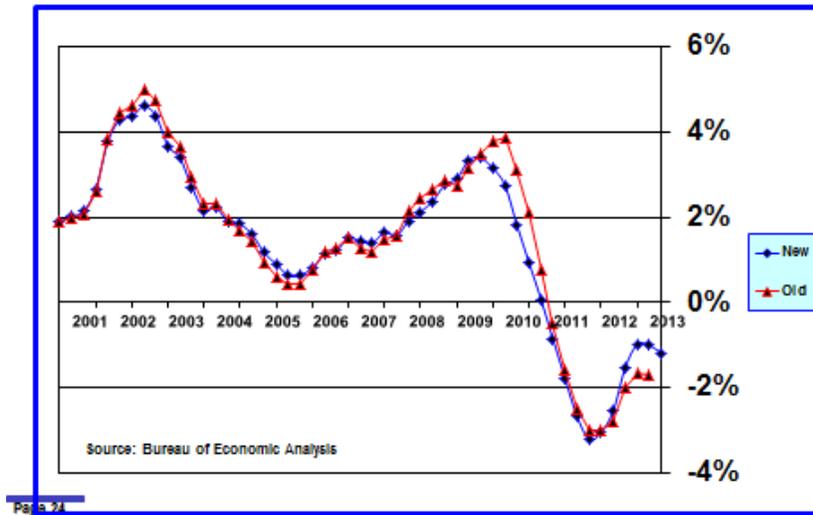
Chart 2 shows that the revised data do not change the cyclical pattern



much, but the rate of growth in residential investment is slightly higher. Based on unrevised data, residential real estate investment decreased at an annual rate of 2.37% from the first quarter of 1999 through the first quarter of 2013. The revised data indicate a slower 1.97% annual rate of decline.

Capitalization of Government Investment Expenditures (Approximately 47% of Total Increase). This revision capitalized federal and state and local government investment expenditures. This added about \$240 billion to real GDP in the first quarter of 2013. As can be seen in **Chart 3**, the revised data are slightly less volatile. Intense pressure on state and local budgets retarded cyclical recovery in the aftermath of the Great Recession. The more recent acceleration in the rate of decline in government expenditures and investment is the result of federal spending cuts.

CHART 3 – Government Expenditures & Investment
(New & Old data – annual rate of change 2001-2013)



2. Revised Real GDP

Table 1 compares old and revised growth rates for GDP and its components for the last three years — 2010, 2011 and 2012. This is the time period that encompasses the most significant revisions in primary source data.

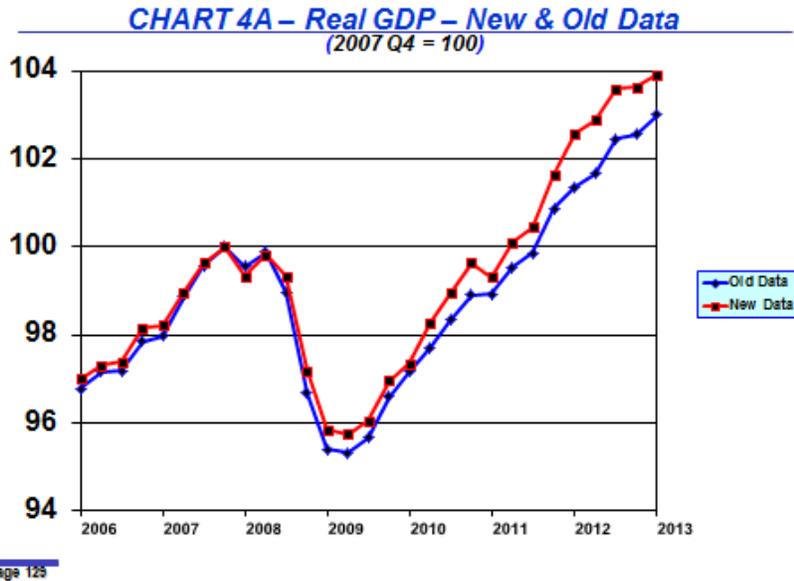
Revised data indicate that real GDP growth was stronger in all three years and considerably so for growth in 2012, which was revised upwards by 58 basis points to 2.79%. Improvements in 2012 came from all categories: personal consumption — 20 basis points; investment — 12 basis points; inventories — 6 basis points; net exports — 6 basis points; and government — 14 basis points.

Final domestic sales, a measure which excludes cyclically volatile changes in inventories from real GDP, also improved in all three years.

New and old GDP data in **Chart 4A** are indexed to the fourth quarter of 2007 to remove the effects the change in the base period from 2005 to 2009 for the GDP deflator. The fourth quarter of 2007 was intentionally chosen as the base period for comparisons as that was the last quarter before the

Table 1
Composition of New Real GDP Growth Compared to Old Real GDP Growth
(2010-2012)

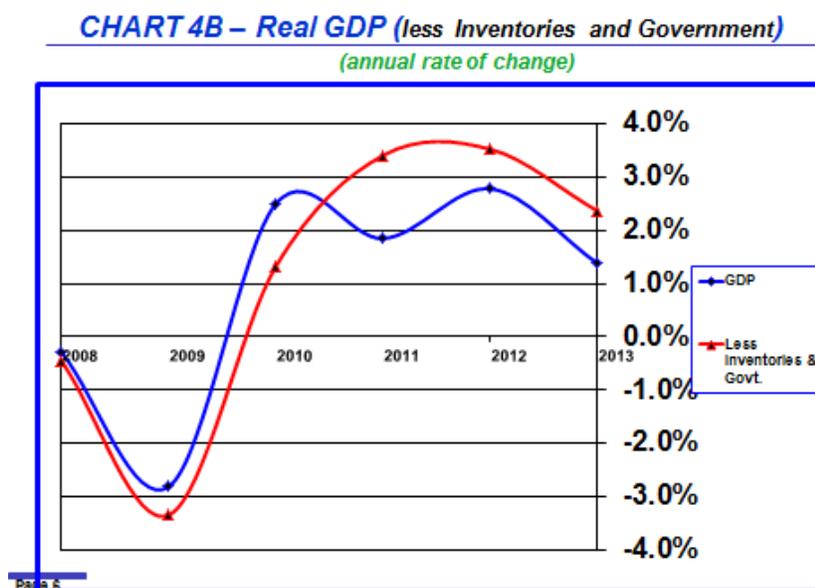
	2012	2012	2011	2011	2010	2010
	New	Old	New	Old	New	Old
	Data	Data	Data	Data	Data	Data
Personal Consumption	1.52%	1.32%	1.74%	1.79%	1.34%	1.28%
Private Investment						
Nonresidential	.85%	.78%	.84%	.80%	.28%	.07%
Residential	.32%	.27%	.01%	-.03%	-.07%	-.09%
Inventories	.20%	.14%	-.16%	-.14%	1.45%	1.52%
Net Exports	.10%	.04%	.10%	.07%	-.51%	-.52%
Government	-.20%	-.34%	-.68%	-.67%	.02%	.14%
Total GDP	2.79%	2.21%	1.85%	1.82%	2.51%	2.40%
Final Dom. Sales	2.59%	2.07%	2.01%	1.96%	1.06%	.88%
Final Dom. Sales	2.79%	2.41%	2.69%	2.63%	1.04%	.74%



onset of the Great Recession.

It is evident in **Chart 4A** that the revisions reduced the severity of the Great Recession and show a stronger recovery. The decline from peak to trough was reduced from 4.7% to 4.3%. The recovery has been stronger. As of the first quarter of 2013, real GDP was 3.9% above the pre-recession peak compared to 3.0% based on the old data.

Chart 4B compares total real GDP growth from 2008 through the sec-



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

There are two takeaways from **Chart 4B** — one good, and one troublesome. The good story is that private sector real GDP growth was about 3.5% in both 2011 and 2012. However, this measure decelerated to 2.4% in the first half of 2013 and reflects the negative effects of higher personal and payroll taxes.

Although the recent decline in private GDP growth is troublesome, there

is reason to be hopeful that real private GDP growth will return to the 3.5% level once the effects of personal tax increases are fully absorbed.

3. 2013 Q2 GDP — Advance Estimate

As can be seen in **Table 2**, the “Advance Estimate” of second quarter real

Table 2
Composition of 2013 and 2012 Quarterly GDP Growth
(New Data)

	Second Quarter 2013 Advance Estimate	Second Quarter 2013 Preliminary Estimate	Second Quarter 2013 Final Estimate	First Quarter 2013	Fourth Quarter 2012	Third Quarter 2012
Personal Consumption	1.22%			1.54%	1.13%	1.15%
Private Investment						
Nonresidential	.55%			-.57%	1.13%	.04%
Residential	.38%			.34%	.50%	.35%
Inventories	.41%			.93%	-2.00%	.60%
Net Exports	-.81%			-.28%	.68%	-.03%
Government	-.08%			-.82%	-1.31%	.67%
Total	1.67%			1.14%	0.13%	2.78%
Final Dom. Sales	1.26%			.21%	2.13%	2.18%
Final Sales Less Govt.	1.34%			1.03%	3.44%	1.51%

GDP growth was 1.67%. Although this was better than expected, subsequent data revisions diminish the reliability of initial estimates. Furthermore, as can be seen in **Table 2**, data are highly volatile from quarter to quarter. The volatility largely disappears in the annual data shown in **Table 1**.

Personal consumption expenditures, which account for 68% of revised real GDP, grew at a very weak annual rate of 1.22%. Data revisions lowered first quarter growth, although it still was the strongest quarterly rate in the last five quarters. Although the somewhat greater strength in consumer spending in the first quarter surprised many, it pretty clearly 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. Second quarter growth returned to a disappointing level, which is unlikely to get much better during the rest of the year.

Nonresidential investment fell in the first quarter and rose in the second quarter. As a result, the level in the second quarter was the same as that in the fourth quarter of 2012. Revised nonresidential investment accounts for 12.6% of GDP. Growth is forecast to increase sharply during the second half of 2013 and in 2014. To a substantial extent, the reliability of forecasts of a significant improvement in real GDP growth in coming quarters depends upon strong acceleration in 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. On balance forecasts of investment spending during the first half of 2013 were too optimistic and appear to continue to be optimistic for coming quarters.

Residential investment accounts for 3.1% of GDP but contributed 26.3% of GDP growth in the first half of 2013. This sector of the economy has been growing faster than the rest of the economy for the last seven quarters. If growth in residential investment continues at its recent pace, it will add 0.3% to 0.5% to real GDP growth in 2013. Goldman Sachs (GS) and Bank of America/Merrill Lynch (B of A) are optimistic that housing will grow at about 15% during the remainder of 2013.

Government expenditures fell much less than expected during the second quarter. State and local government expenditures have stabilized and this is likely to continue. However, the full impact of federal sequestration does not yet appear to have occurred. Declining government expenditures will continue to be a significant negative contributor to GDP growth during the remainder of 2013. Unless there is a change in federal fiscal policy, government expenditures are likely to continue declining after this year, although the rate of decline should diminish.

