



The Longbrake Letter*
Bill Longbrake
May, 2013

I. Is the U.S. Strong April Payroll Report Good News?

“Yes”, to a certain extent. It indicates that the large negative federal tax and spending shocks have not thrown the economy into a downward spiral.

“No”, enormous weaknesses remain in the labor market. Offsetting the good news of a large gain in employment and a decrease in the unemployment rate was a contraction in the number of hours worked and a decline in the rate of increase in hourly and weekly wages. Also, no improvement occurred in the duration of long-term unemployment or in the plight of discouraged and marginally attached workers.

Following progressively weaker U.S. economic reports during March and April, the April employment report was an unexpected favorable surprise. Markets responded enthusiastically sending the S&P 500 index to an all-time high.

On balance, other indicators of economic activity paint a picture of weak, but positive growth. The “Advance Estimate” of first quarter real GDP growth was a very disappointing 2.5% and growth was only 1.5% net of inventory restocking. Just a week prior to this report the consensus had been expecting 3.2% growth.

In spite of the strong April employment report what seems most probable is that 2013 will be a year of slow growth in the U.S. with weakness in the middle of the year as the cumulative effects

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of tighter fiscal policy reach maximum impact. Then, toward the end of the year, growth should improve as the negative near-term impacts of higher federal taxes and reduced spending unwind.

In this month's letter, recent U.S. data reports and prospects for real GDP growth, employment trends and personal income and consumption are reviewed in Sections III, IV and V. Monetary and fiscal policies are the subject matter of Sections VI and VII. In Section VIII I share my thoughts about recent controversy involving Carmen Reinhart and Ken Rogoff's research and the policy battle between Keynesians and proponents of austerity.

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

II. Transitions in Various Global Economies Abound and So Do Risks

In Europe the slow unraveling of the European Project is progressing. Economies are weakening. And, as that occurs, social unrest is building inexorably, which with the passage of time is fostering political instability. Healing is not occurring. The disease is spreading. More crises and darker days lie ahead for the euro, Eurozone and European Union.

China's policy makers appear to be committed to restructuring the economy. This inevitably will entail slower growth and probably to a greater extent and sooner than the market expects. A more consumer-based economy is essential for long-run economic stability, but the transition will neither be easy nor free of risk. Already growth has slowed a little and global commodity prices have declined by an average 7% since February. This is putting downward pressure on export-based economies such as Australia and Brazil.

Japan's experimentation with aggressive reflation has boosted expectations, lifted financial asset prices and driven down the value of the yen. Early indications are that the policy is helping revive the Japanese economy. However, the 20% devaluation of the yen is weighing heavily on other Asian economies, particularly South Korea. China and Europe will also eventually lose some export market share to Japan. And, in the longer run it is unclear

whether Japan's current reflationary economic policies will fundamentally reverse its two-decades long deflation.

Europe's "Slow March to Disaster" is reviewed in Section IX of this month's letter with special focus on the rapidly deteriorating situation in France. Sections X and XI contain updates on Japan and China.

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

Over the long run slower population growth and reduced productivity gains have combined to reduce the inflation-adjusted potential growth rate in aggregate demand to 2.0% to 2.5% compared to the long-run average of 3.2%.

However, in the short run weak GDP growth and the large gap between actual and potential GDP is a direct consequence of a very weak labor market. Remember that one person's spending is another person's income. Spending depends upon income. When unemployment and underemployment are high, income is depressed below full potential. It follows directly that spending will also be weak. Unfortunately, this set of conditions, absent policy intervention, can result in a sustained output gap that does not automatically close. In Keynesian economics this situation is called being in a "*liquidity trap*".

Exit from a liquidity trap requires implementing monetary and fiscal policies which boost income and, therefore, spending. The objective is to initiate a positive feedback loop which results in progressively higher levels of spending and income over time until aggregate demand rises to full potential and the output gap is eliminated.

Monetary and fiscal policy responses in the U.S. focused initially on attempting to boost aggregate demand. But, more recently, while monetary policy has maintained this focus, fiscal policy has shifted into reverse through higher taxes and reduced government spending with the explicit intent to stabilize and eventually reduce the federal public-debt-to-GDP ratio. Unfortunately, this reversal in fiscal policy works to reduce aggregate demand, at least in the short run, and is likely to slow growth over the next two to three quarters. The negative effects of fiscal policy will peak during 2013 at about 2.0% of GDP and then diminish to 0.5% in 2014. This means

that GDP growth is likely to be weak during 2013 and limited progress will occur in reducing the GDP output gap.

However, the good news is that the odds of recession, barring a significant economic shock, appear to be low.

1. 2013 Q1 GDP — Advance Estimate

As can be seen in **Table 1**, real GDP growth improved to 2.50% in the first

Table 1
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%			1.28%	1.12%	1.06%
Private Investment						
Nonresidential	.22%			1.28%	-.19%	.36%
Residential	.31%			.41%	.31%	.19%
Inventories	1.03%			-1.52%	.73%	-.46%
Net Exports	-.50%			.33%	.38%	.23%
Government	-.80%			-1.41%	.75%	-.14%
Total	2.50%			.37%	3.07%	1.25%
Final Dom. Sales	1.47%			1.89%	2.34%	1.68%

quarter from a very disappointing 0.37% in the fourth quarter of 2012.

Personal consumption expenditures, which account for 71% of real GDP, grew at an unexpected annual rate of 2.24% in the first quarter. This was the strongest growth rate since the fourth quarter of 2010. It appears that 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 March growth in both disposable income and consumption slowed considerably. In fact, retail sales in March declined and are expected to decline further in April. Spending may also have been boosted temporarily during the quarter in response to Hurricane Sandy. Unfortunately, this

improvement in consumption appears to be a one-quarter aberration in an otherwise dismal trend that should resume in the second quarter.

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 9.3% in the first quarter, which means it grew at an annual rate of 2.1% in the first quarter. This was slightly better than Bank of America/Merrill Lynch's (B of A) forecast of 1.8% and considerably better than Goldman Sach's (GS) estimate of -0.9%.

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. B of A is more optimistic and expects housing to contribute 0.5% to 0.7% to GDP growth in 2013. It should be noted that although annualized residential investment growth was 12.6% in the first quarter, B of A expected 16.5% and GS forecast 15.7%.

Construction data released since the Advance Estimate of GDP will decrease the combined contribution of residential and nonresidential investment of 0.53% by about 0.30%.

Government expenditures fell much more than expected, taking GDP growth down by -0.80%. 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 in the second and third quarters. Perhaps the bright side of this development is that the federal deficit is falling much more rapidly than anticipated.

