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

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# The Longbrake Letter*

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This month's letter begins with a discussion of 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**.

Recent U.S. data reports and prospects for real GDP growth, employment trends and personal income and consumption are reviewed in Sections II, III and IV. Stock market valuations are the subject of Section V. Monetary policy and fiscal policy updates are included in Sections VI and VII.

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

## I. Slowly Building Economic Momentum? Or, Prelude to Deflationary Bust?

With the notable exception of the European Central Bank (ECB), central banks in developed countries have been trying to ignite higher growth rates by purchasing large amounts of financial assets to drive down long-term interest rates. The theory is that lower interest rates, by decreasing the cost of capital and boosting the value of financial assets, will stimulate new investment and increase aggregate demand for goods and services. This, in turn, and over time, would create positive reinforcing feedbacks that accelerate growth and diminish more quickly the very large output gaps that prevail in many developed economies.

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

Monetary policy affects the cost of money and determines the extent of financial liquidity. It does not directly cause economic agents to engage in behaviors in ways that will change real economic activity; that is, it does not directly result in decisions to make capital investments or to increase purchases of goods and services. The transmission mechanism is indirect. Monetary policy is only effective if the lower cost of money and its greater availability induces economic agents to change behaviors in ways that boost real economic activity.

Because the linkage between monetary policy and real economic activity is indirect there cannot be certainty that current monetary policy will work as intended. In this sense current monetary policy is an enormous experiment. It is uncertain whether it will work as intended and it is uncertain what longer run impacts it will have on the economy. Some fear that it will lead to **inflationary growth** (see Section II 6 below for a discussion of how inflationary growth might occur) . But, a few fear that the experiment will fail to ignite sustainable growth and will end in a **deflationary bust**.

Policymakers could assure the intended impact of monetary policy is realized by increasing government investment in infrastructure projects and by directly or indirectly boosting government purchases of goods and services. But in the U.S. the exact opposite is occurring. Government spending is being reduced. This means that not only is monetary policy on its own in attempting to stimulate economic activity, it also has to contend with the negative impact of falling government spending.

This combination of easy monetary and tight fiscal policies implies a continuation of slow growth and only small reductions in the size of the output gap. This is exactly what has been occurring in the U.S. and more generally in other developed global economies.

As summer begins, economic activity around the globe remains sluggish. Although volatility in global financial markets has risen in the last month, this appears to be due mostly to technical factors, some of which are linked to Japan's reflation policies, and to a tentative reassessment that growth prospects are improving in the U.S.

## 1. United States

While it is now clear in the **U.S.** that tax increases and spending cuts collectively are much greater than expected a few months ago, their negative effects, particularly the sequester, on economic activity don't appear to be as great as feared and appear to being offset by rising consumer optimism and maintenance of consumer spending, which has occurred by virtue of decreasing the saving rate in the face of reduced disposable income growth. The favorable reassessment of growth prospects is rooted in an expectation that private sector improvement will continue in coming months while the negative effects of tax increases and reduced government spending gradually diminish.

Since early May ten-year U.S. Treasury note yields have jumped 60 basis points to 2.25%. Bank of America Merrill Lynch (B of A) believes two-thirds of the increase is the result of the market's belief that economic momentum is improving and that the Federal Reserve will scale back ("taper") asset purchases sooner. The remainder of the increase in rates stems from technical factors such as hedging convexity risk in mortgage backed securities, impacts of rising Japanese bond yields on carry trades, outflows from bond funds and underperformance of emerging market bonds and currencies.

## 2. Europe

Although much of **Europe** remains mired in recession, conditions no longer appear to be worsening and there is considerable hope that Europe will return to modest growth by 2014. French President, Francois Hollande, recently declared that Europe's crisis is over. That pronouncement is decidedly dubious. Policy actions have limited investor risk, but the fundamental structural and governance flaws inherent in the European Union (EU) and Eurozone (EZ) have not been addressed. High unemployment is gradually undermining political stability. While the crisis may be in abeyance for the moment, it is certainly not over. Signs of political and social fragmentation continue to accumulate, all be it very slowly.

## 3. China

**China's** economy is in transition 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 will result in a slowing in the rate of GDP growth. There are already early indications that a gradual slowdown in growth has begun. Most forecasters generally have not yet recognized that slower growth in China is at hand, so forecasts are likely to be lowered incrementally over time. As a greater proportion of the Chinese population benefits from a consumer-based economy, a slower rate of GDP growth is not likely to be problematic. While what needs to happen is clear, the new Chinese leadership will face formidable implementation challenges. This means that there will be plenty of bumps along the way and it is possible that the transition process will stall or move too slowly. The possibility of a hard landing, though unlikely, cannot be ruled out.

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. 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.

## 4. Japan

Recent **Japanese** data indicate that a strong cyclical economic recovery is underway. It is too early yet to know whether Shinzo Abe's reflation policies will defeat entrenched deflation and result in sustained nominal, as well as real, GDP growth.

In the last few weeks the Japanese stock market has experienced a swift 20% correction and the exchange value of the yen has increased substantially. Both developments have blunted the "shock and awe" effects of Japan's reflation policies on expectations. Changing expectations to accelerate investment and consumption has been an important part of the plan to defeat

deflation. As described in previous letters, driving down the value of the yen helps Japan "export" its saving surplus to other countries. That, too, is a significant part of the plan to defeat deflation. The remaining necessary reflation policy, which has yet to be implemented, involve reforms that will increase the supply of labor, particularly women, and worker productivity. Apparently because of the difficulty in enacting far reaching reforms, Abe is waiting until the upper house elections has occurred later this summer before attempting to pass legislation. In the meantime his general commentary has lacked specificity and that fact may have also contributed to the recent setback in financial markets.

There appear to be some plausible technical reasons for the decline in stock prices, but sentiment is a fragile thing. First, the most obvious explanation is that rapid price appreciation, nearly 80% in the case of the Nikkei, eventually invite profit taking. Second, a less understood explanation, but a truly significant one, is that a significant portion of Japanese equities is held by Japanese trust companies. These trust companies have strict asset allocation guidelines. The rapid price appreciation in Japanese equities resulted in breaching the upper bound of the allocation guidelines and forced selling to rebalance portfolio composition. Third, Japan's central bank botched its asset purchase program in the initial stages which created volatility. And, fourth, some increasingly began to question whether reflation policies would work as intended and whether there might be significant risks in the longer term. These worries were not helped by Abe's recent speeches, which appeared to confuse matters more than clarifying them. This latter concern, if it comes to dominate thinking, would lead to a **deflationary bust** outcome.

My own sense is that the recent volatility in Japanese markets will diminish and implementation of reflation policies, including labor market reforms, will proceed. Japan is likely to experience a continuation of a cyclical recovery in growth and policies already implemented assure a return to a modest level of inflation, at least temporarily. What matters is whether the reflation policies can have a longer-term structural impact and permanently alter the way in which the Japanese economy works. I and many others have our doubts. Thus, the Japanese experiment entails high stakes and high risks. It's possible failure, which will not be known for a long time, would have disastrous consequences for Japan and the rest of the world would not emerge from such a possible failure unscathed.

## 5. Deflationary Bust

What is occurring currently in the U.S., Chinese, Japanese and in many emerging economies is encouraging. However, the outlook for Europe remains bleak because, even if most European countries emerge from recession in coming months, the failure to address structural and governance defects, coupled with demographic trends, assures that at best growth will be very weak and at worst stagnation will occur.

So, **economic momentum appears to be building slowly** across the globe. To the extent this trend continues the world economy will strengthen gradually. However, the current extraordinary monetary stimulus 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.[1]

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

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

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

[1] Charles Gave. "More On the Deflationary Bust Risk." GKResearch, June 10, 2013. This commentary is proprietary and is not available for distribution without permission by GaveKal.

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. In short, investors prefer safe assets, even though they have negative real rates of return, than capital investments with uncertain returns, which could turn out to be even more negative.

Negative real interest rates pump up the value of financial assets and create the illusion of greater wealth. And for a while this feels good. But, artificially induced financial wealth must eventually be ratified by an increase in real wealth. If that does not materialize, a financial bubble builds. You will recall from the work of Hyman Minsky that financial bubbles occur when speculative forces predominate, which drive up financial valuations to levels that greatly exceed those justified by likely cash flows from real economic activity. Speculative activity can persist for a very long time and the risk in the present instance is that the Federal Reserve is feeding the beast with its large scale asset purchase policy. 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. As I explain in Section V, 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.

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

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

Real GDP Growth at the outset of 2013 has been very anemic. That is hardly surprising given the enormous negative impact of higher federal taxes and reduced spending. Perhaps the surprise is that growth is not a lot worse. Consumer spending has held up better than expected and optimism is edging up. The stock market continues to perform relatively well, which has increased consumer wealth to a new all-time high, wiping out the losses experienced during and after the Great Recession. Employment gains, while hardly something to stir excitement, reflect steady but slow improvement.

Over the last four quarters real GDP has increased 1.78%. This has been just sufficient to keep the output gap from rising. Based on Congressional Budget Office (CBO) estimates of potential GDP, the gap was 5.66% in the first quarter of 2012 and 5.65% in the first quarter of 2013. From the perspective that "the glass is half full", this could be considered to be good news because the output gap should begin to close, perhaps rapidly, as fiscal drag ebbs in coming quarters.

### 1. 2013 Q1 GDP — Advance Estimate

As can be seen in **Table 1**, real GDP growth in the first quarter was revised lower in the "Preliminary Estimate" to 2.38% compared to 2.50% in the "Advance Estimate." But the quality of growth improved as measured by Final Domestic Sales, which increased from 1.47% to 1.75%. This upward revision brought growth in Final Domestic Sales roughly into alignment with its growth rate over the previous three quarters.

***Personal consumption expenditures***, which account for 71% of real GDP, which grew stronger than expected in the "Advance Estimate," were revised upwards to an even higher annual rate of 2.40% in the first quarter. This was the strongest growth rate since the fourth quarter of 2010. This more rapid than expected growth probably was a direct consequence of the short-lived surge in disposable income in November and December courtesy of intentional timing decisions to avoid higher tax rates in 2013. By April growth in both disposable income and consumption slowed considerably. The annual rate of growth in nominal retail sales also slowed from 5.17% in December to 3.21% in March but improved to 4.31% in May. Spending

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

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

may also have been boosted temporarily during the quarter in response to Hurricane Sandy. Unfortunately, this improvement in consumption may be a one-quarter aberration in an otherwise dismal trend, as second quarter estimates range from 1.3% to 1.7%, not much better than the pace of growth during 2012.

***Nonresidential investment*** surged in the fourth quarter of 2012, but growth slowed sharply in the first quarter of 2013. Nonresidential investment accounts for 11.1% of GDP, but its share of GDP growth shrank from 24.7% in the fourth quarter to 10.4% in the first quarter. Annualized first quarter growth was 2.2% and is not expected to improve much in the second quarter. However, most forecasters are optimistic that nonresidential investment will accelerate sharply in the second half of 2013 as the economy gathers momentum.