Net exports subtracted 0.81% from GDP growth 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. June’s trade report showed a sharp decline in the trade deficit — exports improved and imports declined. This development should change the contribution of net exports to GDP by a fa-

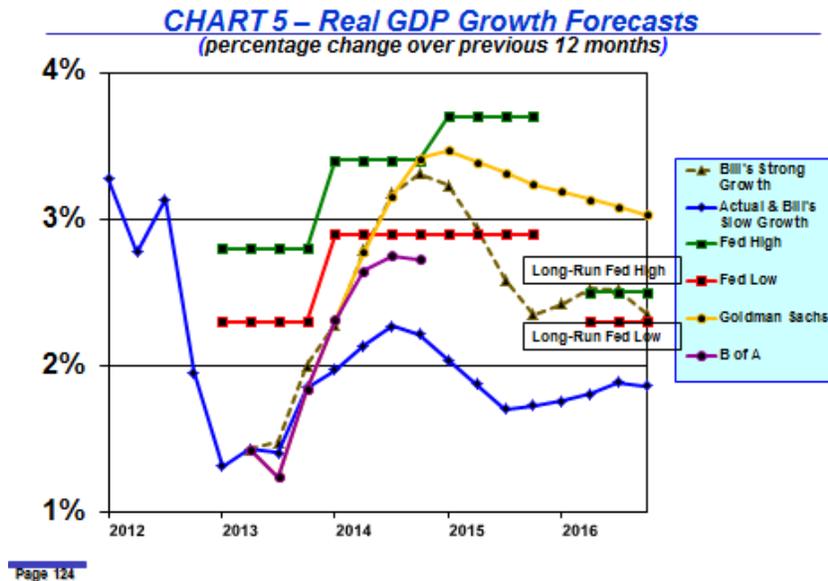
avorable 0.9%, which would reverse the “Advance Estimate” to a small gain in the “Preliminary Estimate”.

4. Revision of Q2 GDP Growth Estimate

Based on the surprising positive trade report, the tracking estimate for second quarter GDP growth has risen from 1.7% to 2.6%.

5. GDP Forecasts for All of 2013

Most forecasters expect growth will pick up during the second half of 2013. **Chart 5** and **Table 3** show GDP forecasts/projections for 2013 through



2016.

B of A expects 2.0% growth in the third quarter and 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 1.5% year over year.

Table 3
Real GDP Growth Forecasts — B of A, GS, 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 of A	2.0	2.5	1.8	1.5	2.7		
GS	2.0	2.5	1.8	1.5	2.9	3.3	3.1
Bill’s Slow Growth			1.8	1.5	2.2	1.8	1.8
Bill’s Strong Growth			2.0	1.6	2.9	2.8	2.5
FOMC — High				2.6	3.5	3.6	
FOMC — Low				2.3	3.0	2.9	

GS’s forecast for the remainder of 2013 is now exactly the same as B of A’s forecast. According to GS, the improvement in the third quarter will be driven by small increases in consumer spending and business investment and a narrowing in the trade deficit. GS’s current activity index, a proxy for GDP growth, was 3.0% in July compared to 2.0% in the second quarter.

Bill’s “*Slow Growth*” fourth-quarter-2012-to-fourth-quarter-2013 forecast shown in **Table 3** is 1.8% and 1.5% year over year. Bill’s “*Strong Growth*” fourth-quarter-to-fourth-quarter forecast is 2.0%, reflecting a strong finish to the year, but year over year growth would still be only 1.6%.

As **Table 4** 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 estimates appear to be totally unattainable unless the economy encounters a strong growth spurt in the second half of the year.

Table 4
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	2.01	1.95	1.8*	3.4*	3.2*	
Actual Y/Y	1.85	2.78	1.5*	2.9*	3.3*	
Long Run Potential						2.3-2.5#

*GS forecast

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

6. Impact of Financial Conditions on 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.⁶ 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 financial conditions on real GDP growth.

⁶Jan 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 tightened in late May and June as fears of “tapering” surged. GS estimated at the time that if tighter conditions were sustained real GDP growth would be depressed by about 0.4% in 2014. Since that time about half of the tightening has abated which implies that real GDP will only be depressed by about 0.2% in 2014.

According to the Federal Reserve’s Senior Loan Officer Opinion Survey, credit conditions eased slightly during the second quarter. Demand for most types of loans also strengthened. Nonetheless, credit standards still remain tighter than prior to the Great Recession.

As market concerns about monetary policy have abated, optimism has reemerged as reflected in strong U.S. stock market performance.

7. GDP Forecasts for 2014 and Beyond — Slow Recovery Scenario

As **Chart 5** showed, most forecasters expect GDP growth to accelerate in 2014 and 2015 as negative fiscal drag diminishes and unemployment gradually declines (also see **Table 3**).

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 nearly four times larger than residential investment, appear to be extraordinarily optimistic compared to historical trends and recent weakness. GS argues that nonresidential investment will rise at a 7% to 8% annual real rate from the second half of 2013 through 2015 because of high corporate profit margins, high real rates of return relative to cheap funding, easier access to credit and declining policy uncertainty. B of A is projecting slightly slower growth of 6% to 7%, but this, too, appears to be optimistic.

If GS’s and B of A’s views are 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 **Chart 5**. My “**Strong Growth**” forecast assumes a much faster rate of investment growth similar to that of GS and B of A and, thus, the forecasts for that scenario is more optimistic

in 2014. 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 actual 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**, at least in the U.S.

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.

8. GDP Output Gap

With the shallower recession and stronger recovery it is likely that the output gap, as measured by CBO, is now smaller than -5.8%, which was based on unrevised first quarter GDP data. Whether revised data will indicate a more rapid decline in the output gap in coming quarters remains to be seen. CBO will update its potential GDP estimates in late August.

III. 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.

1. Revisions to Income, Spending and Saving Data

Now, to add to the confusion, all the data have been updated back to 1947 and methodological changes have altered what is included in many of the components. Significant data revisions to the National Income and Product Accounts were released on August 2, 2013. On balance, these revisions boosted personal income, personal saving and household wealth.

Methodological revisions involving pension plans raised personal income and personal savings considerably. The methodology for defined contribution plans shifted from cash to an accrual basis. Cash basis accounting, which is based on the timing of employer contributions, tends to result in greater cyclical volatility. An accrual basis methodology measures a pension plan's obligations to beneficiaries as they are incurred. This adjustment increased personal income by 2.5% and reduced the cyclical volatility of this measure. Because the revisions to consumer expenditures were limited, most of the increase in personal income increased the personal saving rate by an average of 1.0 percentage points, although the amount of the increase varies by year.

These developments make it harder than usual to assess trends in household income and spending and their implications for broader economic activity. Data presented in **Table 5** show the annual levels and percentage composition for 2011 and for the 12 months from June 2012 through June 2013. To make it easier to see where the changes occurred, both unrevised and revised data are shown in **Table 5**. Comparisons are shown for 2011 data rather than 2012 data because 2012 data were impacted significantly by tax policy.

Revisions for 2011 raised personal income by approximately 2.5% and disposable income by 2.8%. The dollar amount of the increase was about the same for both personal and disposable income which means that the adjustment in personal taxes was negligible.

About two-thirds of the increase in personal income and disposable income was due to asset income and one-quarter to rental income. The remainder of the increase involved small adjustments to other categories.

As a result of these changes, compensation declined from 64.0% to 62.5% of personal income, while rental income and asset income collectively in-

Table 5
Nominal Personal Income and Its Disposition for 2011 (New and Old Data) and June 2013 (New Data)
(in billions of dollars)

	2011 Old Data Level	2011 New Data Level	June 12- June 13 New Data Level	2011 Old Data Pct.	2011 New Data Pct.	June 12- June 13 New Data Pct.
Personal Income	\$13,032.2	\$13,359.4	\$14,102.9	100.0%	100.0%	100.0%
Compensation	8,336.5	8,343.2	8,841.0	64.0%	62.5%	62.7%
Proprietors' Inc.	1,169.8	1,196.2	1,315.0	9.0%	9.0%	9.3%
Rental Income	433.3	519.1	587.3	3.3%	3.9%	4.2%
Asset Income	1,687.8	1,908.3	2,022.7	13.0%	14.3%	14.3%
Government Transfers	2,326.4	2,314.9	2,440.4	17.9%	17.3%	17.3%
Less: <i>Personal Taxes</i>	-2,344.7	-2,350.0	-2,778.3	-18.0%	-17.6%	-19.7%
Disposable Income	11,609.1	11,931.6	12,428.2	89.1%	89.3%	88.1%
Less: <i>Consumption</i>	11,216.7	11,288.6	11,881.5	86.1%	84.5%	84.2%
Personal Saving	392.3	643.1	546.6	3.0%	4.8%	3.9%

creased from 16.3% to 18.2%.

Consumption rose 0.6%. Because consumption rose less than personal income, consumption's share of personal income fell from 86.1% to 84.5% and personal saving as a percentage of personal income increased from 3.0% to 4.8% (note this is not the saving rate, which is measured as the ratio of saving to disposable income).

The impact of higher taxes can be seen in the last column of **Table 5**, which covers the most recent 12 months. Taxes now take 19.7% of personal income compared to 17.6% in 2011. Consumption has fallen some in response but the saving rate has fallen considerably more. These data strongly imply that consumers have dipped heavily into savings in an attempt to sustain spending.

2. Personal Income and Disposable Income 2010, 2011, 2012 Revisions

Table 6A and **Table 6B** show year-to-year changes in personal income and its components for 2010, 2011, 2012 and the most recent 12 months. Both unrevised and revised data are shown for 2010, 2011 and 2012. **Table 6A** shows changes in nominal data levels and **Table 6B** shows year-to-year percentage changes.

There are several noteworthy changes. First, there was a substantial reduction in the change in “Proprietors’ Income” in 2010 and a somewhat larger increase in 2011. This appears largely to be a timing issue, as revised data indicate that this category of income rose modestly over the entire period.

Table 6A
Dollar Change in Nominal Personal Income and Its Disposition
for 2010, 2011, 2012 and 12 Months Ending June 2013 — New
and Old Data
(in billions of dollars)

	2010 New Data	2010 Old Data	2011 New Data	2011 Old Data	2012 New Data	2012 Old Data	June 12- June 13 New Data
Personal Income	\$581.5	\$635.8	\$592.6	\$458.1	\$1060.8	\$1071.9	\$425.1
Compensation	279.6	261.1	228.3	269.2	567.1	558.8	281.4
Proprietors’ Inc.	35.2	120.0	119.0	21.0	60.7	62.3	101.4
Rental Income	78.7	46.4	84.5	70.7	37.8	49.2	45.9
Asset Income	112.9	122.1	83.7	25.9	360.7	376.8	72.2
Government Transfers	102.4	114.9	4.0	4.3	93.9	87.3	82.9
Less: <i>Personal Taxes</i>	-145.9	-136.5	-101.3	-112.7	-222.6	-204.4	-349.6
Disposable Income	463.2	527.7	417.9	278.5	897.6	930.0	234.4
Less: <i>Consumption</i>	427.8	414.9	447.7	435.8	420.7	398.5	371.5
Personal Saving	35.3	112.8	-29.6	-157.4	476.8	531.7	-137.3
Personal Saving Rate	5.64%	5.09%	5.67%	4.24%	5.61%	4.10%	5.01%

Second, there was a significant downward adjustment in the “Compensation” category in 2011 such that the rate of growth decreased from 3.34% to 2.81%.

Table 6B
Percentage Change in Nominal Personal Income and Its
Disposition for 2010, 2011, 2012 and 12 Months Ending June
2013 — New and Old Data
(in billions of dollars)

	2010 New Data	2010 Old Data	2011 New Data	2011 Old Data	2012 New Data	2012 Old Data	June 12- June 13 New Data
Personal Income	4.77%	5.33%	4.63%	3.64%	7.94%	8.23%	3.11%
Compensation	3.57%	3.34%	2.81%	3.34%	6.80%	6.70%	3.29%
Proprietors' Inc.	3.38%	11.66%	11.05%	1.83%	5.07%	5.33%	8.36%
Rental Income	22.11%	14.67%	19.44%	19.50%	7.28%	11.35%	8.48%
Asset Income	6.60%	7.93%	4.59%	1.56%	18.90%	22.32%	3.70%
Government Transfers	4.64%	5.21%	0.17%	0.19%	4.06%	3.75%	3.52%
Less: <i>Personal Taxes</i>	6.94%	6.01%	4.50%	5.05%	9.47%	8.72%	14.39%
Disposable Income	4.19%	4.88%	3.63%	2.46%	7.52%*	8.01%	1.92%
Less: <i>Consumption</i>	4.11%	4.00%	4.13%	4.04%	3.73%	3.55%	3.23%
Personal Saving	5.54%	25.82%	-4.40%	-28.63%	74.14%	135.5%	-20.08%

*2.68%, if tax-avoidance timing impacts on “Compensation” and “Asset Income” are removed

Third, “Asset Income” increased substantially in 2011 but was not much different in 2010 or 2012.