Net exports subtracted 0.50% from GDP growth. However, 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. The March trade deficit was reported after release of the Advance GDP estimate and was much smaller than ex-

pected. As a consequence the -0.50% in the Advance Estimate should become -0.20% in the Preliminary Estimate.

Final domestic sales, which nets out the impact of volatile fluctuations in *inventories*, grew a disappointingly meager 1.47%. Swings in inventories mask the underlying growth rate in real GDP. When the impact of changes in inventories is removed, underlying fundamental trend growth actually decreased from the fourth quarter (1.89%) to the first quarter (1.47%).

2. GDP Forecasts for 2013 Q1 and Q2

Since the Advance Estimate of GDP was released the impacts of newly reported data, which will go into the revised Preliminary Estimate, have been largely offsetting. The balance of trade was less negative, which will boost GDP, but construction spending was less than expected.

GS's current activity index — a rough proxy for GDP growth — declined from 2.2% in December to 1.1% in March. GS currently expects second quarter GDP growth to be 1.8%.

B of A also forecasts growth to slow materially in the second quarter to 1.3% as the full effects of tax increases and reductions in government spending take hold.

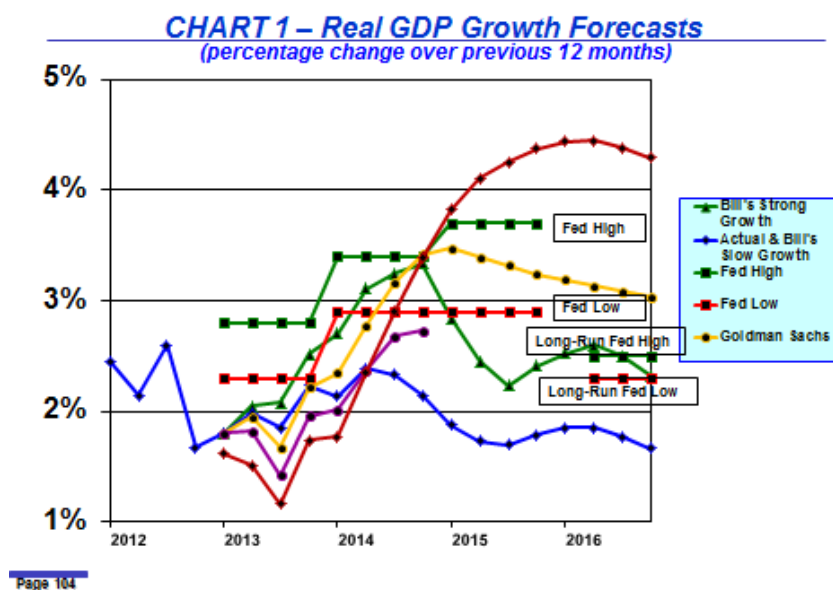
According to a Wall Street Journal survey conducted between April 5 and 9, the consensus of economists for second quarter GDP growth is 1.8%. As summarized by The Capital Spectator, the average second quarter GDP forecast of six econometric models is 2.9% with a range from 1.7% to 4.0%. (My four econometric models have a range of 1.4% to 2.7% and an average of 2.0%.)

Take your pick. My vote goes with the consensus or slightly lower, somewhere between B of A and GS, notwithstanding the stronger than expected April employment report.

3. GDP Forecasts for All of 2013

Most forecasters expect growth in 2013 to slow in the middle of the year and then pick up toward the end of the year.

Chart 1 shows GDP forecasts/projections for 2013 through 2016.



B of A has reduced its 2013 GDP fourth quarter to fourth quarter growth forecast from 2.1% to 2.0%. GS has reduced its forecast from 2.5% to 2.2%.

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 both the B of A and GS forecasts are now below the lower end of the FOMC's projected GDP growth range.

Bill's "*Slow Growth*" forecast has declined from 2.3% to 2.2%. Bill's "*Strong Growth*" forecast has decreased from 2.6% to 2.5%.

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.

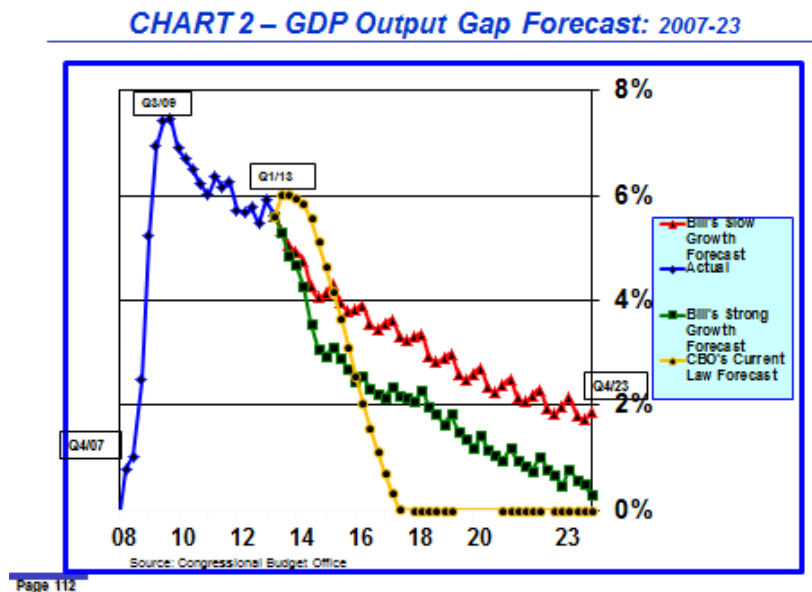
You will note in **Chart 1** that my “*Strong Growth*” scenario tracks the GS forecast in 2014. That occurs because I include GS's optimistic private investment growth assumptions in that scenario. After 2014, private fixed investment growth in my “*Strong Growth*” reverts to historical averages, but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

B of A has equally optimistic investment assumptions but its real GDP forecast for 2014 is 2.7% compared to 3.4% for GS and an FOMC projection range of 2.9 to 3.4%. My “*Slow Growth*” scenario forecast is 2.1%, but the “*Strong Growth*” scenario forecast is 3.3%, which is similar to GS's forecast and to the top end of the FOMC's projection range.

5. GDP Output Gap

According to CBO, the GDP output gap remains very large and declined only marginally during the first quarter to 5.6%. 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.

Chart 2 also shows output gap projections for my “*Slow Growth*” and “*Strong Growth*” scenarios. Both potential and forecast real GDP rise as assumed productivity increases, but forecast growth rises faster than potential growth with the result that the output gap closes more quickly in the “*Strong Growth*” scenario. As can be seen in **Chart 2**, the output gap is approximately 0.3% in 2023 in my “*Strong Growth*” scenario and 1.9% in my “*Slow Growth*” scenario.