***Residential investment*** accounts for 2.9% of GDP but contributed 13.7% of GDP growth in the first quarter. This sector of the economy has been growing faster than the rest of the economy for the last six quarters. If growth in residential investment continues at its recent pace, it will add 0.3% to 0.4% to real GDP growth in 2013. GS and B of A are more optimistic and expect housing to grow at a 15% to 20% rate during the remainder of 2013. Growth at this pace would contribute 0.5% to 0.7% to GDP growth in 2013.

It should be noted that although annualized residential investment growth was 12.0% in the first quarter, B of A expected 16.5% and GS forecast 15.7%. In other words, forecasters may be overly optimistic about the pace of recovery in the housing market.

***Government expenditures*** fell much more than expected and the Preliminary Estimate was even worse than the Advance Estimate, taking GDP growth down by -0.97%. The decline appeared to be linked mostly to a reduction in war-related defense expenditures as the effects of the sequester had not yet taken hold during the first quarter. Unfortunately, declining government expenditures will continue to be a significant negative contributor to GDP growth during the remainder of 2013. Perhaps the bright side of this development is that the federal deficit is falling much more rapidly than anticipated.

***Net exports*** subtracted 0.21% from GDP growth. This was substantially better than the -.50% contribution to GDP growth reported in the Advance Estimate. The Advance GDP estimate frequently is revised substantially in the Preliminary and Final Estimates because trade data are reported with a long time lag and are often revised. For example, the contribution of net exports to fourth quarter GDP was reported as -0.25% in the Advance estimate but was revised to +0.33% in the Final Estimate.

## 2. GDP Forecasts for 2013 Q2

Goldman Sach's (GS) current activity index (CAI) — a rough proxy for GDP growth — declined from 2.2% in December to 0.9% in March, but then increased to 2.4% in May. GS currently expects second quarter GDP growth to be 1.8%.

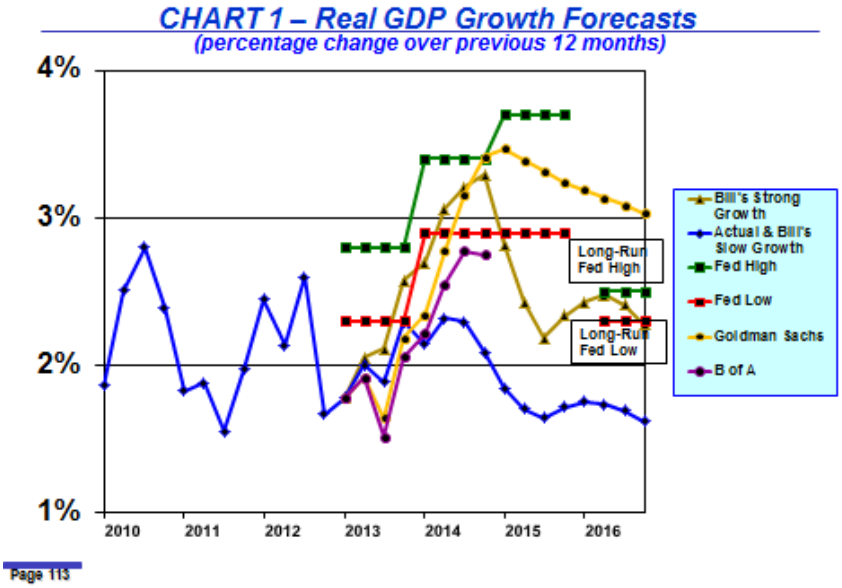
B of A forecasts second quarter of 1.7%, buoyed by stronger than expected consumer spending which is partially offsetting the effects of federal tax increases and reductions in government spending.

Other second quarter forecasts are clustered in the same vicinity — Global Insight 1.4%; Economy.com 1.8%; Blue Chip average 1.7%.

### 3. GDP Forecasts for All of 2013

Most forecasters expect growth will pick up during the second half of 2013.

**Chart 1** and **Table 2** show GDP forecasts/projections for 2013 through




2016.

B of A expects weak 1.5% growth in the third quarter but then growth picks up to 2.5% in the fourth quarter as fiscal drag diminishes. Its forecast for 2013 GDP fourth-quarter-to-fourth-quarter growth forecast is 2.0% and is 1.8% year over year.

GS expects growth to strengthen slightly in the third quarter to 2.0% and accelerate further to 2.5% in the fourth quarter as fiscal drag diminishes. Its forecast for 2013 GDP fourth-quarter-to-fourth-quarter growth is 2.2% and is 1.9% year over year.

The Blue Chip average forecast is 2.3% for the third quarter, 2.6% for the fourth quarter and 2.0% year over year.

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

| | 2013:3 | 2013:4 | 2013 Q4 to Q4 | 2013 Y/Y | 2014 Y/Y | 2015 Y/Y | 2016 Y/Y |
|---|---|---|---|---|---|---|---|
| **B of A** | 1.5 | 2.5 | 2.0 | 1.8 | 2.7 | | |
| **GS** | 2.0 | 2.5 | 2.2 | 1.9 | 2.9 | 3.2 | 3.0 |
| **Global Insight** | 1.8 | 3.0 | | 1.8 | 2.8 | 3.2 | 2.9 |
| **Economy.com** | 2.1 | 3.0 | | 1.9 | 3.4 | | |
| **Blue Chip** | 2.3 | 2.6 | | 2.0 | 2.7 | 3.1 | 2.9 |
| **Bill's Slow Growth** | | | 2.3 | 2.0 | 2.2 | 1.7 | 1.7 |
| **Bill's Strong Growth** | | | 2.6 | 2.1 | 3.1 | 2.4 | 2.4 |
| **FOMC — High** | | | | 2.8 | 3.4 | 3.7 | |
| **FOMC — Low** | | | | 2.3 | 2.9 | 2.9 | |
| **CBO** | | | 1.7 | 1.5 | 2.6 | 4.1 | 4.4 |

The Federal Open Market Committee (FOMC), which has consistently been too optimistic, at its March meeting lowered the top end of the range for its 2013 GDP projections from 3.0% to 2.8%. The lower bound was unchanged at 2.3%. Note that all forecasts are now below the lower end of the FOMC's projected GDP growth range for 2013. It seems likely that the FOMC will lower its projection range when it meets on June 19.

Bill's "***Slow Growth***" fourth-quarter-2012-to-fourth-quarter-2013 forecast is 2.3% and 2.0% year over year. Bill's "***Strong Growth***" fourth-quarter-to-fourth-quarter forecast is 2.6% and year over year is 2.1%. Both forecasts have been notched up 0.1% since last month because of the stronger than expected May employment report.

## 4. GDP Forecasts for 2014 and Beyond — Importance of Investment

Most forecasters expect GDP growth to accelerate in 2014 and 2015 as negative fiscal drag diminishes and unemployment gradually declines. My longer-term forecasts are depressed by slow productivity growth which is caused primarily by weak private and public investment growth.

Both B of A and GS forecast strong residential investment growth as the housing market continues its recovery. These forecasts appear to be reasonable. However, their forecasts for nonresidential investment, which is more than four times larger than residential investment, appear to be extraordinarily optimistic compared to historical trends and recent weakness. GS argues that 8% to 9% annual real growth in nonresidential investment from 2013 through 2015 is likely because of high corporate profit margins, high real rates of return relative to cheap funding, easier access to credit and declining policy uncertainty. If GS's view is correct, nonresidential investment growth at its forecast levels would add approximately 1% to real GDP growth in each of the next three years. Count me skeptical.

You will note in **Chart 1** that my "***Strong Growth***" scenario tracks the GS forecast in 2014. That occurs because I include GS's optimistic private investment growth assumptions in that scenario. After 2014, private fixed investment growth in my "***Strong Growth***" reverts to historical averages, but GS continues to assume high investment growth in 2015 and 2016.

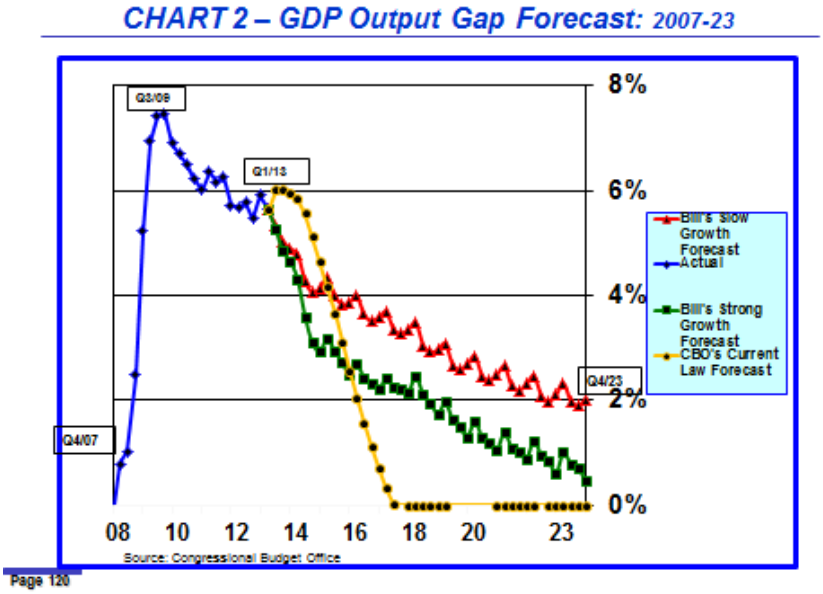
GS does acknowledge that weak aggregate demand is a headwind. Investment conditions may be very attractive financially but if demand is absent, will companies proceed with investments? Other research suggests that the answer is "No". Of course, we will know the real answer in time. If GS turns out to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

B of A has equally optimistic investment assumptions but its real GDP forecast for 2014 is 2.7% compared to 2.9% for GS and an FOMC projection range of 2.9 to 3.4%. My "***Slow Growth***" scenario forecast is 2.2%, but the "***Strong Growth***" scenario forecast is 3.1%, which is similar to GS's.

It is evident in **Table 2** that the upper end of the FOMC's central tendency forecast range for 2014 and 2015 is considerably more optimistic than nearly all other forecasts.

## 5. GDP Output Gap

According to CBO, the GDP output gap remains very large and declined only marginally during the first quarter to 5.65% and is nearly identical to the 5.66% gap recorded in the first quarter of 2012. CBO's output gap in **Chart 2** rises over the next few quarters. CBO's output gap projections




are out of date and too pessimistic because they do not incorporate fully tax and spending revisions that have taken effect during 2013. CBO will update its forecast in August.

**Chart 2** also shows output gap projections for my "***Slow Growth***" and "***Strong Growth***" scenarios. Forecast real GDP rises faster than potential real GDP in both scenarios with the result that the output gap shrinks gradually. Productivity increases in both scenarios but it rises faster in the "***Strong Growth***" scenario which results in the output gap closing more quickly. As can be seen in **Chart 2**, the output gap is approximately 0.5% in 2023 in my "***Strong Growth***" scenario and 2.0% in my "***Slow Growth***" scenario.