Overall, the most significant adjustments occurred in data for 2011. Growth in disposable income declined in 2010 to 4.19% and rose in 2011 to 3.63%, bringing the percentage changes much closer together in both years.

Changes between unrevised and revised data in 2012 were generally not large. Because of the surge in recognition of “Asset Income” at the end of 2012 in response to impending increases in tax rates in 2013, growth in disposable income was elevated at an unsustainably high level of 7.52%, which was reduced only modestly from 8.01% in the unrevised data. “Asset Income” exceeded its trend values by approximately \$307 billion and “Compensation” exceeded its trend values by about \$271 billion in November and December 2012. If these amounts are backed out, the increase in disposable income in 2012 would have been 2.68% instead of 7.52%, which suggests

a sequential deceleration in the revised growth rates in disposable income from 2010 to 2012.

3. Percentage Changes in Personal Income and Disposable Income 2011, 2012 and 12 Months Ending in March, April, May and June 2013

Because the recent data volatility makes it difficult to discern trends, I have included **Table 7** which compares percentage changes, based on revised

Table 7
Percentage Change in Personal Income and Its Disposition for
2011, 2012 and 12 Months Ending March, April, May and June
2013
(New Data)

	2011 Pct. Change	2012 Pct. Change	Pct. Change Mar 12- Mar 13	Pct. Change Apr 12- Apr 13	Pct. Change May 12- May 13	Pct. Change Jun 12- Jun 13
Personal Income	4.63%	7.94%	2.91%	2.69%	3.08%	3.11%
Compensation	2.81%	6.80%	2.39%	2.48%	3.07%	3.29%
Proprietors' Inc.	11.05%	5.07%	12.28%	10.80%	9.68%	8.36%
Rental Income	19.44%	7.28%	10.48%	9.46%	8.86%	8.48%
Asset Income	4.59%	18.90%	2.11%	2.82%	3.31%	3.70%
Government Transfers	0.17%	4.06%	4.07%	2.87%	3.57%	3.52%
Less: <i>Personal Taxes</i>	4.50%	9.47%	12.92%	13.27%	14.09%	14.39%
Disposable Income	3.63%	7.52%*	1.91%	1.60%	1.93%	1.92%
Less: <i>Consumption</i>	4.13%	3.73%	3.10%	2.59%	2.82%	3.23%
Personal Saving	-4.40%	74.14%	-18.87%	-16.06%	-13.67%	-20.08%
Personal Saving Rate	5.67%	5.61%	5.26%	5.18%	5.11%	5.01%

*2.68%, if tax-avoidance timing impacts on "Compensation" and "Asset Income" are removed

data, for 2011 and 2012 and the 12-month periods ending in March, April, May and June 2013. The 12-month periods simply take the difference between data for a month in 2012 and the same month in 2013. This method omits the anomalies in the year-end 2012 data. By showing four successive 12-month periods, one can get some sense of the underlying trend in various

income categories. However, as a caution, the data will be revised many times in the future. So, what appears to be a trend now, may be revised away later on.

The first two columns and the last column of **Table 7** replicate percentage changes shown in **Table 6B**. These columns are included to give a better sense of the longer run trends in various components of personal income.

Growth in personal income and disposable income has been weaker so far in 2013 than it was in 2011. Overall, personal income growth is growing more slowly than in 2011. Slower growth in “Proprietors’ Income”, “Rental Income” and “Asset Income” are contributing factors and more than offset the improvement in “Government Transfers”. In addition, growth in personal taxes is sharply higher in 2013 reflecting increases in personal income tax rates for the wealthy and higher payroll taxes. This latter development has depressed growth in disposable income to a sub-2% rate. This phenomenon will continue through the rest of 2013 for year-over-year comparisons, but will end in January 2014.

4. Consumption

Revised data in **Table 6A** show slight increases in consumption growth in 2010, 2011 and 2013. However, **Table 7** indicates that a decelerating trend in consumption growth commenced in 2012 and is continuing in 2013.

When the data are viewed on a year-over-year basis in **Table 7**, the rate of growth in consumption spending slowed from 4.13% in 2011 to 3.73% in 2012. The slowing pattern has continued into 2013 and was 3.23% over the twelve months ending in June and has averaged 3.04% over the first six months of 2013 compared to the first six months of 2012.

Except for the one-time boost in personal income at the end of 2012 consumption growth has exceeded income growth in recent years. This means that households are reducing their saving rate to sustain consumption. In the longer run this is not sustainable. Either consumption growth will have to slow further or income growth will have to accelerate.

Prospects for acceleration in income growth in coming months will de-

pend primarily upon employment growth and the types of new jobs and to a lesser extent on wage rate growth. While employment growth has been good, it has not been great. Moreover, a disproportionate amount of new jobs have been in the part-time and lower wage categories.

This implies that because consumption growth exceeds income growth, the risks remain tilted in the direction of 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 credit for consumer goods, especially autos, is readily available.

5. Saving — Revisions and Outlook

Except at the end of 2012 consumption growth has exceeded income growth persistently over the last two years with the consequence that the saving rate has declined steadily from 5.9% to 4.4%. Stabilization of the saving rate near 4.5% 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.

Chart 6 compares the revised saving rate with the unrevised saving rate. On average between 1980 and 2013 the revised saving rate is 1.0% higher, although the differences from year to year vary considerably.

Chart 7 shows the forecast saving rate for Bill's "**Slow Growth**" and "**Strong Growth**" scenarios. The saving rate declines in both scenarios from the recent level of approximately 4.5% to about 3.25%. The entire decline occurs in the next three quarters after which the saving rate stabilizes but improves little. The decline is somewhat greater in the "**Strong Growth**" scenario. Forecasts for both scenarios indicate that households are unlikely to attempt to increase their saving rate. To the extent this actually occurs, this forecast is supportive of gradual improvement in economic activity in coming quarters.

CHART 6 – Consumer Saving Rate: New & Old Data
(quarterly average rates)

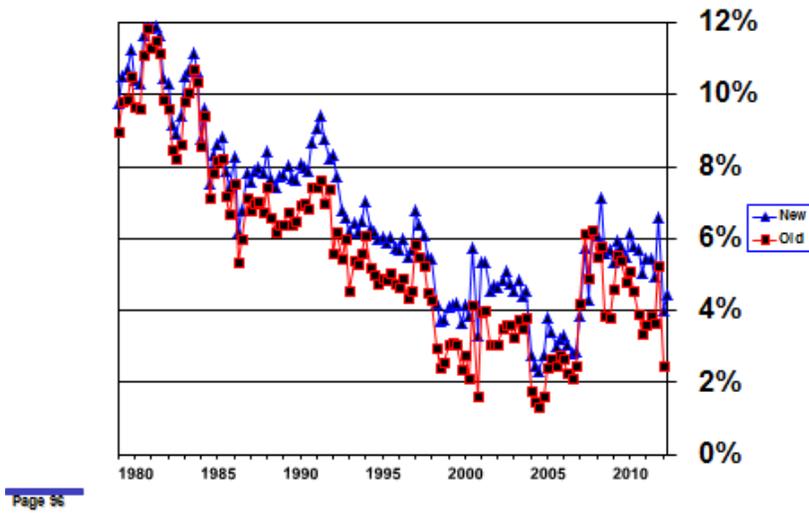
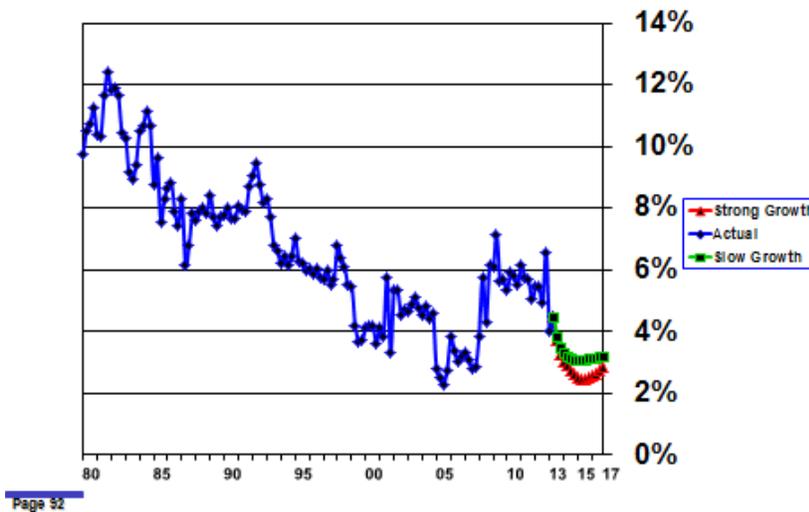
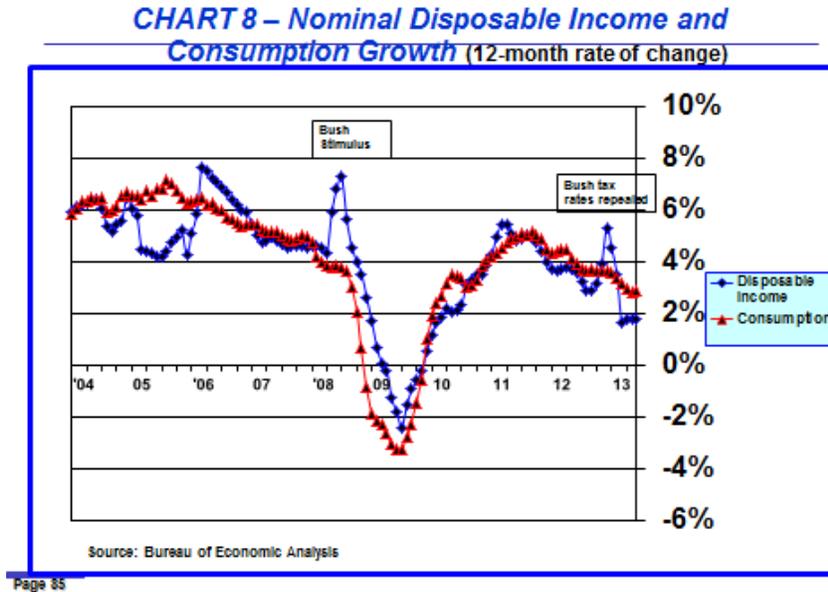


CHART 7 – Consumer Saving Rate Forecast
(quarterly average)



6. Disposable Income and Spending

Chart 8 shows the nominal rate of growth in disposable income and con-



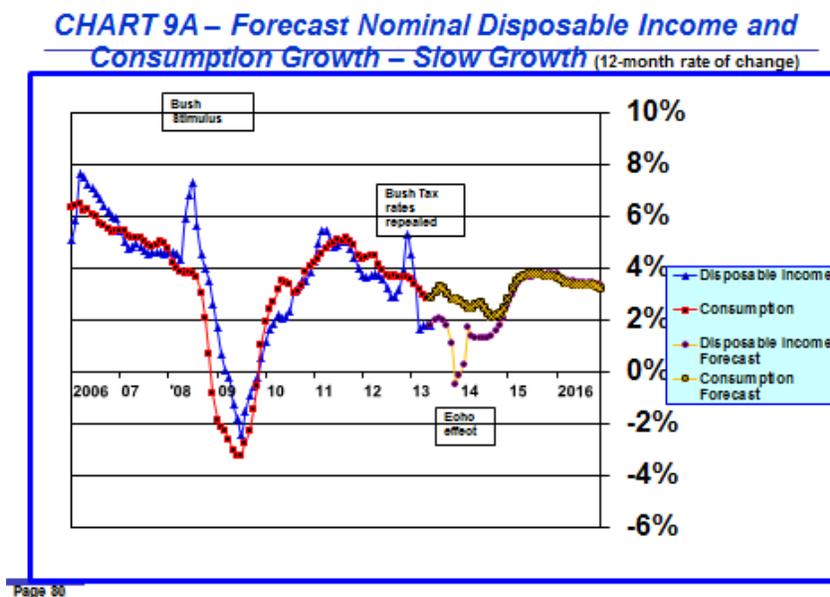
sumer spending from 2004 to the present. Growth rates are calculated as changes in quarterly averages year over year. This method smooths timing anomalies to a certain extent, although major events such as occurred at the end of 2012 will still impact the observed trend for the following 12 months.