CBO projects that the output gap closes by 2017. This result is achieved by assuming very high real GDP growth rates in 2014, 2015 and 2016. 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. This would mean that the output gap would not 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 rate (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.

7. Upcoming Bureau of Economic Analysis (BEA) Revisions to GDP

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

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

In March the BEA released a paper, *“Preview of the 2013 Comprehensive Revision of the National Income and Product Accounts,”* describing several changes. The most significant changes will involve capitalization of research and development expenditures and creative works. Also, the reference year for calculating constant dollars will change from 2005 to 2009.

Collectively, the changes are expected to increase the level of real GDP by about 3%. GDP will increase by approximately \$300 billion, or 2%, from capitalization of research and development expenditures and \$70 billion from capitalization of creative works.

There will be many impacts on the reported data. Private fixed investment (accounting for about 2/3 of the capitalization of research and development) and government investment (accounting for 1/3) will increase. Consumption expenditures will decrease. Corporate profits will rise because research and development expenditures will no longer be treated as an immediate expense, but rather as a depreciable long-term fixed asset.

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

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

IV. Employment

April's employment report was much stronger than expected. The report prompted a favorable tone change in financial markets. Also, consumer sentiment appears to have been positively impacted — the Rasmussen daily survey has risen to its highest level since before the Great Recession. Higher stock prices and lower gas prices are also helping confidence improve.

Positive psychology is helpful because it creates and reinforces favorable feedback loops. Yet, I have to rain a bit on the euphoria parade. There were also weaknesses in the report as evidenced by a decline in the length of the workweek, ongoing stagnation of wage growth at a very low level, no progress in reducing long-term unemployment and a stubbornly high level of underemployed and discouraged workers — the unemployment rate (BLS U-6) that includes underemployed and discouraged workers rose from 13.8% in March to 13.9% in April, even as the primary unemployment rate fell from 7.6% to 7.5%. The labor market is still extremely weak. A little progress has been made, 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 165,000 jobs in March. This total was comprised of an increase of 176,000 private sector jobs and an 11,000 decrease in government jobs. Revisions to February and March jobs added 114,000 jobs resulting in a net increase of 279,000. The 12-month rate of growth edged up from 1.52% in March to 1.56% in April. 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 mandatory cuts in the federal budget are having an impact on employment levels. This may yet depress employment in coming months or it 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 growth in disposable income.

2. Household Jobs Report

Household employment rebounded 293,000 in April after increasing 206,000 in March. This brought the 12-month growth rate back up to 1.16%. But, 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.

Part-time employment increased 441,000 in April. This means that full-time employment decreased by 148,000. This implies that while the number of jobs increased, the overall quality declined. However, as a reminder, monthly data from this survey are volatile. Over the last 12 months, part-time employment has increased only 60,000 while total employment has increased 787,000.

Average weekly hours worked decreased from 34.6 to 34.4. This decline looks worse than it probably is. The 12-month average of hours worked is 34.44, not much different from April's number. Also, the BLS rounds the number of hours worked to the nearest tenth of an hour, which means that the actual decline might have been a lot less than the reported 0.2 hours.

Some have suggested that the surge in part-time employment and the decrease in the length of the workweek are being influenced by provisions of the **Affordable Care Act**. Employers with 50 or more employees are required to provide health insurance for employees who work more than 30 hours per week. This mandate can be avoided if an employer has fewer than 50 employees. Also, it is argued, there is greater incentive to utilize

part-time employees who work fewer than 30 hours a week. In my view, because the monthly data are noisy, it will take continued growth in part-time employment relative to full-time employment and a continuing shrinkage in the length of the workweek to substantiate this hypothesis.

3. Discouraged Workers or Structural Unemployment?

Unemployment dropped to 7.5% in April. The continuing decline in the unemployment rate is partially due to a decline in the number of people who report themselves as unemployed and looking for work. That number declined 83,000 in April and 3.7 million since the number of unemployed workers peaked in October 2009. This is good news, but the word “partially” is important.

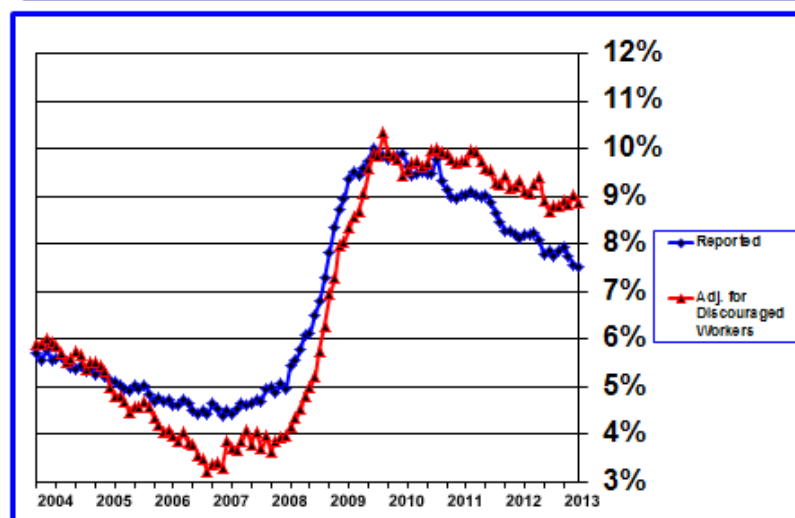
Unfortunately, the unemployment rate is also declining because people have dropped out of the labor force. What is important from a policy standpoint is whether workers who are dropping out of looking for jobs will reenter the job market when jobs become more plentiful or whether their exit is permanent 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 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 April 2013, there were approximately 2.1 million discouraged workers who were not counted as unemployed. If the 2.1 million discouraged workers were counted, the unemployment rate would have been 8.88% rather than 7.51%. A recent Federal Reserve Bank of San Francisco Economic Letter suggested that as many as 2.1 million discouraged workers could re-enter

CHART 3 – Reported Unemployment Rate & Adjusted for Discouraged Workers



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the labor force as the labor market strengthens.¹

GS has published three studies of labor force participation recently.² 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. 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 III.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

¹Mary Daly, Early Elias, Bart Hobijn, and Oscar Jorda. “Will the Jobless Rate Drop Take a Break?”, FRBSF Economic Letter 2012-37, December 17, 2012.

²David 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.

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 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.