CBO projects that the output gap will close by 2017. This result is achieved by assuming very high real GDP growth rates in 2015 (4.1%) and 2016 (4.4%), which are much higher than other forecasts, including the FOMC's. Such an outcome depends not only on high and optimistic investment growth assumptions but also on strong employment and real income growth. But CBO's unemployment forecast is at the pessimistic end of the spectrum. This apparent inconsistency could be explained by assuming that an even greater surge in investment spending occurs. But, if that were to happen it would lead to a further inconsistency. A surge in investment spending would increase productivity which would boost the potential real GDP growth rate more than forecast by CBO. Thus, in spite of CBO's optimism, it is unlikely that the output gap will close entirely by 2017.

## 6. GDP Output Gap — Alternative View

Based upon my analysis I cannot validate the likelihood of CBO's projected elimination of the GDP output gap by 2017. However, it is possible that the gap could close by 2017, or even sooner, if the level of potential GDP is substantially less than that projected by CBO.

***How could this happen?*** Remember that growth in potential GDP depends upon labor growth (hours worked) and productivity. In previous letters I have stated why I think CBO's estimate of productivity is too high, particularly in the next few years. Lower productivity reduces the level of potential GDP, but it also reduces the level of actual GDP. I showed in **Chart 2** that slower productivity growth results in it taking a longer time to reduce the output gap because forecast GDP grows even more slowly than the reduced rate of growth in potential GDP.

Alternatively, the current level of potential GDP could be considerably less than what CBO says it is, if the potential level of full employment is lower than CBO believes. As a reminder, the level of potential GDP is determined by full employment and long-term trend productivity. Full employment is customarily derived by determining the level of unemployment that results in a stable (nonaccelerating) rate of inflation. CBO estimates that non-inflationary full employment currently is consistent with a short-term unemployment rate of 5.96% and a long-term unemployment rate of 5.5%.

But, suppose the long-run noninflationary rate of unemployment is actually higher than 5.5%. That could occur if many workers counted as unemployed are unlikely ever to qualify for a job. They simply don't have the requisite skills for available jobs. Economists refer to this phenomenon as "structural" unemployment. Higher structural 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 than shown in **Chart 2**, modest employment and GDP growth could close the gap sooner than 2017.

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

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

But, as logical as all of this may sound and notwithstanding the preponderance of evidence and analysis, economics is not a precise enough discipline that there can be assurance that the mainstream analysis and policy response is right. If it is wrong, then the doomsayers and inflationists could turn out to be correct in their fears and warnings.

Behavior of the labor market holds the key to assessing the risks. And, probably the earliest warning signals that the labor market is tightening more rapidly than expected would involve skills shortages in certain categories of jobs and wage inflation in those categories. In a dynamic economy,

skills shortages and wage pressures will always be present, which will make it difficult to pick up clear warning signals. What needs watching is the development of an expanding trend in the number of jobs that are in categories subject to skills shortages and upward pressure on wages. To date, there is little evidence such a trend is developing. But there are those who think they see very early indications of such a trend beginning to develop.

## III. Employment

Although the unemployment rate rose from 7.5% in April to 7.6% in May, the market reacted favorably to the report. That was because the market feared that tax increases and government spending cuts would depress employment growth. That did not occur. However, employment growth remains moderate and the labor market can hardly be characterized as robust. Nonetheless, improvements in consumer and market psychology are helpful because they create and reinforce favorable feedback loops.

There were weaknesses in the May report which bear watching. Manufacturing employment fell 8,000. This is consistent with the Purchasing Managers Index, which has fallen to 49.0, demarking that contraction is occurring. Construction jobs were up 7,000, which is not ratifying the optimism about a rapidly strengthening residential home construction market. The length of the workweek was stable and wage growth remains stuck at a low 2.0% annual rate. The labor market is still extremely weak, although gradual improvement is occurring. But, much more needs to occur to boost aggregate demand and put growth on a track that will shrink the enormous output gap more quickly. Let's look at a few of the details.

### 1. Payroll Report

Employers added 175,000 jobs in May. Revisions to March and April jobs subtracted 12,000 jobs resulting in a net increase of 163,000. The 12-month rate of growth edged up from 1.55% in April to 1.58% in May. However, payroll growth remains in a slow decelerating trend having peaked at 1.85% annual growth in February and March 2012.

There was no tangible evidence in the report to indicate that manda-

tory cuts in the federal budget are having an impact on employment levels. Government spending cuts may yet depress employment in coming months or the impacts may show up in shorter workweeks. Many federal workers are being furloughed and the same phenomenon may occur in the private sector as well. Furloughing workers would not show up in payroll decreases but it would show up in hours worked, which is reported only for private sector employees, and in slower growth in disposable income.

GS has constructed a "labor market tracker" which combines information from 24 labor market indicators to determine the likely range of monthly payroll employment gains. The tracker currently indicates jobs should increase between 150,000 and 175,000 monthly. This range is slightly below the 189,000 monthly average over the first five months of 2013 and the 183,000 monthly average in 2012.

## 2. Household Jobs Report

Household employment has increased strongly in the last two months — 319,000 in May and 293,000 in April. However, the 12-month growth rate is 1.12%, well below the 1.58% annual growth rate in payroll employment.

Like payroll employment, growth in this measure of employment is also in a slow decelerating trend, having peaked at 2.18% in June 2012. The household survey is subject to large sampling errors and, therefore, is more volatile than the payroll survey. Although growth in household employment has been slower than growth in payroll employment in recent months, over longer periods of time the growth rates from both surveys have been similar.

Average weekly hours worked was unchanged at 34.5. The 12-month average of hours worked is 34.46, which indicates that the length of the workweek is quite stable.

## 3. Discouraged Workers or Structural Unemployment?

***Employment remains 2.4 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 edged up to 7.6% in May. To two decimal places the increase was from 7.51% to 7.56%. The increase was due to the addition of 101,000 unemployed workers. The unemployment rate would have risen more were it not for the 420,000 increase in the labor force — those eligible and willing to work. The increase in the labor force also boosted the participation rate (those willing to work — includes both employed and unemployed workers — relative to those eligible to work) from 63.32% to 63.44%. 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 58.56% to 58.65%.

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

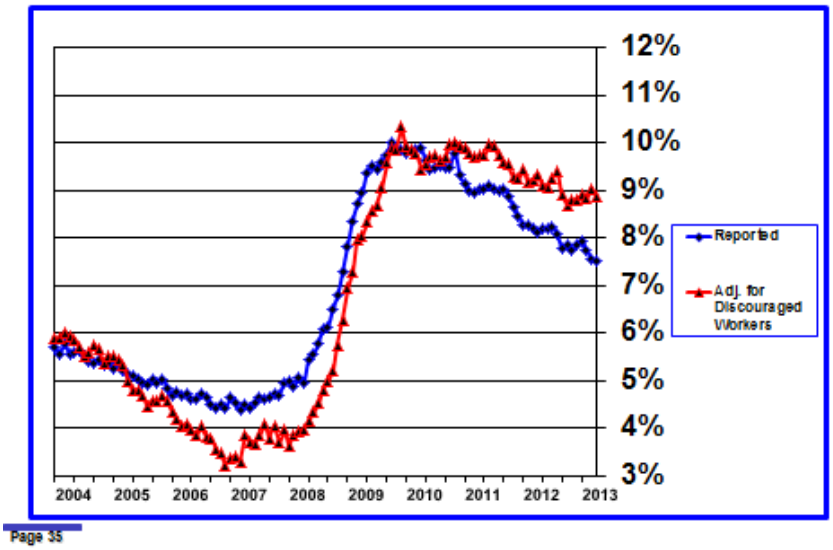
What is important from a policy standpoint is whether workers who are dropping out of looking for jobs will reenter the job market when jobs become more plentiful or whether their exit is permanent because there are no jobs that fit their skills and there won't be any in the future.

This issue is important because it bears on implementation of monetary policy. If discouraged workers re-enter the labor market as unemployment falls this will retard the speed with which the unemployment rate falls. Put differently, it would take longer for the unemployment rate to fall to the policy guideline of 6.5%.

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

In May 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 8.67% rather than 7.56%. GS estimates that employment is about 4% below the potential full-

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




employment level. If the long-term structural unemployment rate is 5.0%, that would imply an unemployment rate of about 9.0% currently, which is not materially different from my estimate of 8.67%.

In December 2012 a Federal Reserve Bank of San Francisco Economic Letter suggested that as many as 2.1 million discouraged workers could re-enter the labor force as the labor market strengthens.[2] A more recent Federal Reserve Bank of San Francisco Economic letter adds additional color to the earlier discouraged worker conclusion.[3] Using state level data, the authors "*... calculated correlations between changes in payroll employment and participation rates for the past four recoveries over the periods it took for 67% of jobs to be regained.*" They found that economic recovery must be well advanced before participation rates recover, which means that correlations are low initially but rise as the labor market improves. In other words, discouraged workers do not return to the labor force until labor market conditions tighten considerably. That point has not yet been reached in the current

[2]Mary Daly, Early Elias, Bart Hobijn, and Oscar Jorda. "Will the Jobless Rate Drop Take a Break?", FRBSF Economic Letter 2012-37, December 17, 2012.

[3]Leila Bengali, Mary Daly, and Rob Valletta. "Will Labor Force Participation Bounce Bank?" FRBSF Economic Letter 2013-14, May 13, 2013.

recovery. This implies that the current unemployment rate understates the true extent of slack in the labor market.

GS has published three studies of labor force participation.[4] Labor force participation has declined 2.7 percentage points since the start of the Great Recession in December 2007. Some of this decline is due to demographic and cultural factors. The Bureau of Labor Statistics (BLS) estimates that such factors account for about 0.6 percentage points. The remaining 2.1 percentage points are split between a temporary cyclical decline and a permanent structural decline. As discussed in Section II 6 above, "GDP Output Gap — Alternative View," the split between cyclical and structural components has important policy implications.

In the first study GS finds that 0.2 to 0.3 percentage points of the decline in participation stems from changes in disability insurance utilization, much of which is connected to older workers.

In the second study, GS uses state level data to examine the statistical relationship between labor participation and the unemployment rate and the growth rate in employment. GS finds a strong negative relationship between the unemployment rate and prime-age men and older workers. In the case of prime-age men this implies that when the unemployment rate falls discouraged workers will reenter the labor force. The interpretation for older workers is that higher unemployment rates stimulate early retirement, but lower unemployment rates lead to deferral of retirement.

In addition, there is a strong positive relationship between the rate of growth in employment and young, prime-age men and older workers.