The annual rate of growth in disposable income began slowing in early 2011 and declined from 5.5% in April 2011 to 2.9% in September 2012, but then surged to 5.4% in December, followed by a resumption of the decline to 1.8% in June.

Chart 8 shows that growth in consumer spending, after peaking at 5.2% in September 2011, slowed to about 3.7% in July 2012, remained at that level until December 2012 and has since declined further to 2.9% in June 2013.

7. Outlook for Nominal Disposable Income and Spending

As can be seen in **Charts 9A** and **9B**, I expect consumer disposable income



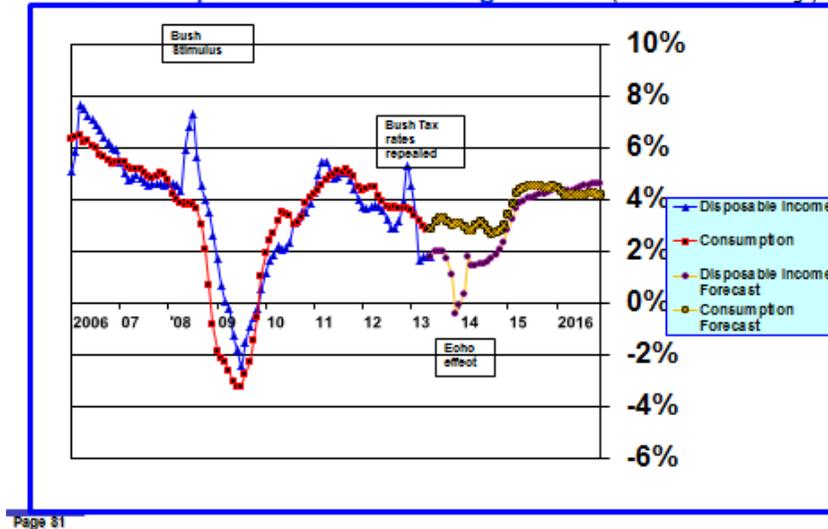
growth will slow in coming months. This trend is not in doubt because of the 12-month moving average calculation method.

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 9A shows my “*Slow Growth*” scenario forecast for growth in nominal consumer disposable income and consumption through 2016. The story **Chart 9A** 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 9B shows my “*Strong Growth*” scenario forecast for growth

CHART 9B – Forecast Nominal Disposable Income and Consumption Growth – Strong Growth (12-month rate of change)

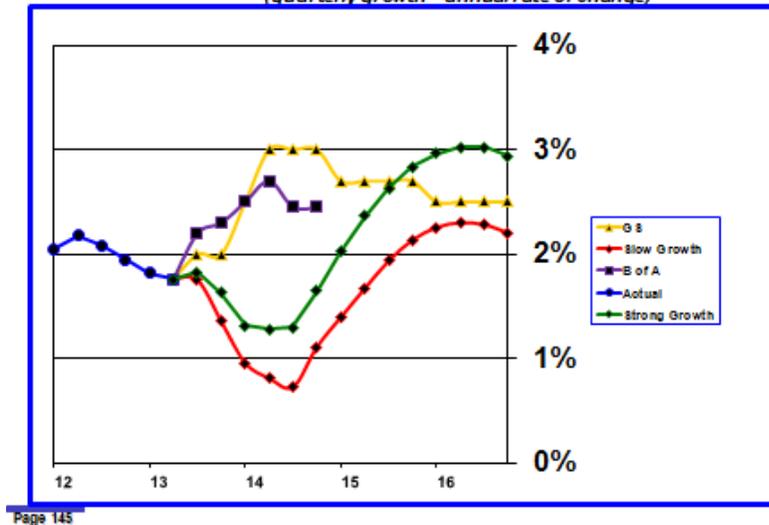


in nominal consumer disposable income and consumption through 2016. Higher rates of growth in employment and productivity in the “**Strong Growth**” scenario lead to stronger growth in nominal disposable income and consumption by about 0.2% to 1.2% during 2014-2016 with the improvement widening over time. Importantly, most of the effect of the faster growth in employment on inflation in this scenario is offset by the benefits of increased productivity. This means that the improvement in real income and consumption growth is nearly the same in the “**Strong Growth**” scenario as the improvement in nominal income and consumption growth.

8. Real Consumer Spending Forecasts

Chart 10 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 1.56% for the two remaining quarters in 2013.

CHART 10 – Real Consumer Spending Growth - Forecast
(quarterly growth – annual rate of change)



Both my “*Slow Growth*” and “*Strong Growth*” scenarios forecast much weaker real consumer spending growth in 2013 and 2014 than either GS or B of A. My “*Strong Growth*” forecast exceeds GS’s forecast by the end of 2015 (also see **Table 8**).

9. Contributions to Changes in Real Consumer Spending

First quarter spending growth was the strongest since the first quarter of 2012 and exceeded initial expectations. However, first quarter growth was lowered in the recent revisions to GDP to 2.25%. 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. Growth slowed to 1.79% in the second quarter.

My econometric model’s estimate of the consumer spending real growth rate was 2.31% in the first quarter and 1.49% in the second quarter. Note that **Chart 9A** indicated that nominal growth slows to nearly 2% by late

2014 before recovering — the same pattern occurs for the growth rate in real spending.

Monthly real consumer spending in my model depends upon hours worked, productivity, the inflation-adjusted federal budget deficit, changes in real housing prices, changes in real stock prices and the saving rate. Then, the real growth rate is derived by calculating the rate of change in real consumer spending.

With the exception of the hours worked variable, which has an average lagged impact of 2.4 months, the lagged impact of all other variables is much longer. As can be seen in **Table 8**, a reduction in the savings rate and an

Table 8
Contributions to Changes in Real Consumer Spending and
Forecast Annual Growth Rates

Variable	Lagged Impact (in months)	Contribution		Projected Contribution*		
		Q2 2013	Q3, Q4 2013	2014	2015	2016
Hours Worked	2.4	28.8%	92.4%	37.6%	18.8%	14.4%
Productivity	17.9	74.4%	129.8%	80.1%	43.4%	45.0%
Federal Deficit	52.3	-65.4%	-198.4%	-73.5%	0.4%	9.5%
Housing Prices	43.8	-18.0%	-41.6%	-9.5%	-7.3%	-3.4%
Stock Prices	14.4	77.9%	80.2%	34.1%	28.1%	29.7%
Savings Rate	16.3	2.4%	37.6%	31.2%	16.6%	4.8%
ANNUAL GROWTH RATES						
Bill's Slow Growth		1.49%	0.82%	1.12%	2.15%	2.22%
Bill's Strong Growth		1.49%	1.37%	1.66%	2.86%	2.97%
GS		1.79%	1.91%	2.65%	2.80%	2.57%
B of A		1.79%	2.27%	2.55%		

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

increase in stock market wealth contributed 80.3% of the increase in second quarter consumer spending.

During the remainder of 2013 my model forecasts real consumer spending growth will slow to a year-over-year rate of 1.20%. The major contributors to growth in real consumer spending will be hours worked and productivity. The lagged effect of the recent rise in stock prices also has a significant

favorable impact as does the recent decline in the saving rate. As would be expected the decline in the federal deficit has a negative effect on real consumer spending. Contrary to what many believe, the recent rise in housing prices does not contribute positively to growth in real consumer spending. This is due to the long lag times between changes in home prices and their impact on real consumer spending. Also, this result is intuitively plausible. While refinancing activity has been strong in recent months, little equity extraction has occurred. In addition, tight underwriting standards have limited the ability of homeowners to obtain equity lines of credit.

Rising stock prices have had and will continue to have a significantly favorable impact on real consumer spending over the 2014-16 period. 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. The negative effect of reduced federal spending continues through 2014 but ceases to be important after that. As the saving rate stabilizes after 2014, this variable's impact on real consumer spending diminishes.

In the long run the principal drivers of real consumer spending are hours worked, productivity, financial wealth and housing wealth. Over the last 25 years, these categories have accounted for 99.5% of the growth in real consumer spending. Hours worked and productivity contributed 87.7% and increases in wealth contributed 12.8% with financial wealth about four times more important than housing wealth. *Thus, strong growth in real consumer spending depends predominantly on growth in employment and productivity. Growth in real consumer spending will not increase materially until both employment and productivity improve substantially. 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.*

10. Consumer Confidence

Measures of consumer confidence have been relatively stable over the last month. For example, the University of Michigan's consumer sentiment index

was 85.1 in July compared to 84.1 in June and 84.5 in May. ISI's company surveys diffusion index peaked at 52.3 in the week of June 7, edged down slightly to 51.3 in the week of August 2 and rose a tad to 51.7 in the most recent week. The Conference Board's measure of consumer sentiment fell slightly to 80.3 in July from 82.1 in June.

Overall, consumer confidence measures are supportive of slow growth in consumer spending.

IV. Inflation

BEA revised PCE inflation measures and benchmarked them to 2009 as part of the comprehensive revisions to the national income accounts released on July 31 and August 2.

1. Total and Core PCE Inflation Revisions

Chart 11 shows the old and new total PCE inflation rate and **Chart 12** shows the old and new core PCE inflation rate.

CHART 11 – Total PCE Inflation
(percentage change over previous 12 months)

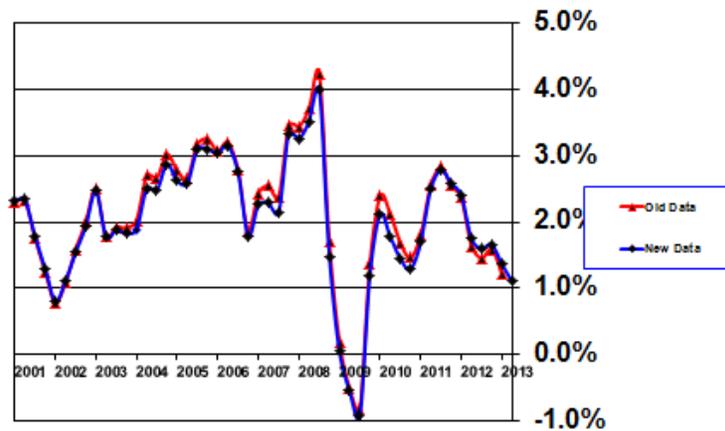
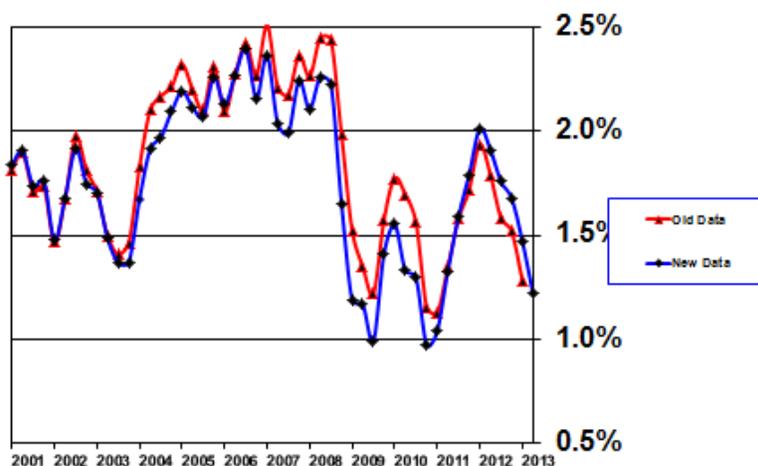


CHART 12 – Core PCE Inflation
(percentage change over previous 12 months)



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Generally, the new data reduce slightly total PCE inflation; however, there is a small increase in recent months. This pattern is the same for both total and core PCE inflation.