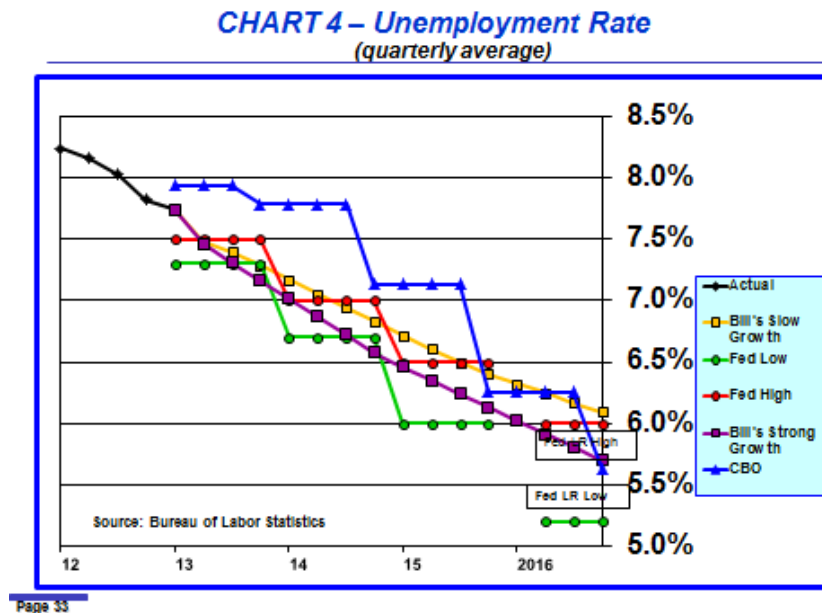
4. Unemployment Rate

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.

According to BLS, the number of unemployed workers decreased 83,000 in April after decreasing 290,000 in March and 300,000 in February. The sharp drop in the number of unemployed workers over the last three months may stem, at least in part, from the progressive expiration of extended unemployment benefits.

The unemployment rate fell to 7.51% in April, which was a new post-Great Recession low. Over the last year since April 2012 unemployment has decreased 859,000 and the unemployment rate has decreased from 8.10% to 7.51%.

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.

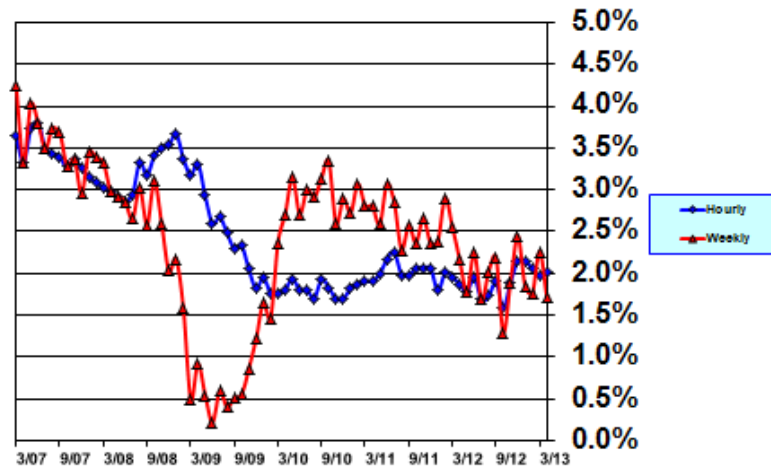
CBO's unemployment rate forecast, which is now out of date, is also shown in **Chart 4** (blue line and triangles). The unemployment rate barely budges in 2013 and 2014 but then falls quickly and hits 6.5% by mid-2015. GS expects the unemployment rate to reach 6.5% by early 2015 and expects that the 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.

5. 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

CHART 5 – Hourly and Weekly Wages
(annual rate of change)



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will accelerate.

Average hours worked has stabilized at 34.44 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 reliable evidence of a tightening labor market.

V. Consumer Income and Spending

Personal income, consumption expenditures and saving have been very volatile in recent months. This has been caused primarily by anticipated 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 2** show the annual results

Table 2
Change in Personal Income and Its Disposition for 2011, 2012
and 12 Months Ending March 2013
(in billions of dollars)

	Nominal Annual		Nominal Annual		Nominal	Pct.
	2011	Pct.	2012	Pct.	Mar 12 to	Change
	Change		Change		Mar 13	Mar 12 to
					Mar 13	Mar 13
Personal Income	\$458.1	3.64%	\$923.3	7.08%	\$332.1	2.50%
Compensation	269.2	3.34%	390.9	4.69%	219.3	2.57%
Proprietors' Inc.	21.0	1.83%	62.3	5.33%	79.3	6.66%
Rental Income	70.7	19.50%	49.2	11.35%	57.6	12.76%
Asset Income	25.9	1.56%	376.8	22.32%	48.0	2.82%
Government Transfers	4.3	0.19%	87.3	3.75%	81.3	3.45%
Less: <i>Personal Taxes</i>	-112.7	5.05%	-156.9	6.69%	-243.3	10.10%
Disposable Income	278.5	2.46%	809.7	6.97%	242.1	2.05%
Less: <i>Consumption</i>	435.8	4.04%	398.5	3.55%	350.0	3.07%
Personal Saving	-157.4	-28.63%	411.3	104.84%	-107.7	-24.66%
Personal Saving Rate	4.24%		3.91%		3.69%	

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

1. Personal Income and Disposable Income

What immediately stands out is the near doubling in nominal personal income growth from 3.64% in 2011 to 7.08% in 2012. The contrast between 2011 and 2012 is even more dramatic for disposable income growth which increased to 6.97% 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 2.50% over the 12 months ending in March 2013 and disposable income rose 2.05%. The impact of the payroll tax rate increase from 4.2% to 6.2% is clearly visible in the 10.10% increase in personal taxes over the same 12-month period. The average saving rate declined from 3.91% in 2012 to 3.69% in 12 months ending in March 2013 and was 2.72% in March.

Because the recent data volatility makes it difficult to discern trends, I have added **Table 3** which compares averages for 2011 and 2012 with the

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

	2011 Pct. Change	2012 Pct. Change	Pct. Change Jan 12- Jan 13	Pct. Change Feb 12- Feb 13	Pct. Change Mar 12- Mar 13	Pct. Change Apr 12- Apr 13
Personal Income	3.64%	7.08%	2.28%	2.76%	2.50%	
Compensation	3.34%	4.69%	2.99%	2.87%	2.57%	
Proprietors' Inc.	1.83%	5.33%	5.94%	6.08%	6.66%	
Rental Income	19.50%	11.35%	11.63%	12.15%	12.76%	
Asset Income	1.56%	22.32%	0.01%	3.70%	2.82%	
Government Transfers	0.19%	3.75%	3.47%	3.72%	3.45%	
Less: <i>Personal Taxes</i>	5.05%	6.69%	10.04%	10.17%	10.10%	
Disposable Income	2.46%	6.97%	1.85%	2.35%	2.05%	
Less: <i>Consumption</i>	4.04%	3.55%	3.26%	3.18%	3.07%	
Personal Saving	-28.63%	104.84%	-35.00%	-20.34%	-24.66%	
Personal Saving Rate	4.24%	3.91%	3.83%	3.75%	3.69%	

twelve-month periods ending in January, February and March 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 3**, 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 3.07% over the twelve months ending in March.