GS summarizes overall implications in the third study. About 1.2 percentage points of the decline in participation are due to demographic factors. This means that this part of the decline in participation is structural and permanent. However, the remaining 1.5 percentage points is due to the temporary exit of discouraged workers who will return when the labor market strengthens and is growing rapidly and the unemployment rate is falling. The conclusion is that most of the decline in the participation rate in recent

[4]David Mericle. "A State-Level Look at Declining Labor Force Participation", Goldman Sachs US Daily, April 17, 2013. David Mericle. "Disability Insurance: A Minor Contributor to Reduced Participation", Goldman Sachs US Daily, May 1, 2013. Jan Hatzius and David Mericle. "Time to Rethink the 6.5% Unemployment Threshold", Goldman Sachs US Economics Analyst, Issue No: 13/18, May 3, 2013.

years is due to cyclical rather than structural factors. However, GS observes that "*...the longer the cyclical weakness in participation lasts, the greater the risk that individuals who have left the labor force will ultimately lose their ability to re-enter. If so, cyclical declines in output and employment could ultimately turn structural.*"

There is merit to GS's concluding cautionary observation. We have not experienced such an extended period of labor market weakness since the Great Depression of the 1930s and the experience of that period doesn't provide any insight into whether cyclical unemployment will eventually turn into structural unemployment. Unfortunately, there is no method that will provide reliable insight into the question of whether cyclical unemployment will turn into structural unemployment. This mandates close vigilance and continued study of each new employment report in coming months.

B of A has also conducted extensive analysis of the causes of the decline in the participation rate.[5] It concluded that 1.3 percentage points of the 2.7 percentage point decline in the participation rate is due to permanent demographic factors. B of A also conducted its own version of the San Francisco Federal Reserve Bank's analysis and concluded that the participation rate is unlikely to be boosted by returning discouraged workers until 2015. Based on this analysis and its employment growth forecasts, B of A does not expect the 6.5% unemployment guideline to be reached until the second half of 2015.

B of A's conclusions are as tentative as GS's. Both acknowledge that while research suggests that there is a substantial discouraged worker effect, the historical record and statistical analysis are hardly definitive. Thus, uncertainty will continue and with it the debate over the strength of the labor market and the risk of tightening monetary policy too soon or delaying tightening for too long. Unfortunately, we won't know the answer for a long time and in the interim market uncertainty about the timing of tapering large scale asset purchases will continue to inject volatility. Already volatility has increased over the last two months.

[5] "Like a Dog Without a Bone," Bank of America Merrill Lynch Global Economic Weekly, May 24, 2013, pp. 6-8.

## 4. Job Openings and Structural Unemployment

A long-term stable relationship between the unemployment rate and the job openings rate broke down in the aftermath of the Great Recession. This relationship, referred to by economists as the Beveridge Curve, indicates that as the unemployment rate rises, the job openings rate falls. This is logical and the relationship continues to persist. What has changed is that the entire Beveridge Curve has shifted so that the current job openings rate is much higher for a specific unemployment rate than it was prior to 2009. To illustrate, the current job openings rate is 2.8% of total employment. Today's unemployment rate is 7.6% but if the relationship that persisted prior to 2009 were still operative, the unemployment rate would be about 5.3%.

One explanation for this systematic change is that there is a huge number of long-term unemployed workers whose skills have atrophied or whose skills do not match the requirements of many available jobs. To the extent that this reason is substantive, it indicates that the level of structural employment has risen considerably and perhaps more than the increase from 5.2% to 5.96% estimated by CBO. If that is true, then the structural rate of unemployment could be greater than 5.96%. This possibility cuts against the potential implications of the discouraged worker effect on the unemployment rate and highlights the importance of GS's and B of A's cautions.

## 5. Unemployment Rate

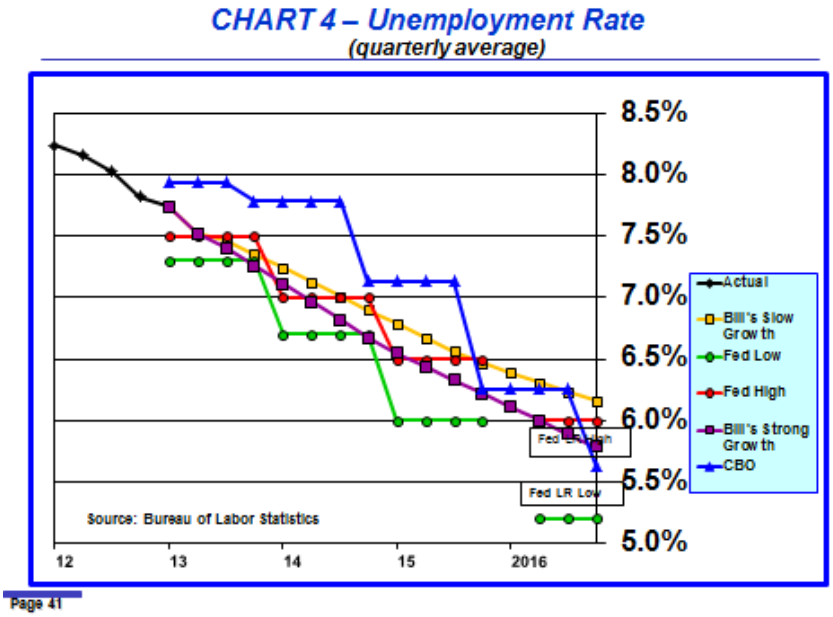
Because the Federal Open Market Committee (FOMC) has now linked monetary policy explicitly to the unemployment rate, it is important to track this data point and various forecasts of when the unemployment rate is expected to cross below 6.5%, which is the FOMC's threshold for considering whether to raise the federal funds rate. And, as was discussed in the previous section, the discouraged worker phenomenon and its impact on the participation rate is critically important in ascertaining just how meaningful the 6.5% unemployment rate guideline, as conventionally measured, is. The evidence, such as it is, suggests that the labor market could still be quite weak even if the 6.5% rate is penetrated.

According to BLS, the number of unemployed workers increased 101,000

in May but is still down 446,000 since 2013 began. Some of the decline in unemployed workers earlier this year may have stemmed from the progressive expiration of extended unemployment benefits.

The unemployment rate fell to 7.56% in May. Over the last year since May 2012 unemployment has decreased 935,000 and the unemployment rate has decreased from 8.19% to 7.56%.

**Chart 4** shows the FOMC's high (red line and circles) and low (green




line and circles) unemployment rate projections for 2013, 2014 and 2015. These projections suggest an early 2015 date for reaching the 6.5% target level. The FOMC's long-run noninflationary rate of unemployment (structural unemployment rate), achieved sometime after 2015, falls between 5.2% and 6.0% (shown on the right hand side of **Chart 4**).

I have included 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 generally tracks the upper end of the FOMC's range and the "***Strong Growth***" unemployment rate tracks the middle of the FOMC's range. The

unemployment rate forecast in the "***Strong Growth***" scenario reaches the 6.5% threshold in early 2015 which is consistent with the FOMC's projection range. However, the unemployment rate in the "***Slow Growth***" scenario does not reach 6.5% until late 2015.

CBO's unemployment rate forecast, which is now out of date, is also shown in **Chart 4** (blue line and triangles). The unemployment rate barely budges in 2013 and 2014 but then falls quickly and hits 6.5% by mid-2015. GS expects the unemployment rate to reach 6.5% by early 2015 and expects that the FOMC will not raise the federal funds rate until early 2016.

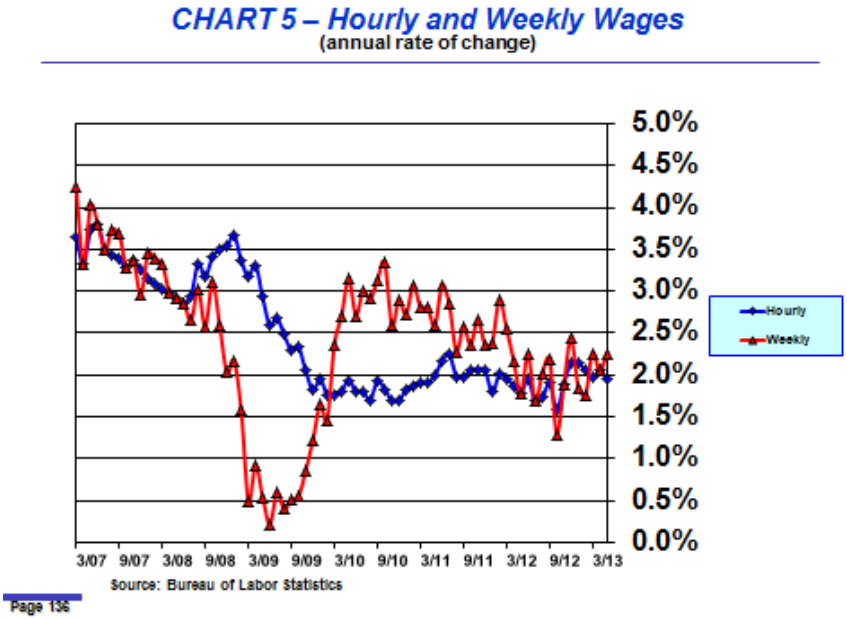
As a reminder, the FOMC has been clear that while the unemployment rate is a policy guide, it is not a policy target. The Committee is reviewing many other indicators of the health of the labor market. Because of the discouraged worker effect, there is increasing risk that the unemployment rate may hit the 6.5% level while considerable labor market weakness remains. GS has suggested that it may be time for the FOMC to "rethink" its unemployment rate policy guidance. At the very least it will probably become increasingly important for the FOMC to deemphasize the 6.5% number by broadening its discussion of other indicators of labor market health.

## 6. Hiring

Net employment changes are the sum of hirings less firings/layoffs. The layoff rate has returned to its normal level but hirings continue at a rate substantially below the pre-Great Recession level. As a result, the economy is not generating enough new jobs to reduce labor market slack very rapidly. In fact, the hiring rate has recovered very little since the end of the Great Recession and has been essentially unchanged for the last 2.5 years. There is no particular pattern to this change among organizations of different sizes. Chairman Bernanke has identified the hiring rate as one of the main indicators of the health of the labor market. That implies that the hiring rate needs to improve, which is something that is not happening.

## 7. Growth in Wages

Growth in hourly wages has stabilized in the vicinity of 2.0% for the last three and a half years (see **Chart 5**). This is probably good news because




the large output gap and high unemployment rate apparently are not putting further downward pressure on wage rate growth. This suggests, but does not guarantee, that when the labor market begins to tighten, wage rate growth will accelerate.

Average hours worked has stabilized at 34.46 over the last year, which means that both hourly and weekly wages are growing at similar rates. This is a sign of labor market stability. Wages do not yet show any evidence of a tightening labor market.

## IV. Consumer Income and Spending

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

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

For these reasons, it is difficult to discern developing trends from monthly data. Accordingly, the data presented in **Table 3** show the annual results

**Table 3**
**Change in Personal Income and Its Disposition for 2011, 2012 and 12 Months Ending April 2013**
(in billions of dollars)

| | **Nominal 2011** | **Annual Pct. Change** | **Nominal 2012** | **Annual Pct. Change** | **Nominal Apr 12 to Apr 13** | **Pct. Change Apr 12 to Apr 13** |
|---|---|---|---|---|---|---|
| Personal Income | **$458.1** | **3.64%** | **$1071.9** | **8.23%** | **$372.2** | **2.80%** |
| **Compensation** | 269.2 | 3.34% | 558.8 | 6.70% | 274.9 | 3.22% |
| **Proprietors' Inc.** | 21.0 | 1.83% | 62.3 | 5.33% | 74.2 | 6.22% |
| **Rental Income** | 70.7 | 19.50% | 49.2 | 11.35% | 66.3 | 14.68% |
| **Asset Income** | 25.9 | 1.56% | 376.8 | 22.32% | 54.6 | 3.18% |
| Government Transfers | 4.3 | 0.19% | 87.3 | 3.75% | 63.0 | 2.67% |
| Less: ***Personal Taxes*** | -112.7 | 5.05% | -204.4 | 8.72% | -327.4 | 13.61% |
| Disposable Income | **278.5** | **2.46%** | **930.0** | **8.01%** | **205.5** | **1.74%** |
| Less: ***Consumption*** | **435.8** | **4.04%** | **398.5** | **3.55%** | **316.3** | **2.77%** |
| Personal Saving | **-157.4** | **-28.63%** | **531.7** | **135.53%** | **-110.8** | **-26.53%** |
| Personal Saving Rate | **4.24%** | | **4.05%** | | | **3.68%** |

for 2011 and 2012 and the 12 months from April 2012 through Apirl 2013.