2. Prospects for PCE Inflation

Core PCE inflation was 1.22% in June. Total PCE inflation was 1.31% in June (see **Chart 11**). The total PCE measure of inflation is much more volatile and has been negative for short periods of time in the past. For that reason the FOMC prefers to focus on the core PCE inflation measure.

PCE inflation is well below the FOMC's target level of 2% and is heading toward the lows experienced briefly in mid-2009 and late-2010 when the FOMC was concerned about the threat of deflation. However, until its most recent meeting FOMC members, with the exception of James Bullard, had not expressed concern about the below target level of inflation. Instead, previous FOMC policy statements expressed the view that the low level of inflation was temporary. At the July 31 meeting the FOMC amended its policy statement as follows: *"The Committee recognizes that inflation*

persistently below its 2 percent objective could pose risks to economic performance, but longer-term inflation will move back toward its objective over the medium term.” Thus, the FOMC remains relatively unconcerned about the current low level of inflation. Nearly all forecasters expect inflation to edge back up but many don’t expect that to occur as quickly as implied by FOMC member projections of inflation rates.

Part of the rationale for expecting inflation to move higher is assigned to so-called “temporary distortions” that are depressing inflation and which are anticipated to dissipate in coming months. For example, elimination of transitory factors, such as medical prices, would add only about 0.25% to PCE core inflation. That would mean that the “stable” core PCE index in June was 1.5% rather than the reported rate of 1.22%.

As can be seen in **Table 9** shows historical core PCE price index data and data from **Table 9** in graphical form), all forecasts of the core PCE inflation index indicate that inflation should rebound from its current low level of 1.22% to 1.2% to 1.6% in 2014, which is generally 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 forecasts occurs because of the large and persistent gap between actual and potential real GDP. (**Chart 13**)

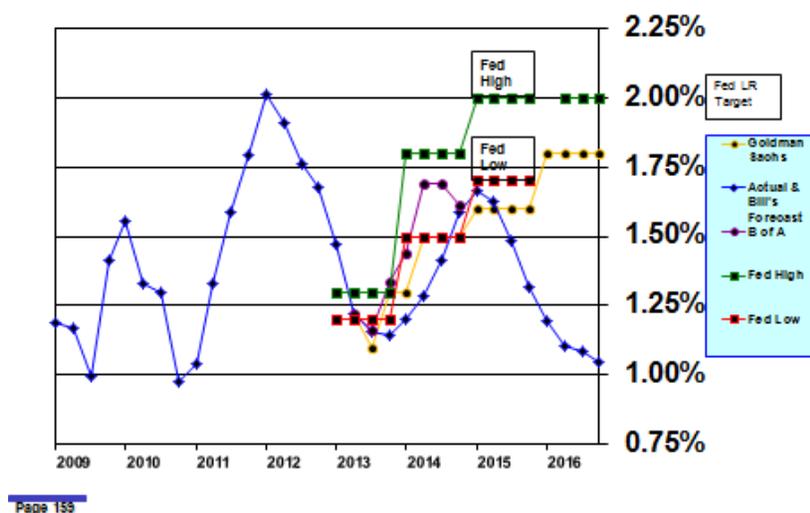
Table 9
Core PCE Inflation Forecasts — B of A, GS, Bill’s “Slow Growth”, Bill’s “Strong Growth” and FOMC High and Low

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

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.

CHART 13 – Core PCE Inflation Forecasts
(percentage change over previous 12 months)



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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.

3. Risk of Persistently Low Inflation

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.*”⁷ 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, 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. Inflation expectations are 1.5% for the 10-year forward time period.

Survey measures of expectations have 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 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. The recent reversal of hot money financial flows in some emerging economies 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 1.22%, 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

⁷Paul Krugman. “Not Enough Inflation,” *The New York Times*, May 2, 2013.

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.

V. Prospects for Productivity — May Not Be As Good As Many Would Have You Believe

Macroeconomists do not pay a great deal of attention to productivity when making forecasts. Generally, it is presumed that productivity will be relatively constant over a long time period with modest cyclical fluctuations. For example, productivity falls as a business cycle matures and then rises after a recession commences as organizations strive to cut excess costs.

However, over the long term the level of productivity is important in determining the rate of growth in potential real GDP. As I have explained in previous letters, potential real GDP growth depends on growth in the labor force (hours worked) and productivity growth. We know with certainty that labor force growth is slowing because of lower birth rates and aging of the population. Policies can influence incentives to work and can increase or decrease immigration rates and thus modify to a certain extent the impact of natural demographic processes. However, when all is said and done, the labor force will grow more slowly in the future than it has in the past. This means that potential real GDP growth will be depressed by that differential, whatever it turns out to be.

There seems to be a presumption by some that somehow, someday we should be able to get back to the historical 3.2% real GDP potential growth rate. That will not be possible unless productivity in the future is much greater than it has been in the past. This seems unlikely. Indeed, the risk is that productivity may fall short of its historical level of 2.2%. The FOMC and CBO acknowledge the decline in labor force growth in their estimates of long-run potential GDP growth. The FOMC expects potential GDP growth to be between 2.3% and 2.5%. CBO expects potential GDP growth to be about 2.2% in 2023. Embedded in CBO's potential GDP growth rate is an assumption that productivity increases 2.1% annually, near the historical

average rate.

1. Determinants of Productivity

Productivity occurs when the measure of output rises per unit of inputs. Principal inputs include labor and capital.

Labor can contribute to increased productivity through education and training. But jobs must exist that take advantage of higher level skills. There is no addition to productivity when a PhD economist is forced to work as a Wal-Mart associate. Thus, policy needs to focus not solely on enabling greater numbers of people to obtain college or advanced vocational training. Policy also needs to focus on creating jobs requiring the skills such advanced education develops. Currently more people than ever before are going to college, but fewer high-skilled jobs are being created. In fact, as discussed in Section VI below, more than 100% of the job growth since the Great Recession has taken place in low-wage, low-skill jobs. This has been a persistent trend. There is no indication of potential reversal.

Thus, to create more high-skilled jobs policies that encourage research and development and technological and process innovation are crucial. This entails constructing supportive governance and regulatory regimes. It also requires creating a financing system that encourages investment and risk taking. Private finance is discouraged when risks are too great — the expected risk-adjusted return is simply not sufficient to induce investment. When that is the case, government policy can attempt to reduce the risks through regulatory streamlining or by providing incentives and subsidies. Or, alternatively, the government can engage directly in investment. Government investment is obviously essential for public works, such as a national transportation system. But during periods when the output gap is large and private investment risks are high government investment in initiatives, which the private sector could do but won't because the risk-adjusted returns are insufficient, is merited.

Significant technological advances are important in providing the opportunity to accelerate productivity. But without an enabling policy environment and adequate availability of financing, technological breakthroughs won't automatically lead to higher productivity. Historically, significant technological advances such as railroads in the 19th century; electrification

in the early 20th century; interstate highways, the space program and home appliances in the mid-20th century; and, more recently, fiber optics and information processing at the end of the 20th century have led to extended periods of high productivity. However, each advance required years to exploit and substantial financial investment was an essential ingredient.

2. Optimism About Increased Productivity In Coming Quarters

GS and B of A both have recently published optimistic analyses of productivity prospects. They begin by acknowledging that productivity has slowed sharply in recent years.

Over the last nine quarters productivity has average about 0.9% annually, substantially below the long-run 2.2% average. Recent data revisions which raised real GDP by 3.2% will raise measured productivity as well. Thus, it is probable that measured productivity will rise when the Bureau of Labor Statistics (BLS) releases revised data on August 16. But the increase isn't likely to be large because the 3.2% increase in the level of real GDP will be spread over many years in the productivity data.

GS correctly pins the primary blame for low productivity on low investment spending. BLS decomposes total productivity into three categories — labor composition (education and experience), capital intensity (amount of capital per worker) and total factor productivity (the difference between total productivity and the other two categories — what can't be measured directly). GS notes that the recent shortfall in productivity from its long-term expected trend level of 2.0% is entirely due to capital intensity. That shortfall, in turn, stems directly from low capital expenditures in recent years. Based on this analysis, it naturally follows that if business capital expenditures increase, then capital intensity productivity will also increase.

GS's analysis is valid but embedded in it is a leap of faith that business capital expenditures will increase. GS's argument is that business investment historically has been cyclical and that as GDP growth picks up and the output gap shrinks business investment will accelerate. High expected rates of return on investment, easy access to cheap financing, significant pools of cash, strong profitability and diminishing policy uncertainty will combine to push investment and, thus, productivity much higher.

GS acknowledges risks that structural factors may retard productivity improvement but argues that such risks are embedded in total factor productivity and there is no evidence that this source of productivity has diminished in recent years.

B of A also expects productivity to improve substantially in coming quarters. B of A points out that over the last year employment for those with a college education has grown 3.4% compared to 1.0% for those with some college and 0.4% for those with a high school education. Employment has decreased -3.0% for those without a high school education. On the face of it this looks encouraging. But, as mentioned above, education is only half of the story. The rest of the story is that higher-skilled jobs need to be available for higher-skilled people. The BLS's employment data don't show that that is happening.

B of A also cites the lack of job turnover as inhibiting productivity improvement. Presumably as the labor market tightens turnover will pick up and so will productivity. There is research to support this expectation but its realization requires substantial improvement in the labor market — an outcome that is taking a long time to develop.

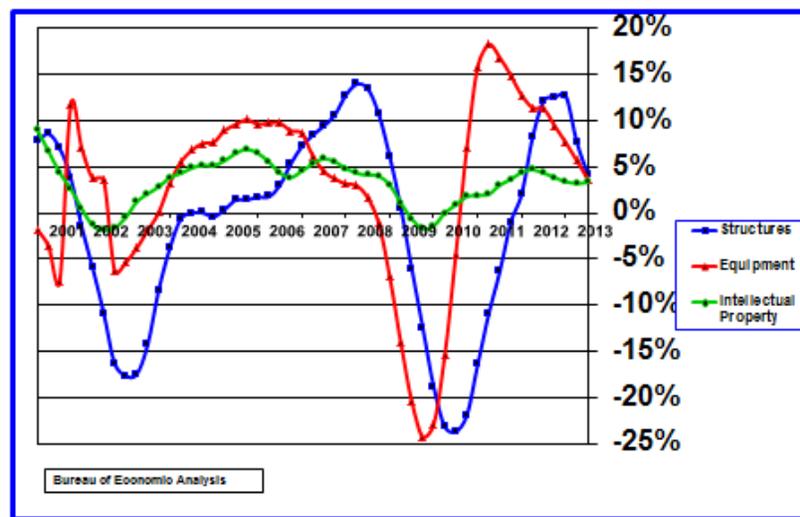
Lower rates of technological innovation would depress productivity. B of A finds there is no evidence that this is occurring and cites fracking, robotics and 3-D printing as examples of significant and far-reaching technological breakthroughs. So slower technological innovation is not a concern and I agree with that assessment.