Because income growth is likely to slow further in coming months as cuts in federal spending accumulate, it is likely that consumption growth will also continue to edge down.

3. Saving

Consumption growth has exceeded income growth persistently over the last 27 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 probable is that the saving rate will erode further as households attempt to maintain consumption in the face of slower income growth.

4. Disposable Income and Spending

Chart 6 shows the nominal rate of growth in disposable income and consumer 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 4.8% in December, and fell back to 2.1% in March.

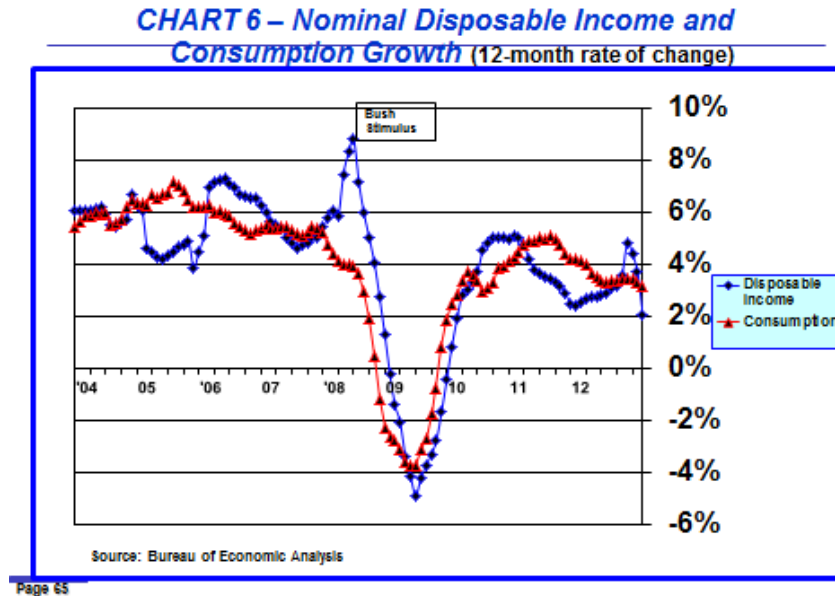


Chart 6 shows that growth in consumer spending, after peaking at 5.1% in September 2011, subsequently slowed to about 3.4%, then stabilized at that level for eight months before resuming a declining pattern to 3.2% in March 2013.

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.

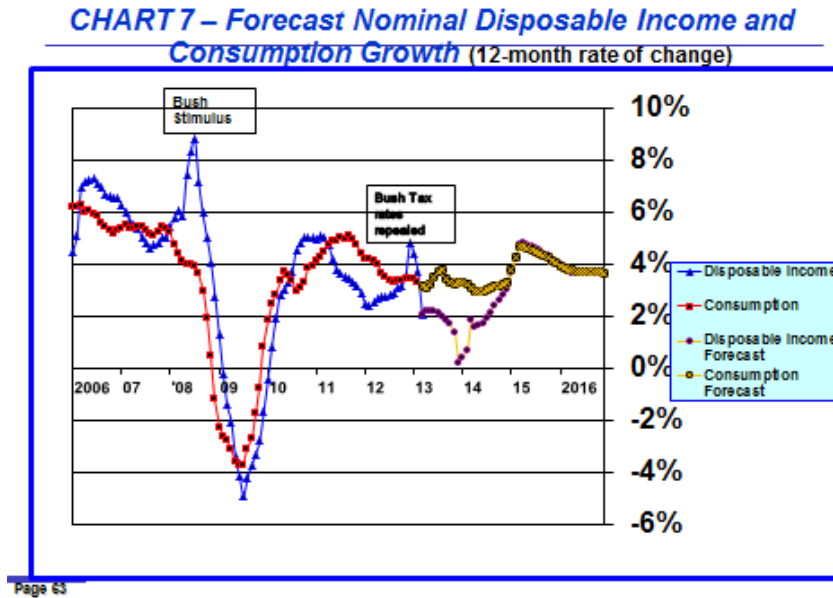
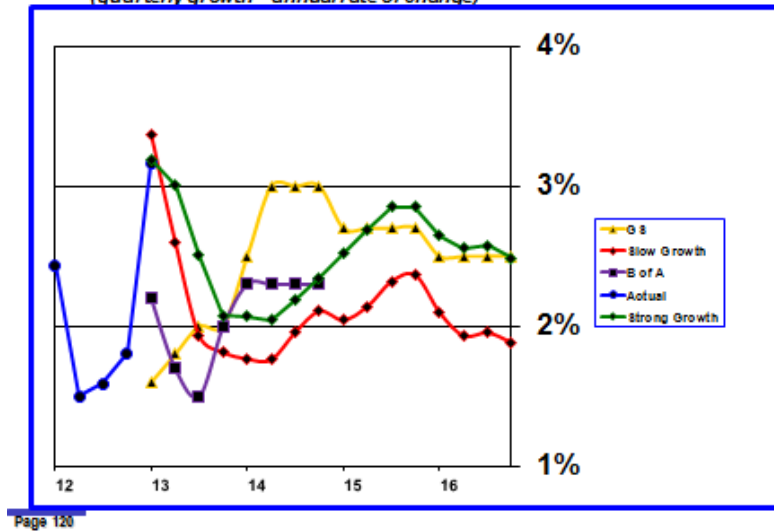


Chart 7 shows my forecast for growth in nominal consumer disposable income and consumption through 2016. All-in-all the story **Chart 7** tells is not a strong one. It is a story that is consistent with low labor supply growth, paltry productivity gains, low inflation and meager increases in wages and salaries.

First quarter spending growth was much stronger than most forecasters expected. **Chart 8** shows forecasts for quarterly real consumer spending growth at an annualized rate. Both B of A and GS badly underestimated first quarter 2013 consumer spending growth, which was 3.16%. My forecasts overestimated growth but were much closer to the actual result. What most forecasters missed apparently was a temporary pickup in consumer spending during January and February in response to the large, but temporary, gains in income in November and December.