## 1. Personal Income and Disposable Income

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

Income was inflated during 2012 by policy and timing. Income in January 2012 was boosted by bonus and incentive payments. Impending tax rate increases led to an acceleration in the timing of these same sources of income to November and December of 2012 to avoid higher tax rates in 2013. In addition, distribution of dividends and other sources of income were accelerated to November and December.

Personal income rose 2.80% over the 12 months ending in April 2013 and disposable income rose 1.74%. The impact of the payroll tax rate increase from 4.2% to 6.2% is clearly visible in the 13.61% increase in personal taxes over the same 12-month period. The average saving rate declined from 4.05% in 2012 to 3.68% in 12 months ending in April 2013 and was 2.55% in April.

Because the recent data volatility makes it difficult to discern trends, I have added **Table 4** which compares averages for 2011 and 2012 with the twelve-month periods ending in January, February, March and April 2013.

It is clear that growth in personal income and disposable income is weaker so far in 2013 than it was in 2011. This negative impact is concentrated almost entirely in "Compensation", which makes up 64% of personal income. Government transfers are at about the same level of growth as in 2012. However, growth in personal taxes is sharply higher reflecting increases in personal income tax rates for the wealthy and higher payroll taxes.

## 2. Consumption

When the data are viewed on a year-over-year basis in **Table 4**, the rate of growth in consumption spending slowed from 4.04% in 2011 to 3.55% in 2012. The slowing pattern has continued into 2013 and was down to 2.77% over the twelve months ending in April and averaged 3.13% over the first

**Table 4**
**Percentage Change in Personal Income and Its Disposition for 2011, 2012 and 12 Months Ending January, February, March and April 2013**

| | 2011 Pct. Change | 2012 Pct. Change | Pct. Change Jan 12-Jan 13 | Pct. Pct. Feb 12-Feb 13 | Pct. Pct. Mar 12-Mar 13 | Pct. Pct. Apr 12-Apr 13 |
|---|---|---|---|---|---|---|
| Personal Income | **3.64%** | **8.23%** | **2.54%** | **3.10%** | **2.88%** | **2.80%** |
| **Compensation** | 3.34% | 6.70% | 3.33% | 3.24% | 2.94% | 3.22% |
| **Proprietors' Inc.** | 1.83% | 5.33% | 6.29% | 6.79% | 7.09% | 6.22% |
| **Rental Income** | 19.50% | 11.35% | 12.25% | 13.38% | 14.67% | 14.68% |
| **Asset Income** | 1.56% | 22.32% | 0.20% | 4.02% | 3.29% | 3.18% |
| Government Transfers | 0.19% | 3.75% | 3.44% | 3.64% | 3.47% | 2.67% |
| Less: ***Personal Taxes*** | 5.05% | 8.72% | 12.94% | 13.12% | 13.07% | 13.61% |
| Disposable Income | **2.46%** | **8.01%** | **1.58%** | **2.16%** | **1.90%** | **1.74%** |
| Less: ***Consumption*** | **4.04%** | **3.55%** | **3.27%** | **3.33%** | **3.16%** | **2.77%** |
| Personal Saving | **-28.63%** | **135.53%** | **-42.56%** | **-29.63%** | **-31.00%** | **-26.53%** |
| Personal Saving Rate | **4.24%** | **4.05%** | **3.95%** | **3.85%** | **3.77%** | **3.68%** |

four months of 2013.

Prospects for acceleration in income growth are poor in coming months until cuts in federal spending diminish and end. Because consumption growth exceeds spending growth by more than one percentage point, it is likely that consumption growth will continue to edge down. And, 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 optimism is rising, employment is improving slowly and credit for consumer goods, especially autos, is readily available.

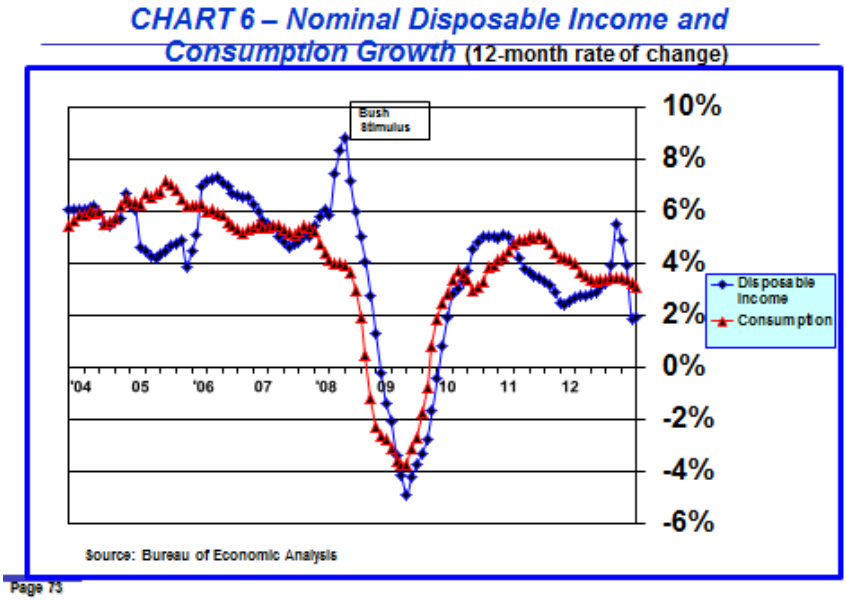
## 3. Saving

Consumption growth has exceeded income growth persistently over the last 28 months with the consequence that the saving rate has declined steadily. Stabilization of the saving rate at its recent sub-3% rate will require consumption growth to slow and match income growth. What seems more prob-

able is that the saving rate will remain depressed as households attempt to maintain consumption in the face of slow income growth.

## 4. Disposable Income and Spending

**Chart 6** shows the nominal rate of growth in disposable income and con-




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

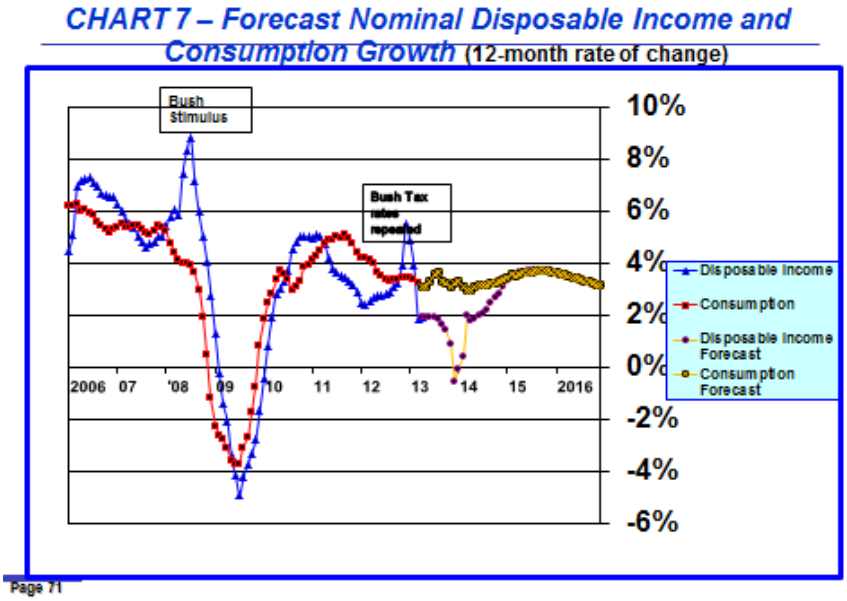
The annual rate of growth in disposable income began slowing in early 2011 and declined from 5.1% in February 2011 to 2.4% in February 2012, but then rose to 3.2% in October 2012, surged to 5.5% in December, and fell back to 1.9% in April.

**Chart 6** shows that growth in consumer spending, after peaking at 5.1% in September 2011, subsequently slowed to about 3.4%, then stabilized at

that level for eight months before resuming a declining pattern to 3.1% in April 2013.

## 5. Outlook — Effect of Increases in Tax Rates

As can be seen in **Chart 7**, 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 7** shows my forecast for growth in nominal consumer disposable income and consumption through 2016. All-in-all the story **Chart 7** tells is

not a strong one. It is a story that is consistent with low labor supply growth, paltry productivity gains, low inflation and meager increases in wages and salaries.

First quarter spending growth was much stronger than most forecasters expected. With the benefit of hindsight, the reason is clear. Consumers spent part of the surge in income received in November and December during the first quarter, while dipping into savings to maintain normal spending patterns.

Both B of A and GS badly underestimated first quarter 2013 consumer spending growth, which was 3.40%. My consumer spending model's estimate of the consumer spending growth rate almost exactly matched the reported growth rate. In my model, real consumer spending growth 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. With the exception of hours worked, which has an average lagged impact of 2.8 months, and the saving rate, which has an average lag of 6.8 months, the lagged impact of all other variables is much longer. As can be seen in **Table 5**, a reduction in the savings rate and an increase in stock market wealth contributed 81.6% of the increase in first quarter consumer spending.

During the remainder of 2013 my model forecasts consumer spending growth to slow to an annualized rate of 2.33%. The major contributors to growth are hours worked and productivity, which account for 69.0% of the increase. The lagged effect of the recent rise in stock prices also has a significant favorable impact. However, as the saving rate stabilizes at a low level its contribution to consumer spending, while still positive, is greatly reduced.

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

Note that the recent increase in housing prices is not contributing positively to consumer spending because of the long lag time of 31 months. This corroborates with the continuing difficulty in obtaining mortgage financing and home equity loans. Refinancing activity has been brisk, but

has not involved a material amount of equity cash out. Increases in housing construction will raise real GDP growth in coming quarters, but there is unlikely to be any material increase in consumer spending and GDP growth via the housing wealth effect.