B of A agrees with GS that low business spending on capital deepening is the primary culprit for lower productivity. There are three categories of nonresidential investment — structures, equipment and intellectual property. The National Income Accounts show that investment in structures remains deeply depressed but equipment investment has returned to pre-Great Recession levels. However, as shown in **Chart 14**, the growth rates for both structures and equipment have been slowing in recent quarters. Notably, the growth rate in equipment spending is considerable below the level that prevailed during the mid-cycle growth period of 2004-2006. Also, compared to that prior period, growth in intellectual property investment is somewhat less.

B of A observes that the outstanding capital stock is growing at the slow-

est rate in 60 years because new investment is barely exceeding depreciation. However, for reasons similar to those articulated by GS, B of A expresses optimism that the growth rate in the capital stock is poised to accelerate.

CHART 14– Nonresidential Investment
(Structures, Equipment & Intellectual Property)



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3. Optimism About Increased Productivity May Be Misplaced

Optimism about improving productivity is based on historical cyclical patterns. While some of the analysis appears to support this optimism, there are some critical missing links. For example, more skilled people need to be connected to the right jobs. It is not clear that such a matching process is occurring. Most all of the analysis has focused on private sector investment. But, historically government investment has been extremely important in boosting productivity. Investment at all levels of government is extremely weak and there are no prospects for significant improvement in coming quarters. Finally, the current economic recovery has been extremely weak. Even if growth accelerates a bit in coming quarters, it will still take a long time to close down the output gap. What this means is that aggregate demand will recover slowly and that will continue to take the pressure off the business

sector to make capital investments to improve capacity.

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

4. Could the Shale Oil/Shale Gas Energy Revolution Galvanize Productivity?

Charles R. Morris recently published a book Comeback: America’s New Economic Boom in which he attempts to make the case that the emerging energy boom will catapult real GDP growth back to “traditional” rates of 3.5%.⁸ To begin with, the historical real GDP growth rate has been 3.2% and will be lower in the future because of slower labor force growth. That said, the emerging energy boom certainly does have the potential to accelerate productivity growth provided that the regulatory environment is conducive and risk-adjusted investment returns are sufficient to attract abundant amounts of private capital. Environmental regulation is of particular concern.

Morris correctly acknowledges that it will take several years to develop and lock in the benefits of abundant cheap energy. Potential longer-term benefits include limited to no reliance on foreign sources to meet energy needs and cheaper manufacturing costs which make U.S. products more competitive in global markets. Implications include a substantial decline in the U.S. trade deficit and downward pressure on inflation for years to come.

On balance the potential to harvest abundant and cheap energy has many positive implications. It will take time to develop this potential and

⁸Charles R. Morris. Comeback: America’s New Economic Boom. Paperback edition published on June 11, 2013 by PublicAffairs.

many policy issues and structural impediments will need to be resolved. This will not be easy and political considerations have the potential to slow the developmental process.

To the extent that the U.S. trade deficit shrinks dramatically there would be monetary consequences for a world which relies on the U.S. dollar as the reserve currency. While we may not like the fact that the U.S. has run large trade and current account deficits in recent years, those deficits are important to assuring that the global economy has adequate liquidity to finance trade and investment. Shrinkage in the pool of available U.S. dollars will result in tighter global liquidity. This has negative implications for global growth as India is currently discovering.

Although Morris's claims that the energy revolution will bring back the good old days of high real growth are greatly exaggerated, there should be little doubt that over time this development is a game changer which will have far-reaching impacts not only on the U.S. economy but also on the global economy.

VI. Employment

In spite of higher taxes and the federal government's mandatory spending cuts, monthly payroll growth has held up well, rising an average of 192,000 monthly so far in 2013. 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 2.0 million fewer people employed than in January 2008 according to June's payroll data and 2.1 million fewer according to the household survey. The unemployment rate is 7.4% versus a pre-Great Recession low of 4.4%. But, if approximately 1.7 million discouraged workers are counted, the current unemployment rate would be in the vicinity of 8.5%. According to CBO, full employment will be reached when the unemployment rate falls to 5.5%, which would require 2.9 to 4.6 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 sub-

stantial 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 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 the shortcomings of this measure and emphasize that many other labor market measures enter into policy setting, this introduces considerable complexity into attempting to understand the timing and extent of policy normalization. Market participants have difficulty dealing with the opaqueness of complexity and appear to be more comfortable with simple decision rules. This means that the flawed measure of the unemployment rate and perceptions about how the FOMC might adjust monetary policy in response to improvements in this measure have had greater impact on interest rates and financial conditions than the FOMC desired.

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. July Payroll Report

Employers added 162,000 jobs in July, slightly below expectations of 185,000. However, revisions to May and June jobs subtracted 26,000 jobs, resulting in an overall increase of 136,000. The 12-month rate of growth remained stable at 1.70%.

There continued to be limited evidence in the report to indicate that mandatory cuts in the federal budget are having an impact on employment levels. The drop of 0.1 hours in the work week and the fall in hourly wages from \$24.00 to \$23.98 may reflect the impact of sequester-induced employment furloughs.

2. June Household Jobs Report

Household employment has increased strongly in the last four months — 226,000 in July, 160,000 in June, 319,000 in May, and 293,000 in April. This has helped increase the 12-month growth rate to 1.43%, but household job growth is still below payroll growth of 1.70% over the last 12 months. 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 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 is shrinking but may 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 and subsequently revised upwards.

Average weekly hours worked declined to 34.4 in July from 34.5 in June. 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. Composition of Employment Growth Is Skewed to Lower-Wage and Part-Time Jobs

Because a disproportionate share of second quarter job growth, about 49%, was 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 more subdued than the raw percentage increase in employment implies. 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.

This pattern of low quality job growth continued in July. Payroll job increases were concentrated in the low-wage sectors of retail trade and leisure/hospitality.

Low-wage retail trade, leisure/hospitality, education and other service jobs accounted for 36.34% of total jobs at the beginning of the Great Recession in December 2007. These categories increased to 38.43% of total jobs in July 2013. Although this may seem like a small change, it is extremely significant. During this 5 and a half year period, jobs in the low-wage categories increased 2.3 million but jobs in the high-wage categories decreased 4.3 million.

Another indicator of employment quality is the ratio of part-time employees to total employees. That ratio soared from 16.9% in December 2007 to 19.6% in June 2009, which was the final month of the Great Recession. What is disturbing, however, is that since the end of the Great Recession, this ratio has failed to decline over the past four years of economic recovery. It still was 19.6% in July 2013. Again, the tale is even worse when percentages are converted to numbers of jobs. Since the beginning of the Great Recession to July 2013, 5.5 million full-time jobs have disappeared; 3.5 million of these jobs have been replaced by part-time jobs.

Recent experience is hardly any better. About 69% of jobs created in the second quarter of 2013 and 57% in the first half of 2013 were in the low-wage categories of retail trade, leisure/hospitality and administration/waste services, which account for about one-third of total jobs. Average hourly pay for these jobs was about \$15.80 compared to \$27.16 for the remaining two-thirds of jobs. And, this is not the end of the bad news. Wages, adjusted for inflation, declined 0.69% for the low-wage jobs over the last year. Real wages eked out a gain of 0.44% for high-wage jobs.

So, while the number of jobs is increasing and that is good news, part-time and lower wage jobs are accounting for a disproportionate share of this improvement — and that is the bad news. Wages are barely keeping up with inflation. *As long as these employment trends remain intact, and there is no indication yet of any change, personal income*

growth will remain weak. And, weak income growth means weak consumer growth.

4. Discouraged Workers or Structural Unemployment?

Employment remains 2.02 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 fell to 7.4% of the labor force in July — the number of unemployed workers declined by 263,000, while 163,000 were added to the labor force — those eligible and willing to work. The participation rate (those willing to work — includes both employed and unemployed workers — relative to those eligible to work) declined slightly from 63.46% to 63.40%. 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 58.67% to 58.71%.

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.

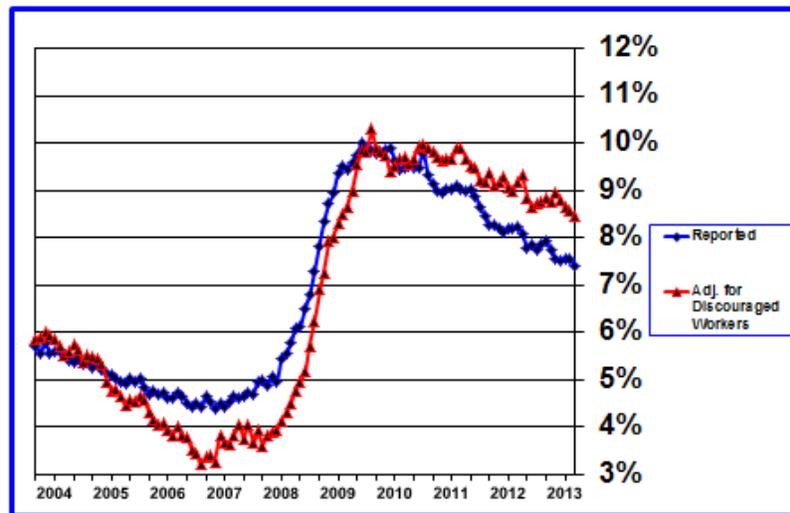
What is important from a policy standpoint is whether workers who are dropping out of looking for jobs will reenter the job market when jobs become more plentiful or whether their exit is permanent because there are no jobs that fit their skills and there won't be any in the future.

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 15**. 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.

CHART 15 – Reported Unemployment Rate & Adjusted for Discouraged Workers



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In July 2013, there were approximately 1.7 million discouraged workers who were not counted as unemployed. If the 1.7 million discouraged workers were counted, the unemployment rate would have been 8.48% rather than 7.39%.

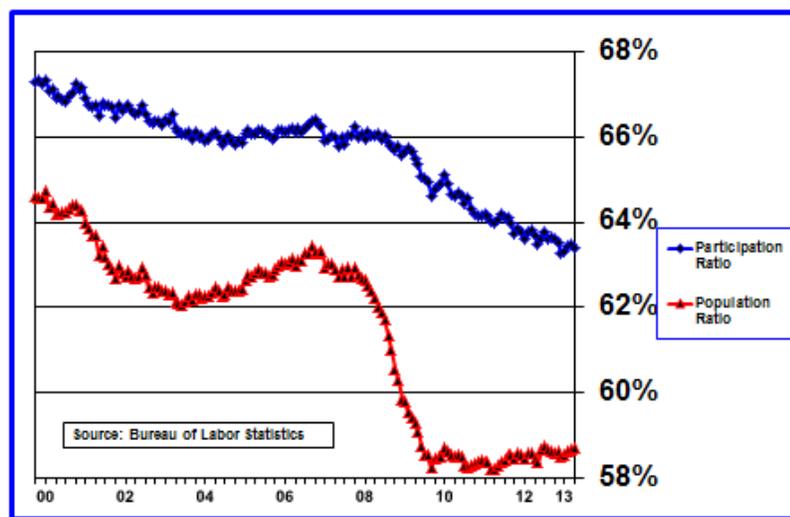
5. Labor Force Participation and Employment-to-Population Ratios

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 16**. The denominator of both ratios is the same — total number of people eligible to work. The difference in the numerators of the two ratios is the number of unemployed workers — those who say

they are looking for work.

When the Great Recession hit, the employment-to-population ratio plummeted from 62.9% 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 July 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.