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. Both my "*Slow Growth*" and "*Strong Growth*" scenarios forecast weaker consumer spending growth in 2014 than

CHART 8 – Real Consumer Spending Growth - Forecast
(quarterly growth – annual rate of change)



either GS or B of A. My “*Strong Growth*” forecast closely tracks GS’s 2015 and 2016 forecasts.

Retail sales fell 0.4% in March and are projected to decline 0.3% to 0.5% in April. Part of the decline in both months has to do with lower gas prices.

On a brighter note, measures of consumer confidence generally are strengthening. This implies that even though income growth is likely to slow for the next few months greater optimism about the future will prompt consumers to dip into savings to sustain spending patterns rather than pulling back.

VI. Monetary Policy

April’s employment report provided some evidence of gradual improvement in the labor market. The unemployment rate fell to 7.5%. The 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. Total PCE inflation was only 1.0% in March and core PCE inflation was 1.1%.

To an extent these developments were offsetting. Improving labor market conditions might prompt consideration of earlier tapering off of the current open-ended program 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. Clearly, the FOMC is not ready to reduce the extent of monetary ease. Indeed, it explicitly restated policy at its most recent meeting to make it clear that it could either increase or decrease large scale asset purchases, depending upon evolving economic conditions.

1. Policy Intent and Expected Benefits

Quantitative easing through large scale asset purchases and policy guidance for conditions necessary to raise short-term interest rates 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.

2. Quantitative Easing — Large Scale Asset Purchases

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, at least for the time being, 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.

Timing of Reductions 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. Those who expect growth to strengthen later this year believe that purchases will be reduced before the end of 2013.

GS anticipates purchases to be scaled back in late 2013 and to terminate by the end of the second quarter of 2014. GS expects the Federal Reserve to purchase approximately 45% of Treasury net issuance in fiscal year 2013 — \$405 billion of \$875 billion — and 32% in fiscal year 2014 — \$225 billion of \$700 billion. The amount of net issuance purchased by others would be approximately \$475 billion in each of fiscal years 2013 and 2014. All of net issuance of about \$575 billion in fiscal year 2015 would be purchased by others. Thus, in GS's view, tapering and eventual termination of large scale asset purchases will not impose much in the way of additional pressures on the market to absorb net new Treasury debt over the next two and a half years.

B of A does not expect any reduction in purchases until early 2014. B of A is explicit in its view that reductions in purchases will not commence until April 2014 and quantitative easing will not end until November 2014. B of A's math does not work quite as neatly as GS's. Assuming Treasury net issuance requirements of \$875 billion in fiscal year 2013 and \$700 billion in fiscal year 2014 (B of A is projecting larger fiscal deficits in both years than GS which, if correct, would require net financing of \$940 billion in fiscal year 2013 and \$775 billion in fiscal year 2014), B of A's forecast results in others absorbing \$470 billion in fiscal year 2013 but only \$240 billion in fiscal year 2014. Then, the amount others would have to absorb in fiscal year would bounce back to \$ 575 billion. What this would mean, if B of A's analysis is on the mark, is that the net impact of large scale asset purchases would actually increase during fiscal year 2014, even as the total amount of purchases is reduced.

B of A's forecast of FOMC quantitative easing policy appears to make less sense than GS's because it seems more likely than not that the FOMC will attempt to smooth the timing impact of purchases of net additional Treasury issuance by others. B of A's view is possible, but seems to depend upon larger deficits over the next two fiscal years and worse than generally expected performance of the economy.

Wind-down of Federal Reserve's Balance Sheet After Large Scale Asset Purchases End. Based upon recent commentary by Federal Reserve officials, it seems likely that once large scale asset purchases end, the Federal Reserve will not actively sell securities as the economy improves but will let its balance sheet shrink slowly as securities reach maturity. Because the Federal Reserve no longer has any short-term Treasury securities on its balance sheet, shrinkage in its holdings of Treasury securities will not begin until 2016, but will accelerate quickly thereafter. Permitting its portfolio to shrink by not replacing matured securities will result in a steady but orderly increase in the amount of net new Treasury issuance that others must absorb at a time when, hopefully, the economy is performing well and the output gap is shrinking rapidly.

Passive unwinding of the Federal Reserve's balance sheet will provide predictability and will limit financial market pressures. The FOMC can conduct monetary policy effectively by using its other policy tools of adjusting interest rates on federal funds and bank reserves.

Interestingly, even though GS expects tapering of quantitative easing to begin sooner than B of A does and to end sometime in the second quarter of 2014, it does not expect the FOMC to begin raising the federal funds rate until the first quarter of 2016.

3. Quantitative Easing — Potential Systemic Risk — Asset Price Bubbles

In the *April Longbrake Letter*, I described risks quantitative easing may pose to market liquidity, systemic risk and long-term economic growth. In this month's letter I take a closer look at systemic risk and the potential for the formation of new asset price bubbles.

Asset price bubbles are not simply the result of rising prices. That

is a necessary, but not sufficient condition. For rising prices to become a systemic risk that threatens financial stability, other conditions need to be met. These include extensive use of debt leverage, excessive reliance on short-term borrowing, and low capitalization and limited liquidity of financial intermediaries.

When all of these factors are evaluated collectively, there is no apparent evidence of troublesome asset price bubbles in the making. Nonetheless, these are unusual times. The Federal Reserve's quantitative easing monetary policy is intentionally depressing real long-term interest rates below their "natural" level with the intent to channel funds into higher risk investments. The purpose of policy is to stimulate credit creation and in so doing accelerate economic growth. However, a potential unwelcome policy derivative is speculative activity that eventually leads to asset price bubbles.

Asset Prices. The first question is one of whether any asset classes exhibit unusual price rises.

Generally speaking there is little substantive evidence that material asset price bubbles are forming.

Asset Prices — Bonds. For example, many talk about a bond-price bubble. The Federal Reserve's policy of driving down long-term interest rates to very low levels has resulted in high bond prices. This is a policy result, not a speculative result. Interest rates on long-term bonds result from expectations of future short-term interest rates plus a term premium plus a credit risk premium. The FOMC has anchored future expected short-term interest rates through policy guidance. For bond prices to be in bubble territory, the economy would need to recover much more quickly than the FOMC expects. This risk appears to be negligible.

As for the term premium, it has been an intentional objective of monetary policy to drive it into negative territory. This will reverse eventually as the economy improves and the FOMC withdraws policy accommodation. But this, too, is clear and straightforward and is not the sort of thing that tends to drive speculative behavior.