There is other salient point embedded in **Table 5**. The difference in

**Table 5**
**Contributions to Changes in Real Consumer Spending and Forecast Annual Growth Rates**

| Variable | Lagged Impact (in months) | Contribution* Q1 2013 | Expected Contribution* Q2, Q3, Q4 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| Hours Worked | 2.8 | 9.3% | 23.0% | 26.9% | 18.8% | 17.0% |
| Productivity | 15.3 | 9.6% | 46.0% | 65.6% | 47.7% | 47.9% |
| Federal Deficit | 26.7 | 1.8% | 4.2% | -15.3% | 9.9% | 4.9% |
| Housing Prices | 31.0 | -2.3% | -6.5% | -3.4% | -4.1% | -0.8% |
| Stock Prices | 18.1 | 31.2% | 25.4% | 22.3% | 25.2% | 30.2% |
| Savings Rate | 6.8 | 50.4% | 7.9% | 3.9% | 2.4% | 0.8% |
| ANNUAL GROWTH RATES | | | | | | |
| Bill's Slow Growth | | 3.40% | 2.33% | 1.90% | 2.31% | 2.01% |
| Bill's Strong Growth | | 3.40% | 2.66% | 2.09% | 2.78% | 2.56% |
| GS | | 3.40% | 1.88% | 2.65% | 2.80% | 2.57% |
| B of A | | 3.40% | 2.08% | 2.42% | | |

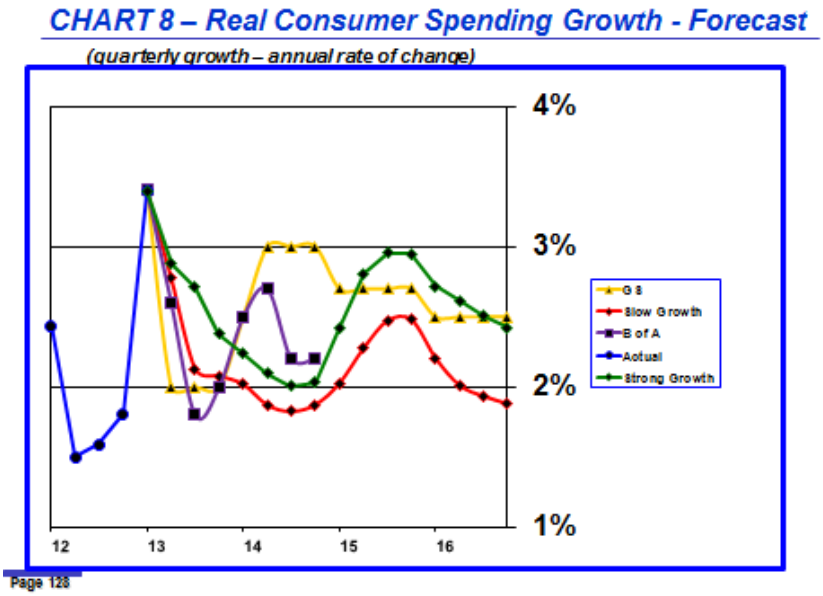
*Contributions based on Bill's "***Slow Growth**" scenario

the forecast growth rates in real consumer spending between Bill's "***Slow Growth**" and "***Strong Growth**" scenarios results primarily from greater employment and productivity gains. For example, 68.2% of 2016's projected $272.8 billion increase in real consumer spending, or $186.2 billion, in the "***Strong Growth**" scenario comes from increases in employment and productivity; 64.9% of 2016's projected $210.0 billion increase in real consumer spending, or $136.3 billion, in the "***Slow Growth**" scenario comes from increases in employment and productivity. The difference is significant and points out the importance of pursuing policies that increase both employment growth and productivity.

***Currently, policy generally is not directly targeting employment and productivity. Policy, principally monetary policy, is indirectly***

***targeting employment by attempting to stimulate spending. Without more direct policy intervention, the risks are greater that the "Slow Growth" scenario, rather than the "Strong Growth", scenario will be the one most likely to occur.***

**Chart 8** shows forecasts for quarterly real consumer spending growth




at an annualized rate. B of A and GS expect consumer spending growth to slow to a 2% or less annual rate during the remainder of 2013. Bill's "***Slow Growth***" forecast indicates growth of 2.6% in the second quarter but then sub-2% growth in the third and fourth quarters (annual rate of 2.33% for all three quarters).

Both my "***Slow Growth***" and "***Strong Growth***" scenarios forecast weaker consumer spending growth in 2014 than either GS or B of A. My "***Strong Growth***" forecast closely tracks GS's 2015 and 2016 forecasts (also see **Table 5**).

### 6. Consumer Confidence

On a brighter note, measures of consumer confidence generally are strengthening. For example, the University of Michigan's consumer sentiment index rose to 84.5 in May from 76.4 in April and is now at the highest level since July 2007 before the onset of the Great Recession. ISI's company surveys diffusion index was 52.2 in the most recent week and 52.3 in the previous week. Both readings are also at the highest levels since 2007 prior to the Great Recession.

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

***Let us hope that this emerging optimism is borne out by increases in actual economic activity over coming quarters.***

## V. Stock Market Equity Valuations

Some believe that stock prices are overvalued and may be moving into bubble territory.

To assess whether stock prices may be overvalued requires examining the drivers of valuation. Stock prices theoretically should be the discounted present value of future expected earnings. Thus, valuations depend on two variables — future expected earnings and the discount rate.

### 1. Future Expected Earnings

Recent actual earnings growth has been strong. S & P 500 earnings are up about 5% over the last year. To date earnings gains have been strong because of low and stable labor costs, cost cutting and reduced borrowing costs. This has led to a steady increase in profit margins, which are now at historically high levels. Some believe that reversion of profit margins to their historical average is inevitable. Were this to occur, earnings would grow less rapidly than nominal GDP in the future or could even fall. At the very least, if that were to occur, stock prices would rise more slowly in the future and could fall, if current valuations are based upon an assumption that current high profit margins will continue.

GS recently published a study which examined future prospects for profit margins.[6] David Mericle's overall conclusion is that profit margins are likely to move sideways — neither higher nor lower — over the next few years. Profit margins depend upon: (1) the strength of the domestic labor market, (2) the performance of financial services companies, (3) foreign growth and the performance of the dollar, and (4) effective corporate tax rates. These four components are tracked individually in the National Income and Product Accounts.

Although in the aggregate Mericle expects profit margins to remain stable, that is not true for each of the four components. As the domestic labor market strengthens, a greater share of revenues will go to labor and that will depress profit margins. Unless Congress takes up tax reform, which increasingly appears to be unlikely, corporate tax rates will remain stable and therefore there will be no impact on profit margins from that component. Mericle expects profit margins of financial services companies to improve, although he acknowledges that this is highly uncertain. I have serious doubts myself. The fourth category — foreign sources — is likely to boost profit margins as growth in foreign economies exceeds growth in the U.S. economy and foreign earnings account for an increasing share of total earnings. This will be assisted by continued modest depreciation in the dollar on a trade-weighted basis.

Stable margins translate into about a sustained 5% annual rate of growth in profits over the next few years. That should support an annual increase

[6] David Mericle. "Profit Margins: Moving Sideways", Goldman Sachs US Economics Analyst, Issue No: 13/23, June 7, 2013.

in stock prices of 5%, assuming that the price-earnings multiple remains constant and assuming that stock valuations are not currently based on a higher expected rate of growth in earnings.

Over shorter periods of time, a perceived strengthening of the economy could cause investors to increase near-term earnings forecasts and this could have a favorable impact on stock prices. Stronger than expected consumer spending and employment growth this year may explain in part why the S&P stock average is up 14.1% since the beginning of the year.

Over extended periods of time and assuming stable profit margins, nominal growth in earnings should closely track nominal growth in GDP. Nominal growth in GDP is the sum of real growth plus inflation. The 5% estimate is reasonable provided that real GDP growth averages 2.5% to 3.0% and inflation averages 2.0% to 2.5%. But, if nominal growth is 3%, composed of 1% inflation and 2.0% real growth, the 5% estimate will prove to be too high. This is the risk inherent in the **deflationary bust** scenario in which growth falls significantly short of expected levels. A recalibration to a much lower assumed nominal rate of growth in earnings would lead to a significant downward adjustment in stock prices. And, if profit margins move down, which doesn't appear to be very likely right now, this would reinforce the downward adjustment in stock prices.

### 2. Equity Discount Rate

The discount rate has been falling, thanks both to declining inflation and to the FOMC's quantitative easing policy. In fact, when both of these factors are taken into consideration, ***there is no basis to conclude that stock prices are moving into bubble territory.*** To the contrary, there is room for further prices increases.

As is the case for bonds, the discount rate is composed of several elements — future expected interest rates, a term premium and a risk premium. The risk premium is the most important element when analyzing whether stock prices are reasonable or in bubble territory. B of A calculates a measure for the equity risk premium as the spread between the 500 S&P earnings yield, based on 12-month forward earnings forecasts, and the 10-year Treasury Inflation Protected Securities' (TIPS) yield. Notwithstanding the strong rise in stock prices so far in 2013 this measure of the equity risk premium

has been stable over the last two years, not falling as would be expected if a price bubble were forming. The equity risk premium is about 750 basis points as compared to a pre-Great Recession level of about 500 basis points. This implies that equity prices could still have more upside potential than downside risk, even if earnings forecasts turn out to be too optimistic and the economy's performance is worse than the consensus expects.

***Why should the equity risk premium be as high as it is?*** There are plausible reasons. First, there has been considerable uncertainty in recent years about prospects for economic growth, so it is logical for investors to demand a higher risk premium to accommodate greater uncertainty. Second, having been badly burned during the 2007-09 financial crisis, investors may simply have become more risk averse. Third, investors know that negative real rates of interest are abnormal and a return to normal levels has to occur sometime in the future. A higher equity risk premium accommodates this likelihood. Fourth, some investors expect inflation to become a significant problem once the economy recovers and the Federal Reserve's balance sheet is still bloated. Not surprisingly, the last time the equity premium was as high as it is today way during the late 1970s and early 1980s when double-digit inflation held sway. That time, too, was one of great uncertainty.

Thus, there are plenty of good reasons why the equity risk premium is high and why it is likely to remain relatively high. There is, however, a silver lining in this phenomenon. If interest rates rise because of a stronger economy and/or higher inflation, a corresponding decrease in the size of the equity risk premium might occur and, if it did, the discount rate would remain the same and stock prices would be less likely to be crushed. Alternatively, if economic growth remains weak and interest rates do not rise, as time passes investors may become progressively less concerned about bad things happening. This could lead to a shrinking in the equity risk premium, a higher price-earnings multiple and higher stock prices.

## VI. Monetary Policy

May's employment report provided further evidence of gradual improvement in the labor market, even though the unemployment rate edged up to 7.6%. The unemployment rate policy guideline for sustaining the current

easy monetary policy is 6.5%. However, inflation has now moved well below the Federal Open Market Committee's (FOMC) 2.0% long-term target. Core PCE inflation was only 1.05% in April, which is an all-time low in the 53 years that this data series has existed — the previous low was 1.07% in November 1961.

Improving labor market conditions might prompt consideration of earlier tapering of large scale asset purchases. But, slowing inflation cuts the other way. In addition, the FOMC is well aware of the strong fiscal policy headwinds that will buffet the economy over the next few months. The FOMC is probably not ready to reduce the extent of monetary ease. While it explicitly revised the policy language at its April meeting to make it clear that it could either increase or decrease large scale asset purchases, depending upon evolving economic conditions, the minutes of that meeting and subsequent commentary from Fed speakers have telegraphed a lack of consensus and sowed a degree of confusion in the marketplace.