CHART 16 – Labor Force Participation and Employment-to-Population Ratios



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If the employment-to-population ratio were the same today as it was in early 2000, about 64.5%, there would be 14.2 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 14.2 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 14.2 million to 11.0 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 6.4 million as the "optimal" number of additional workers. That 6.4 million is composed of 4.7 million who are currently looking for work (difference between 7.4% and 5.5% rate of unemployment) and 1.7 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 4.7 million, 14.2 million or some number between these two?*

6. Unemployment Rate

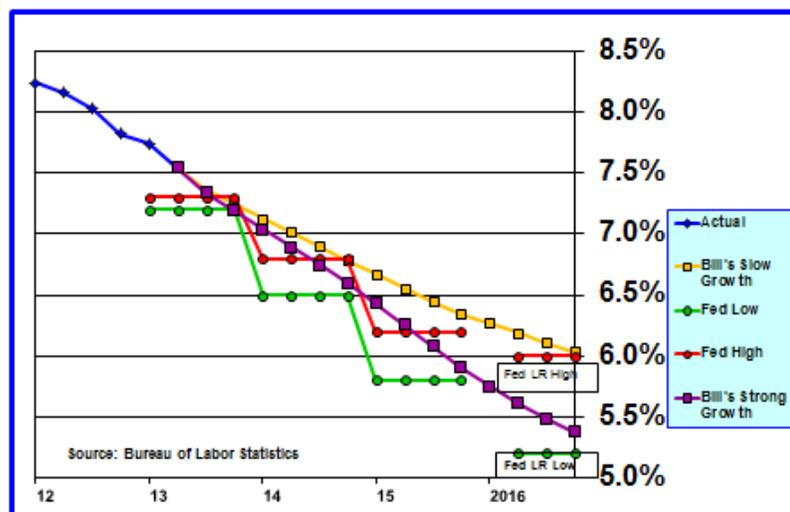
Because the FOMC has linked monetary policy explicitly to the unemployment rate, it is important to track this data point and various forecasts of when the unemployment rate is expected to reach 6.5%, which is the FOMC's stated threshold for considering whether to raise the federal funds rate. And, as 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 is down 692,000 since 2013 began. The unemployment rate fell to 7.39% in July. Over the

last year since July 2012 unemployment has decreased 1.2 million and the unemployment rate has decreased from 8.22% to 7.39%.

Chart 17 shows the FOMC's high (red line and circles) and low (green line and circles) unemployment rate projections for 2013, 2014 and 2015. The FOMC's projections imply that the first increase in the federal funds rate will occur in late 2014. That presumes, of course, 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, particularly since the labor market is considerably less strong than the current 7.4% unemployment rate implies.

CHART 17 – Unemployment Rate
(quarterly average)



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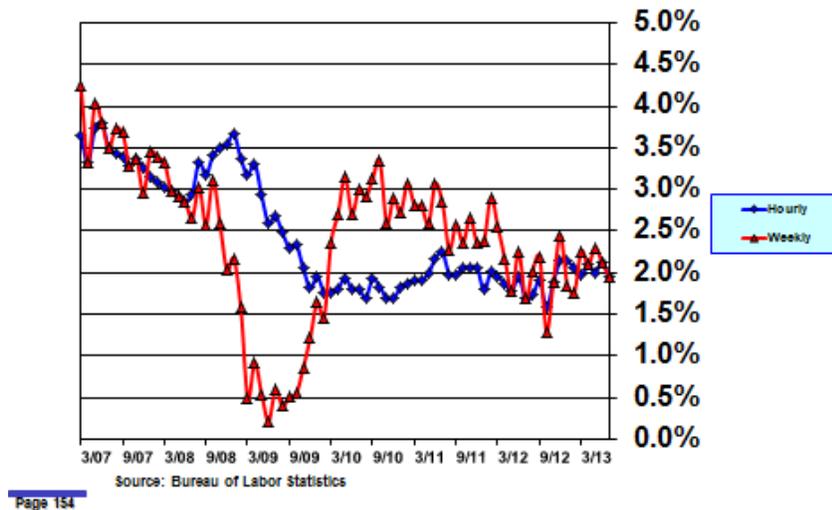
I have included in **Chart 17** unemployment rate forecasts for both my “*Slow Growth*” (yellow line and squares) and “*Strong Growth*” (purple line and squares) scenarios. The “*Slow Growth*” unemployment rate projection is slightly above the upper end of the FOMC’s range and the “*Strong Growth*” unemployment rate tracks slightly above the lower end of the FOMC’s range. The unemployment rate forecast in the “*Strong Growth*” scenario reaches the 6.5% threshold in early 2015. However, the unemployment rate in the “*Slow Growth*” scenario does not reach 6.5%

until late 2015.

7. 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 18**, the rate of growth in hourly

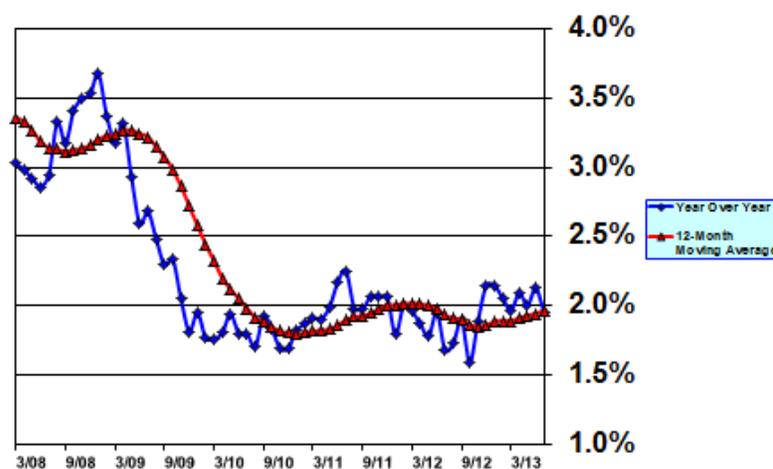
CHART 18 – Hourly and Weekly Wages
(annual rate of change)



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.

However, hourly and weekly wage growth really appears to be stuck at about 2.0%. **Chart 19** shows a slight improvement in the 12-month moving average rate of growth from 1.85% in November 2012 to 1.97% in July 2013, but the growth rate was 1.98% in June 2012. The 12-month rate of change in both hourly and weekly wages in July was 1.96%.

CHART 19 – 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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VII. Monetary Policy

In late May and during June the 10-year Treasury rate rose 70 basis points in the wake of quantitative easing tapering commentary from Fed Chairman Ben Bernanke that spooked the markets. Financial conditions tightened in the U.S. and in many global markets as well. Since then the tempest in the markets has abated as Chairman Bernanke and other Fed officials sought to clarify that tapering would be data driven. Financial conditions have eased somewhat but still remain tighter than they were in early May. The ten-year Treasury rate has stabilized but has not fallen.

1. FOMC July 31 Meeting

No one expected the FOMC to opine on tapering in its July 31 policy statement and the FOMC did not disappoint. The statement itself was little changed from the previous one.

Economic Assessment. The FOMC made a slight change in its assessment of *economic activity* by replacing “... *economic activity has been expanding at a moderate pace*” with “... *economic activity expanded at modest pace during the first half of the year.*” Observers interpreted the change in language as a slight downgrade based on the shift in the verb tense from present continuous to past and substitution of the word “modest” for the word “moderate”.

There was no change in the language regarding *employment* — conditions are improving but the unemployment rate remains elevated.

There was no substantive change in the conclusion that *housing* is strengthening, but a cautionary phrase was added: “... *but mortgage rates have risen somewhat ...*”

Not a single word was changed regarding *inflation* — the FOMC continued to cite “transitory influences” as responsible for the inflation rate being below its objective.

Outlook. Wording concerning prospects for *economic growth* was altered slightly from “... *economic growth will proceed at a moderate pace ...*” to “... *economic growth will pick up from its recent pace ...*” This was interpreted to acknowledge that growth had slowed but would improve. Such an outcome, of course, would be consistent with the FOMC’s optimistic GDP growth projections.

There were no changes in the *unemployment rate* or *risks* language. The unemployment rate will gradually improve and risks have diminished.

Perhaps the most significant language change concerned *inflation*. The FOMC added “*The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.*” Insertion of this language acknowledged James Bullard’s (president of the St. Louis Federal Reserve Bank) concern, but does not imply any policy action is likely unless low inflation persists.

Policy Statement. The only change in the policy paragraphs was a small wording change, which appeared to be a subtle way of emphasizing that tapering will not be followed quickly by increases in the federal funds rate: “...*the Committee today affirmed its view that that a highly*

accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and economic recovery strengthens.”

2. Next Steps — September FOMC Meeting

Most market participants still expect reductions in large scale asset purchases to begin in September, although a few, taking Chairman Bernanke at his word that timing will be data dependent, believe that tapering will begin later in the year because economic activity will continue to disappoint on the weak side.

Recent research indicates that guidance language is more effective than asset purchases in influencing interest rate expectations and, thus, is more effective in driving easier financial conditions, which are an essential outcome if monetary policy is to be effective when short-term interest rates are at the zero bound.

This has led to speculation that the FOMC will commence tapering at its September meeting but combine that announcement with stronger guidance language. That might involve returning to date-specific language for raising the federal funds rate or it might involve defining more precisely labor market and perhaps other metrics that must be met before the FOMC will consider raising the federal funds rate. As much as some FOMC members might like to provide greater clarity, which could limit a potential tightening of financial conditions, the lack of agreement among members and the difficulty of coming up with simple but reliable metrics argue against improved transparency. Unfortunately, as recent events have shown, lack of transparency leads to market uncertainty and market uncertainty leads to higher long-term interest rates and tighter financial conditions which collectively blunt the intended effect of monetary policy.

FOMC members will have another challenge at the September meeting. Their economic projections are clearly inconsistent in the near term with economic trends. GDP projections are too optimistic and inflation projections are on the high side. It seems likely that the 2013 projections will be marked to market, but that could send mixed messages if it decides to begin tapering. It will be interesting to see how the FOMC resolves these challenges or whether the lack of clarity that accompanied the June FOMC

meeting and confused the markets repeats again in September.

3. 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 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 could 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. India's central bank has been forced to defend its currency by raising short-term interest rates. As a result the yield curve has inverted. At the very least it appears that growth will slow substantially in India just as it did in Brazil earlier this year.

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 inevitable. But, U.S. economic activity needs to accelerate to support other global economies. If U.S. growth falls short it doesn't appear that any other country or countries are positioned to pick up the slack.

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.

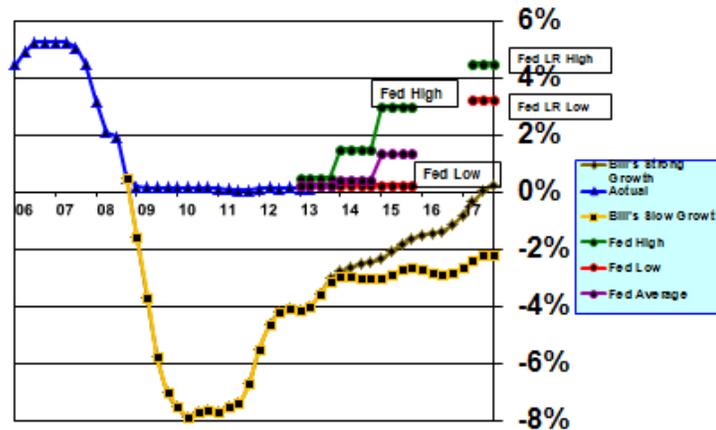
4. Federal Funds Rate

Chart 20 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). The projections imply that the first increase in the federal funds rate will take place either very late in 2014 or in early 2015.