While there is little evidence of unreasonable bond price increases in low credit risk issues, there is increasing concern that high-yield bonds are exhibiting price bubble characteristics. However, credit risk spreads on high-

yield bonds are not especially depressed relative to historical experience.

Asset Prices — Stocks. Stock prices are also cited as flirting with bubble territory. Stock prices theoretically should be the discounted present value of future expected earnings. Earnings have 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. Much of the favorable impacts of these factors have run their course. What this means is that future earnings gains will depend on top-line revenue growth. As long as inflation remains low and real GDP growth is depressed, nominal earnings will grow very slowly.

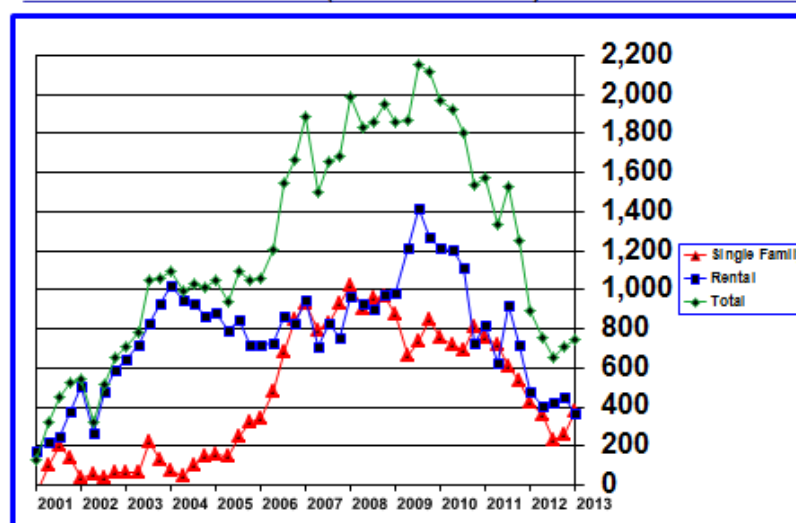
But U.S. equity prices, as measured by the S&P 500 index, are up 14.55% since the beginning of the year. Since stock prices are rising much faster than earnings, surely this must be an indicator of a price bubble in the making. It is not this simple. Stock prices also depend upon the discount rate. The 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 still have more upside potential than downside risk, even if 12-month earnings forecasts turn out to be too optimistic and the economy's performance is worse than the consensus expects.

Asset Prices — Housing. Gains in single family housing prices over the last year have been surprisingly strong. Based on the Case-Shiller S&P housing price index, prices have increased 7.3% over the last year. B of A

expects housing prices to increase 8% during 2013, 6.5% in 2014 and then slow to about the rate of inflation thereafter. The strong rise in housing prices has led some to speculate that investor speculative activity might be in play and that a new price bubble in housing is in the making. At least intuitively this concern is supported by various housing market indicators — home ownership rates continue to fall, underwriting standards remain extremely tight limiting access to credit, vacancies (according to US Census Bureau data) remain above long-term norms (see **Chart 9**), and foreclosure

CHART 9 – Number of Housing Units Above 1994-2000 Average
(in thousands of units)



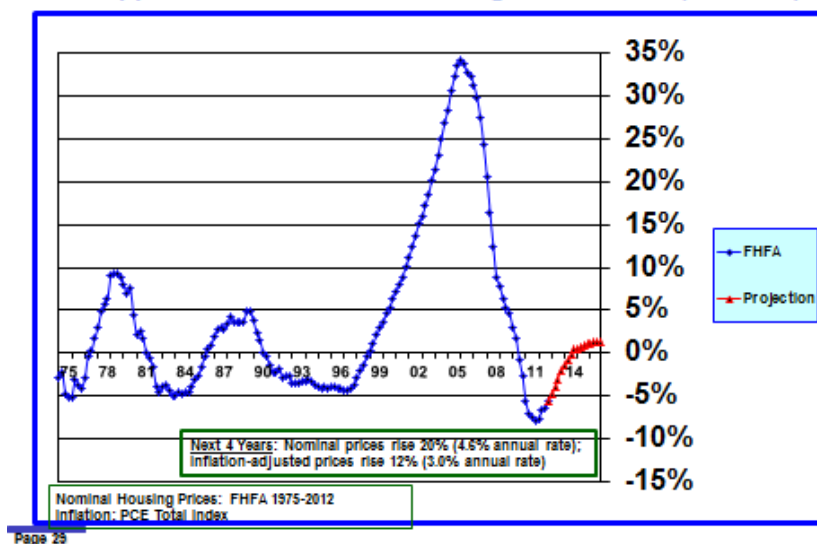
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Source: Census Bureau

activity, though declining, remains well above the long-term average. All of these factors weigh against price increases.

However, offsetting these negative forces, financing costs remain at historically cheap levels. Moreover, housing prices, according to a variety of measures such as price-to-rent ratios, price-to-disposable-income-per-capita ratios and long-term trends in inflation-adjusted prices (see **Chart 10**), still are below long-run historical levels. These measures all confirm that prices are returning to more normal levels as the housing market heals. The large increases over the last year are indicative of normalization, not speculation. The many headwinds the housing market faces are significant and will not

**CHART 10 – Cumulative Real Housing Price
Appreciation Relative to Long-Term Trend (1975-2014)**



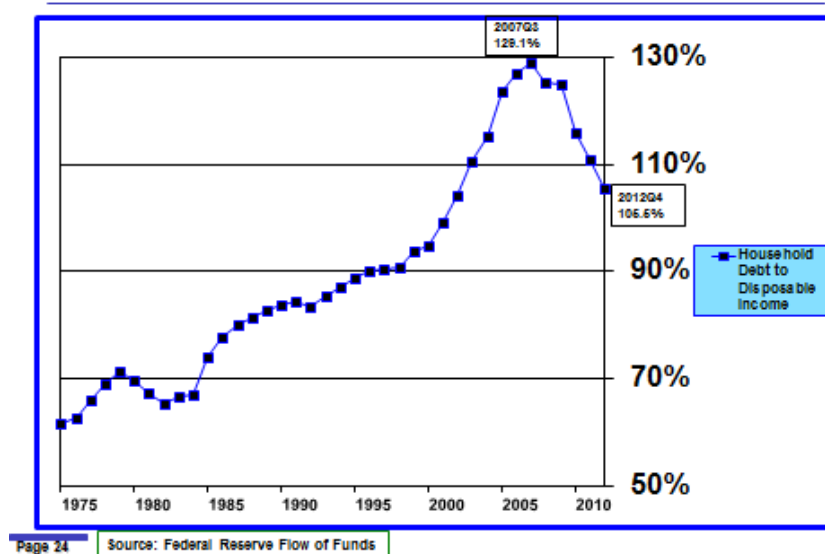
fade away quickly. These headwinds will limit housing price increases once the price normalization process matures.