## 1. Quantitative Easing — Large Scale Asset Purchases and Market Confusion

**Policy Intent and Expected Benefits.** Quantitative easing through large scale asset purchases ("portfolio balancing") and policy guidance for conditions necessary to raise short-term interest rates ("signaling") are intended to lower longer-term interest rates. Lower long-term interest rates are expected to stimulate aggregate demand and investment in an economy still struggling to establish sustainable growth momentum.

Quantitative easing works to stimulate the economy by changing the supply/demand dynamics of longer-term securities to reduce both their nominal and inflation-adjusted (real) yields. Lower rates promote investment and create wealth by driving up financial asset prices. Both contribute to raising aggregate demand. Short-term interest-rate guidance has the same impact but works through market participant expectations by extending the timeframe for future increases in interest rates.

**FOMC Clarification of Policy.** At its April meeting the FOMC clarified that it is prepared either to increase or decrease large scale asset purchases: "*The Committee is prepared to increase or reduce the pace of its purchases to maintain appropriate policy accommodation as the outlook for*

*the labor market or inflation changes."*

**Increases or Decreases in Purchases.** In the immediate aftermath of the FOMC meeting there was market speculation about the possibility of increased purchases. However, that speculation ended with the stronger than expected April employment report. This kind of speculation is likely to ebb and flow with the strength of incoming data reports. Future inflation and employment reports will have the greatest weight on FOMC deliberations about large scale asset purchases.

Federal Reserve officials insist that "portfolio balancing" and "signaling" are distinctly separate policy tools. Thus, timing of tapering securities purchases should not convey any implications about timing of rate increases. However, the market either isn't hearing this distinction or doesn't believe it. Thus, the recent market debate about the timing of tapering has been reflected in bringing forward the date when the market expects the FOMC to begin raising the federal funds rate.

GS has published an analysis of the market effects of "portfolio balancing" and "signaling" and finds that "signaling" is about twice as effective as "portfolio balancing" in easing financial conditions through a reduction in ten-year Treasury yields.[7]

**Timing of Tapering and Eventual Termination of Purchases.** Opinions differ about when the FOMC will begin to scale back asset purchases, depending upon views about the prospective strength of the economy. ***Perhaps the FOMC will attempt to clarify its intent for both tapering and the first federal funds rate increase at its upcoming meeting on June 19, which will have occurred by the time this June letter is distributed. Thus, what follows are views prior to the meeting and may or may not reflect sentiment in the aftermath of the meeting.***

The market consensus is expecting tapering to begin by the fourth quarter of this year and the first rate increase to occur in February 2015. According to a Wall Street Journal survey of economists, 55% expect tapering to begin in the third or fourth quarter of this year, while the remainder expects tapering to begin in 2014 or later. None believe that the FOMC will increase

[7]Sven Jari Stehn. "Signaling vs. Portfolio Rebalancing Effects", Goldman Sachs US Daily, May 22, 2013.

the amount of purchases. The survey of primary dealers indicates that large scale asset purchases will end by the second quarter of 2014 and the first federal funds rate hike will occur sometime between the fourth quarter of 2015 and the second quarter of 2016, depending upon the strength of GDP and employment growth.

GS anticipates purchases will be scaled back beginning in early 2014 and will terminate by the third quarter of 2014. The first increase in the federal funds rate would not occur until the first quarter of 2016.

B of A expects tapering to begin during the second quarter of 2014 and end by the fourth quarter of 2014.

Considering all of these forecasts, the timing range in commencing tapering stretches from the third quarter of 2013 to the second quarter of 2014. The range for ending purchases of securities extends from the second quarter of 2014 to the fourth quarter of 2014. The first increase in the federal funds rate could occur as soon as February 2015 or as late as four to five quarters later. Take your pick. As much as the FOMC might like to provide greater clarity, there is too much uncertainty about the outlook, especially regarding the health of the labor market, to do so. So, in the meantime the timing debate will continue. Good news will advance timing; bad news will push it back.

## 2. Financial Conditions

Until recently, financial conditions had been relatively favorable and stable since late summer 2012. But since early May, long-term interest rates rose abruptly by 60 basis points or more and credit spreads widened. However, the Goldman Sachs Financial Conditions Index has edged up only a small amount and is actually still signaling slightly easier conditions than those that prevailed at the end of 2012. GS expects financial conditions to ease further in coming quarters, even as long-term interest rates continue to rise gradually, because it anticipates favorable developments for stock prices, home prices, credit spreads and the trade-weighted dollar. However, a deterioration in financial conditions, should it occur, would probably lead the FOMC to adjust policy by increasing the amount of large scale asset purchases.

## 3. Prospects for Inflation

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.

In the U.S. the total PCE and core PCE measures of inflation, which guide FOMC monetary policy, are hovering around 1%, well below the FOMC's long-term target level of 2.0%. The recent decline in U.S. inflation has been greater than expected and the core PCE inflation rate has reached a level at which it is beginning to generate some concern.

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.*"

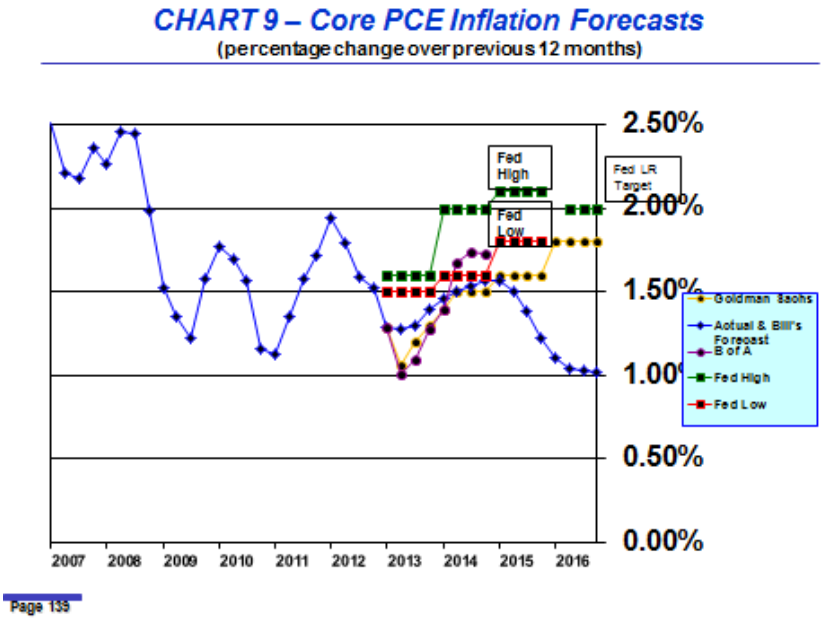
What is needed is higher inflation, which, of course, is one of the objectives of the FOMC's quantitative easing policy.

**Table 6** and **Chart 9** show forecasts for core PCE inflation, which is the preferred FOMC measure of inflation. Some forecasters only forecast the consumer price index (CPI) rather than the PCE inflation index. Because of differences in composition and methodology of construction, the CPI tends to average about 0.3% higher than the CPE.

Generally, all forecasts, except those based on Bill's "***Slow Growth***" and "***Strong Growth***" scenarios, indicate that inflation will rise gradually from the current depressed level, but remain below or close to the FOMC's long-run target level. Bill's forecasts remain near current levels because the

**Table 6**
**Core PCE Inflation Forecasts — B of A, GS, Global Insight, Economy.com, Blue Chip, Bill's "Slow Growth", Bill's "Strong Growth" and FOMC High and Low**

| | 2013:3 | 2013:4 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| B of A | 1.7 | 1.8 | 1.4 | 1.7 | | |
| GS | 1.2 | 1.3 | 1.2 | 1.5 | 1.6 | 1.8 |
| Bill's Slow Growth | 1.6 | 1.9 | 1.4 | 1.6 | 1.2 | 1.0 |
| Bill's Strong Growth | 1.6 | 1.9 | 1.4 | 1.5 | 1.1 | 0.9 |
| FOMC - High | | | 1.6 | 2.0 | 2.1 | |
| FOMC - Low | | | 1.5 | 1.6 | 1.8 | |
| CBO | | | 1.3 | 1.8 | 1.9 | 1.9 |
| Global Insight — CPI | 2.2 | 1.6 | 1.4 | 1.6 | 1.7 | 1.9 |
| Economy.com — CPI | 2.1 | 2.1 | 1.8 | 2.1 | | |
| Blue Chip — CPI | 2.1 | 2.0 | 1.7 | 2.0 | 2.3 | 2.4 |



size of the employment gap, though slowly diminishing, remains substantial throughout the forecast period and limits upward pressure on inflation. Given the decline in global inflation to 2.3% (B of A's optimal trimmed mean inflation indicator) and falling commodity prices, it is not clear why inflation should rise materially above the current level of approximately 1.0%. GS believes the current stabilized level of core PCE inflation is about 1.3%.

In fact, several developments indicate that downward pressure on inflation is likely to continue. First, inflation expectations, as measured by the TIPS (Treasury Inflation Protected Securities) 5-year 5-year forward breakeven, have dropped 30 basis points since March. The Cleveland Federal Reserve's measures of inflation expectations, which cover a variety of time periods, have been dropping and are well below 2% for longer time periods. Quantitative easing is supposed to raise inflation expectations, but the opposite is happening.

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. It is clear that this is a secular, not a cyclical trend, which means that it will persist for a long time.

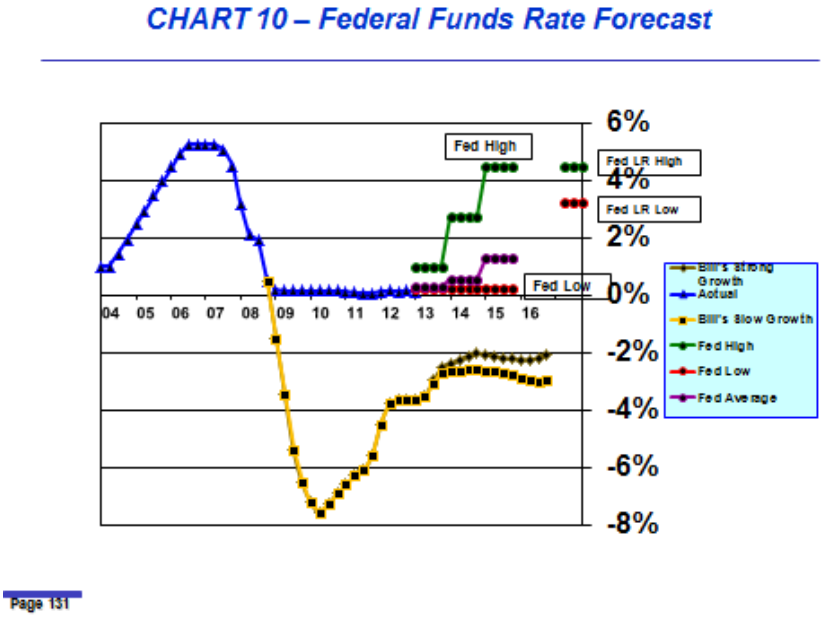
Recent research conducted by GS indicates that for every 100 basis points decline in commodity prices, core PCE inflation declines 6 to 9 basis points. With core PCE inflation already down to 1.05%, this impact is not as trivial as it might seem. GS also finds that about 53% of the change in inflation expectations finds its way eventually into core inflation. This means that if the recent decline in inflation expectations persists, it, too, will place downward pressure on the core PCE inflation rate. However, in other work GS found that about 5% to 15% of low measured inflation passes through into inflation expectations and concluded that this is evidence that inflation expectations are well anchored. These two studies raise an issue of the directionality of cause and effect and whether asymmetries exist. However, whatever the answer might be, a decline in measured inflation expectations, if it persists, seems very likely to place downward pressure on measured inflation.