B of A expects the first federal funds rate increase to occur in the summer

of 2015 and GS puts the timing in early 2016.

CHART 20 – Federal Funds Rate Forecast



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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. Most agree with the timing implied by the FOMC's projections. However, GS believes the first federal funds rate increase will not occur until early 2016.

VIII. Fiscal Policy

As we entered 2013 there were three significant fiscal policy issues in play — implementation of automatic spending cuts, 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 always seems to happen, when deadlines are moved nothing happens until the new deadlines are at hand. Thus, all three matters remain unresolved and the clock is ticking. The key date for sequestration and the budget, which are now linked, is the beginning of the government's new fiscal year on October 1, 2013. Thanks to tax increases and spending cuts, the deadline for raising the debt ceiling is a few weeks later.

As of this writing, Congress has made no substantive progress on any of these fiscal issues. Stalemate prevails. And, there is significant risk that September 30 could pass without any kind of resolution in which case part of the government would have to shut down. My sense is that neither Republicans nor Democrats have any desire to actually let that happen based on past experience. Politically speaking, shutting down the government, alienating the American public and scaring financial markets is a losing proposition for both parties. Thus, either a last minute deal or a "kick the can down the road" continuing resolution seems to be the likely outcome.

1. 2014 Fiscal Budget

Pertinent congressional committees have been working on specific appropriations bills over the past few months. Passage of such bills is an essential component of adopting a budget. However, it is possible for Congress to act in a piecemeal fashion by passing individual appropriations bills without adopting a comprehensive budget. Such an approach, however, will require a continuing resolution to be passed for those budgetary areas for which no appropriations bill is passed.

Republicans are determined to keep overall spending within budgetary caps. However, they, and Democrats as well, intensely dislike the blunt and impersonal nature of sequestration. Democrats want to restore spending to pre-sequestration levels. The difficulty for Republicans is that they cannot agree among themselves on what should be cut and what should not be cut.

Divisions among Republicans became visible recently when the Republican House leadership withdrew the Transportation-Housing and Urban

Development (THUD) appropriations bill from floor consideration. The problem arose because Republicans want to restore defense spending to pre-sequestration levels but maintain overall spending caps. This would require deeper spending cuts in discretionary programs than required by sequestration. But, some Republicans balked at cutting an additional \$4.4 billion in the THUD appropriations bill. So, the Republican House leadership withdrew the bill because it didn't have the votes to pass it.

Over in the Senate an alternative version of the THUD appropriations bill, which would raise spending above the sequestration-mandated level, was blocked by a Republican filibuster.

Other appropriations bills have been set aside in the House for lack of Republican consensus. One would cut the Environmental Protection Agency's budget from \$8.3 billion to \$5.5 billion and would result in reducing clean-water grants by 83%. Another appropriations bill covering labor, health and education programs entails deep spending cuts. It, too, lacks votes for passage.

Representative Harold Rogers (R-KY), who is chairman of the House Appropriations Committee, issued a public statement critical of the House leadership: "*Thus, I believe that the House has made its choice: sequestration — and it's unrealistic and ill-conceived discretionary cuts — must be brought to an end. And, it is also clear that the higher funding levels advocated by the Senate are also simply not achievable in this Congress.*" To be clear, Representative Rogers has not abandoned the Republic policy for reducing the budget deficit through spending cuts. His position is that cuts need to be spread across all categories, including defense and entitlements.

So, not only are Democrats and Republicans far apart on an approach to crafting a 2014 fiscal budget and accompanying appropriations bills, neither the Senate nor the House appear to be able to pass anything at the moment.

As Congress adjourned for its summer recess stalemate was the order of the day and deep pessimism prevailed about the ability of Congress to bridge the chasm by the end of September.

But, if the House and Senate leaderships heed Representative Rogers counsel, there may be room for compromise. Given the deep philosophical differences reaching compromise will not be easy.

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 July 31, 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.

While the debt ceiling may be raised in conjunction with either the adoption of the fiscal year 2014 budget or yet another continuing resolution, it now seems more likely that action will be deferred until default is imminent. That time should arrive sometime during November.

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 no acutely severe consequences for economic activity that are directly traceable to the sequester or tax increases. The economy did not fall off the cliff. But, data revisions confirm that fiscal austerity is retarding economic growth.

When household incomes are reduced, as is occurring for those who are caught in the cross hairs of sequestration through job furloughing, it takes time for the financial consequences to cumulate. Initially, households dip into savings, which is what the aggregate data confirm is happening. But as time passes and savings are depleted the consequences grow. So, we are not yet out of the woods and optimism about acceleration in consumer spending later this year and in 2014 may prove to be overly optimistic.

4. Federal Tax Reform

While tax reform is not likely to occur anytime soon, at least the process of examining the options has commenced in a bipartisan fashion in the Senate. Sen. Max Baucus (D-MT), chairman of the Senate Finance Committee, and Sen. Orrin Hatch (R-UT), ranking member, have joined forces and have initiated a zero-based review of tax expenditures covering both personal and corporate income taxes. It is referred to as the “blank slate” approach

because all tax preferences would be eliminated and restoration of any preference would require affirmative action. Specifically, Senators Baucus and Hatch have asked other Senators to make a case for which tax preferences should be added back. For a preference to be re-included, it must meet three criteria: (1) help grow the economy, (2) make the tax code fairer, and (3) effectively promote important policy objectives.

Currently, there are approximately \$1.3 trillion of deductions, credits and other types of preferences embedded in the tax code. Eliminating all preferences would obviously greatly simplify the tax code. It would also permit reduction of the highest personal tax rate to 23% and the corporate tax rate to 27% according to “Fix the Debt”, an organization founded by Erskine Bowles and Al Simpson.

“Fix the Debt” advocates that the following principles guide the “blank slate” review:

- Tax reform should promote economic growth and help reduce future deficits.
- Tax reform should begin with a “blank slate” by eliminating all corporate and individual tax preferences that do not pass a cost-benefit analysis, recognizing that each restoration must be accompanied by a tax rate increase.
- Tax preferences that are restored should be made more efficient and cost-effective to maximize return on investment for the American taxpayer.
- Tax reform should lower tax rates for individuals, corporations and small businesses.
- Tax reform should promote fairness and protect the most vulnerable in society.
- Tax reform is a complement, not a substitute, for entitlement reforms. Policymakers must continue to pursue structural reforms to slow the rate of growth of Medicare, Medicaid and Social Security in order to fix the debt and make those programs sustainable.

Principal tax expenditures include:

- **Mortgage Interest Deduction.** Annual cost average \$76 billion.
- **Charitable Giving Deduction.** Annual cost averages \$40 billion.
- **Employer Health Insurance Exclusion.** Annual cost averages \$152 billion or \$270 billion if the impact of payroll taxes on higher personal incomes is included.
- **Higher Education Tax Provisions.** Annual cost averages about \$30 billion.
- **Corporate Tax Breaks.** Annual cost of 80 breaks average about \$130 billion.
- **Capital Gains and Dividends Tax Rates.** Annual cost averages \$123 billion.
- **401(k)s and IRAs.** Annual cost averages \$88 billion.
- **Earned Income Tax Credit.** Annual cost averages \$67 billion.
- **Child Tax Credit.** Annual cost averages \$58 billion.
- **State and Local Tax Deduction.** Annual cost averages \$56 billion.
- **Step-Up Basis for Capital Gains at Death.** Annual cost averages \$52 billion.
- **Other.** Annual cost averages \$400 to \$500 billion.

There are other provisions in the tax code, which are not defined as tax expenditures and thus are not included in the “blank slate” review that arguably should be considered as part of comprehensive tax reform. Such provisions are considered to be part of the tax base and thus are not designated as preferences. Examples include exemptions for dependents, moving expenses, business use of homes, and deductions for ordinary business expenses such as interest on debt obligations, advertising, meals and entertainment and so forth. The revenue impact of such “non-tax-expenditure base provisions” is smaller than the \$1.3 trillion in tax expenditures, but is still significant — approximately \$450 billion annually.

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

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

1. U.S.

- *Q4 real GDP* growth projections range from 0.5% to 1.8%; tracking estimates based on October and November data are consistent with growth of approximately 1.0%.
✓ - *“Final Estimate” was +0.14%; weaker than expected due to data anomalies.*
- *2013 real GDP* growth projections range from 1.5% to 3.0% but with a preponderance of the forecasts falling in the lower end of the range. The drag from tighter fiscal policy will offset gradual improvement in the household and business sectors. Growth should improve gradually over the course of the year. The balance of risks, particularly U.S. fiscal policy but also global growth, is weighted toward slower GDP growth.
✓ + *First quarter GDP growth was a much weaker than expected 1.14%; the “preliminary estimate” of second quarter growth was 1.66%; 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. (Because of substantial GDP data revisions, CBO will revise its estimates of the output gap in late August)*
- *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 seven months of 2013 payroll growth has averaged 192,000 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 7.39% in July, but it appears that a substantial number of discouraged workers has 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 June both disposable income (7.52% in 2012; 1.92% in 2013) and consumer spending growth (3.73% in 2012; 3.23% 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 six months of 2013 (4.24% in 2013 vs. 5.61% 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 3.26% of GDP in December to 3.00%*

in June; both export and import growth rates are slowing, but import growth is slowing more rapidly.

✓ *(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 from weak to strong expansion in July.*

- **Business investment** spending has slowed sharply because of fiscal cliff concerns and could rebound if there is a satisfactory resolution of major fiscal issues. Capital expenditure plans are cautious based both on concerns about growth and political uncertainty.

✓ + *Business investment growth was very strong in the fourth quarter; no growth occurred over the first six months of 2013, key fiscal issues remain unresolved.*

- **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 914,670 over the first six months of 2013, up 18.8% 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.
 - ✓ + *June PCE inflation was 1.31% and core PCE inflation was 1.22%.*
- ***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 was more contractionary during the first half of 2013 than most had expected because Congress permitted automatic spending cuts to take effect as scheduled on March 1; fiscal policy is now expected to subtract -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; historical productivity data will be revised on August 16.*

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.
 - ✓ ? *Recent data reports hint at imminent end of recessions in most countries; the rate of contraction has decelerated (second derivative).*
- *European banking union* will do little to solve deep-seated European and Eurozone structural problems.
 - ✓ + *The EU has issued a policy paper but no action is expected anytime soon.*
 - ✓ *Germany has persuaded other EU members to eventually amend treaties to require a separation of the ECB's monetary and supervisory responsibilities — this move is seen by some as a delaying tactic on the part of Germany; insurance protocols have been recommended, but no action is likely any time soon.*
- European political dysfunction, populism and nationalism will continue to worsen gradually.
 - ✓ + *Coalition governments in Italy and Greece appear increasingly fragile; political crisis is brewing in Portugal; Spain's government is engulfed in scandal; German parliamentary elections are scheduled for September 22.*
- *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 year-over-year growth was 7.5% at lower bound of expectations.*
- *China's new leadership* understands the need to design and implement *economic reforms* and avoid repeating a massive infrastructure spending program.
 - ✓ + *Accumulating evidence that transition toward a more consumer-focused economy has begun.*
 - ✓ ? *Implementation of reforms not expected until 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.*
 - ✓ + *Another budget crisis is imminent given the September 30 deadline to pass a fiscal year 2014 budget or a continuing resolution.*
- *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 has been worse than expected, however there are indications that the rate of decline is slowing and that modest growth may take hold in the second half of 2013.*
 - ✓ - *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 slightly slower growth is expected in the second half of 2013 (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.
 - ✓ ? *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 spooked global financial markets.
 - ✓ ? *There has been a lot of saber rattling, but nothing has happened yet; the crisis has now dropped out of sight.*

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