As of yet, there is no significant concern about low measured inflation, although James Bullard, president of the St. Louis Federal Reserve Bank, recently stated that the FOMC may need to continue large scale asset pur-

chases for an extended period of time.

## 4. Federal Funds Rate

**Chart 10** shows the FOMC's high and low projections for the federal funds




rate for 2013, 2014 and 2015. The FOMC central tendency range is derived by excluding the three highest and the three lowest projections. The purple line (circles) is the average of projections for the 19 FOMC members (7 governors and 12 presidents).

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

## VII. Fiscal Policy

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

As we now approach mid-year, the budget deficit outlook has improved enormously. The 2013 fiscal year deficit is expected to be just 4.0% of GDP compared to 6.9% in 2012. Because of the large decline in the deficit, raising the debt ceiling, which still requires legislation, is no longer a major policy issue. The debt ceiling is currently binding but the U.S. Treasury can maintain operations through mid-October to early-November before matters become critical.

Congress will still need to deal with the fiscal year 2014 budget. However, this can be done without the parties having to face off over long-run issues of tax, spending and entitlement reforms. What seems likely is that Congress will opt for a continuing resolution, perhaps accompanied by selective appropriations bills. Thus, it appears that fiscal issues will not dominate the legislative agenda in coming months. Significant tax reform also seems very unlikely and probably will now have to wait until the next crisis before Congress will be forced to deal with significant issues such as entitlement reform.

### 1. Automatic Spending Cuts (Sequester)

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

the impacts will show up in the income rather than in the employment data. That is because government workers are more likely to be furloughed than terminated. Significant numbers of furloughs did not commence until May 24 when 115,000 federal workers stayed home without pay. This means the income impact won't show up until the June data is reported in August. The BLS's employment report does not contain data on the length of government workers' workweek, so there is no way of obtaining an early read on the extent of the federal worker impact.

However, there will be a direct negative impact on second and third quarter real GDP because government expenditures will continue to decline. Daily Treasury data reveal that government spending so far in the second quarter is declining at the same rate it did in the first quarter. Federal government spending subtracted 0.68% from GDP growth in the first quarter — the annualized rate of decline was -8.7%. GS expects federal spending to shrink 5% in the second quarter and 10% in the third quarter. This would subtract about 0.35% from second quarter real GDP and 0.70% from third quarter. Additional negative impact from the sequester would enter into real GDP through lower consumer spending and gross private domestic investment.

## 2. Debt Ceiling

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

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

whether Boehner will pursue such a bargaining position aggressively.

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

## 3. Potential Consequences of Rapid Fiscal Consolidation

We seem to be experiencing a Goldilocks situation in which the federal deficit is falling much more rapidly than expected but there have been little adverse consequences for economic activity. It might be that the rest of the economy is picking up sufficiently to offset a portion of the negative impact or it might be that we are living on borrowed time and that the full extent of the negative impact has been delayed.

Brian Lucking and Daniel Wilson, economists at the San Francisco Federal Reserve Bank. recently published a study with the somewhat ominous title: "*Fiscal Headwinds: Is the Other Shoe About to Drop?*"[8] They note what we all know. Fiscal policy was "extraordinarily expansionary" by historical comparison during and immediately following the Great Recession, but has become "unusually contractionary" over the last two and a half years. But what is discouraging about their research is their conclusion that over the next three years federal fiscal policy "... *could restrain economic growth by as much as 1 percentage point annually beyond the normal fiscal drag that occurs during recoveries.*" This negative outcome will occur because the federal budget deficit is likely to fall faster than it has historically, primarily because tax revenue is expected to rise faster than it has historically.

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

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

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

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

1. **U.S.**

   - ***Q4 real GDP*** growth projections range from 0.5% to 1.8%; tracking estimates based on October and November data are consistent with growth of approximately 1.0%.

     ✓ ***- "Final Estimate" was +0.37%; weaker than expected due to data anomalies.***

   - ***2013 real GDP*** growth projections range from 1.5% to 3.0% but with a preponderance of the forecasts falling in the lower end of the range. The drag from tighter fiscal policy will offset gradual improvement in the household and business sectors. Growth should improve gradually over the course of the year. The balance of risks, particularly U.S. fiscal policy but also global growth, is weighted toward slower GDP growth.

     ✓ ***+ First quarter GDP growth was a weaker than expected 2.38%; second quarter growth is expected to be less than 2.0%; forecasts for all of 2013 are clustered between 1.5% and 2.0%.***

   - ***Real GDP output gap*** will remain very high and close little, if at all, during 2013.

     ✓ ***+ The output gap was 5.65% in the first quarter about the same level as in the first quarter of 2012.***

   - ***Employment*** should grow about 125,000 per month, somewhat more slowly than in 2012.

     ✓ ***- Data revisions indicate that employment grew 183,000 monthly in 2012; employment growth probably will be stronger than 125,000 monthly in 2013; over the first five months of 2013 payroll growth has averaged 189,000.***

- ***Unemployment rate*** should edge down to about 7.5%. A lower rate is not very likely unless more discouraged workers exit the labor force.

  ✓ ***+ The unemployment rate has edged down from 7.85% in December to 7.56% in May, but it appears that a substantial number of additional discouraged workers has dropped out of the labor force.***

- ***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 April both disposable income (8.01% in 2012; 1.85% in 2013) and consumer spending growth (3.56% in 2012; 3.20% 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 four months of 2013 (2.39% in 2013 vs. 4.10 in 2012).***

- ***Export and import*** growth will probably continue to slow gradually due both to slower U.S. growth but also due to deepening recession in Europe.

  ✓ ***+ The 12-month moving average measure of the trade deficit fell from 3.37% of GDP in December to 3.16% in April; both export and import growth are slowing.***

- ***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 into contraction territory (49.0) in May.***

- ***Business investment*** spending has slowed sharply because of fiscal cliff concerns and could rebound if there is a satisfactory

resolution of major fiscal issues. Capital expenditure plans are cautious based both on concerns about growth and political uncertainty.

✓ ***+ Business investment growth was very strong in the fourth quarter, but slowed sharply in the first quarter and appears to be weak in the second quarter.***

- ***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 935,250 over the first four months of 2013, up 19% from 783,170 in 2012.***

  ✓ ***- Housing prices are rising much faster.***

- ***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 for most of the year; tapering is likely to commence in early 2014.***

- ***Inflation*** will remain below the Federal Reserve's 2% objective at least through 2015. Concerns about increases in inflation in the long-term are misplaced.

  ✓ ***+ April PCE inflation was 0.74% and core PCE inflation was 1.05%, the lowest in 53 years of record keeping.***

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

  ✓ ***? Too early to tell, but sometime between mid-2015 and mid-2016 appears most likely at this time.***

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

  ✓ ***+ Fiscal policy is likely to be more contractionary during the first half of 2013 than most had expected because Congress permitted automatic spending cuts***

***to take effect as scheduled on March 1st; fiscal policy is now expected to subtract -2.0% from GDP in 2013 and -0.5% in 2014; the deficit is shrinking more rapidly than expected.***

- ***Potential structural rate of real GDP growth*** has declined significantly and could decline further in coming years unless a concerted public initiative is undertaken to invest in education, research and public infrastructure.

  ✓ ***? Too early to tell, but I remain firm in my conviction; productivity increased at a disappointing annual rate of 0.5% in the first quarter and is up only 0.9% over the last year.***

2. **Rest of the World**

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

  ✓ ***+ To date calm has prevailed but political uncertainty is rising in Italy and Spain; the Cyprus bailout/bail-in was a significant negative development; however, markets have downplayed its significance.***

- ***European recession*** is spreading to stronger countries and worsening in peripheral countries.

  ✓ ***+ Data reports are generally worse than expected.***

- ***European banking union*** will do little to solve deep-seated European and Eurozone structural problems.

  ✓ ***+ Germany has persuaded other EU members to eventually amend treaties to require a separation of the ECB's monetary and supervisory responsibilities — this move is seen by some as a delaying tactic on the part of Germany.***

- 

- European political dysfunction, populism and nationalism will continue to worsen gradually.

  ✓ ***+ Parties opposed to austerity won more than 50% of the vote and 25% of the vote was captured by the populist Five Star party; Alternative for Germany is a new party in Germany which favors changing Germany's relationship to the EU and EZ.***

- ***China*** appears to have achieved a ***soft landing*** and economic activity will strengthen modestly.
  - ✓ ***+ Soft landing achieved.***
  - ✓ ***? Second quarter growth forecasts have been revised modestly lower.***
- ***China's new leadership*** understands the need to design and implement ***economic reforms*** and avoid repeating a massive infrastructure spending program.
  - ✓ ***+ Accumulating evidence that transition toward a more consumer-focused economy has begun.***
  - ✓ ***? Implementation of reforms not expected until second half of 2013.***
- ***Global growth*** is likely to be fairly steady in 2013 but will depend on developments in the U.S. and Europe.
  - ✓ ***+ Global growth is now trending at last year's level of about 3%.***

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.***
   - ***Europe's recession*** deepens more than expected; financial market turmoil reemerges; political instability and social unrest rises more than expected threatening survival of the Eurozone.
     - ✓ ***+ Economic data indicate that the recession is worse than expected, although hope prevails that modest growth will resume in 2014.***
     - ✓ ***- financial markets have remained calm and weathered the Cyprus episode surprisingly well.***
     - ✓ ***? political instability and social unrest are not yet serious, but the trend is unfavorable.***
   - ***Chinese*** leaders have difficulty implementing ***economic reforms***; growth slows more than expected.
     - ✓ ***? Too early to tell about implementation of reforms.***
     - ✓ ***+ Growth forecasts are being revised lower.***

- ***Global growth*** slows more than expected.

  ✓ + ***The trend in global growth is about the same as last year, but risks appear to be tilted toward slightly slower growth (B of A revised its global growth forecast for 2013 from 3.2% to 3.0%).***

- Severe and, of course, unexpected ***natural disaster*** occurs.

  ✓ ? ***Nothing has happened so far this year.***

- ***Disruption of Middle East oil supply***, stemming from hostile actions involving Iran and Israel, occurs.

  ✓ ? ***All is quiet for now.***

- ***New North Korea attacks South Korea***, which spokes global financial markets.

  ✓ ? ***There has been a lot of saber rattling, but nothing has happened yet; the crisis has dropped out of sight in the last month.***

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