Asset Prices — Other Asset Classes. Two other asset classes — farmland and student loans — have been cited as potential bubbles in the making. Even were this so, both classes are insignificant in size to have a material effect on systemic risk. As for student loans, the rapid growth has more to do with the expansion in the number of loans than it has to do with the average size of loan. In addition, the federal government guarantees most student loans. What this means is that if there were a meltdown in the student loan market, it would not adversely impact the financial system because the government is already obligated to backstop credit risk on these loans.

Debt Leverage — Households. There is no evidence that debt leverage is developing and without that ingredient escalation of asset prices cannot pose systemic risk.

Households continue to deleverage (see **Chart 11**). Household debt to disposable income peaked at 129.6% in the third quarter of 2007 and has

CHART 11 – Household Debt to Disposable Income – 1975-2012



fallen steadily since then, reaching 105.5% in the fourth quarter of 2012. The ratio of household debt to GDP has followed a similar downward trajectory, peaking at 97.6% in the first quarter of 2009 and retreating to 80.9% in the fourth quarter of 2012 — a level last experienced in 2003. Further household debt deleveraging seems likely.

The recent Federal Reserve’s Senior Loan Officers’ survey indicated that underwriting standards on consumer credit have been eased only to a limited extent in recent months. Auto lending and student lending is expanding, but credit card and mortgage debt continue to contract.

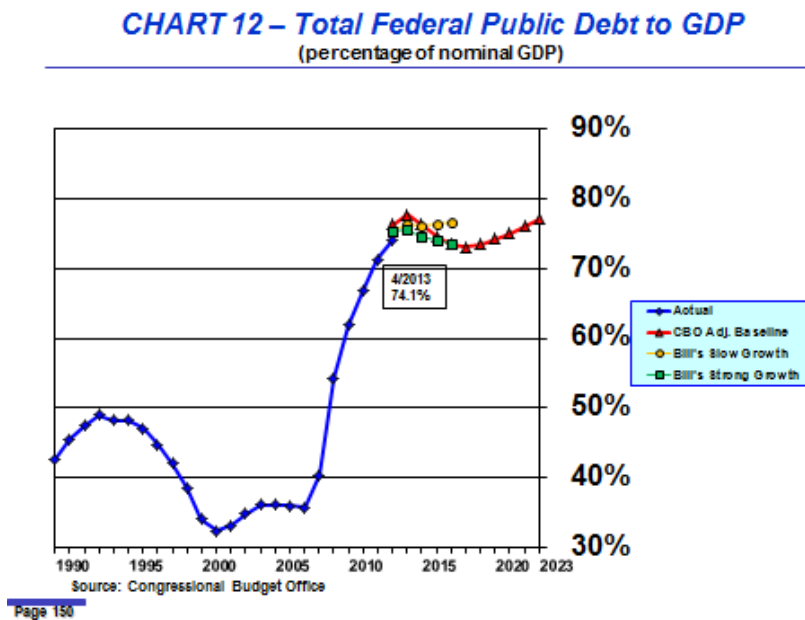
Debt Leverage — Businesses. Business borrowing peaked at 83.5% of GDP in the first quarter of 2009. It then fell to 77.5% by the end of 2010 but has been edging up since then, reaching 80.1% at the end of 2012. Increases in business borrowing have been dampened by strong profits and cash flows and weak revenue growth pressures on working capital. Also, weak investment activity, which is a direct result of slow growth in aggregate demand, has limited the demand for funds.

However, the recent Federal Reserve’s Senior Loan Officers’ survey in-

icated that underwriting standards are being eased for both commercial and industrial loans and commercial real estate loans and that demand in both categories has risen. So far, this is a favorable indicator of a recovering economy and is not a signal of emerging excessive debt leverage.

Debt Leverage — Government. State and local debt peaked at 21.0% of GDP in 2009 and has declined to 18.8% since then. There is no indication yet that state and local debt will rise relative to GDP in coming quarters.

Of course, the real story has been the explosion in the federal government public-debt-to-GDP ratio since the onset of the Great Recession. As can be seen in **Chart 12**, this ratio rose from 35.9% in the fourth quarter of



2007 to 74.1% in April 2013. But, thanks to tax rate increases and spending reductions, this ratio will not rise much further. It should peak between 76% and 77% in less than two years and then begin a gradual decent. However, note that in the CBO projection, the ratio begins to rise again slowly after 2018 because of rising expenditures on entitlement programs.

Financing Debt Leverage with Short-term Borrowings. Simply

put, there is no evidence in any sector that debt leveraging is a developing problem. Thus, it follows directly that short-term financing should not be a problem either. One potential warning signal, however, is short-term stock market margin debt, which has ascended recently to a level almost the same as the pre-Great Recession high point. Although the stock market is not yet overvalued, as discussed above, the evolving use of margin debt and rising prices need to be monitored for signs of emerging speculative activity.

Financial Institution Capitalization and Liquidity. Higher capital ratios provide a greater cushion to absorb losses. Capital ratios of most financial institutions in the U.S. are considerably higher than they were prior to the Great Recession. In addition, regulators now conduct annual stress tests to determine whether a specific institution's capital is sufficient to absorb prospective losses under extremely adverse circumstances. Those failing the test are required to increase capital or reduce their risk profile. Results of the stress tests are published, which has increased market transparency.

Notwithstanding these developments, the subject of "too big to fail" remains a hot topic and legislation has been introduced by Senator Sherrod Brown (D-OH) and Senator David Vitter (R-LA) which would require institutions with more than \$500 billion in assets to meet higher capital ratio requirements. This particular piece of legislation is not likely to pass, but the bipartisan nature of this issue and the strength of concerns in many quarters from small community banks to consumer advocacy groups to small government proponents raise prospects that a legislative response to the too big to fail concern may eventually become law. The overall argument is that when large, complex financial institutions dominate the financial system contagion is more likely to breakout and spread rapidly when a severe financial crisis occurs.

Requiring large amounts of liquidity provides a means for limiting contagion. Contagion takes hold when highly leveraged financial institutions lose access to funding and are forced to liquidate assets at fire sale prices. By limiting reliance on short-term funding and requiring added holdings of highly liquid assets, the intent is to interdict the potential for contagion to spiral out of control.

Illiquid collateral and reliance on short-term repurchase agreement funding and commercial paper have fallen dramatically since 2008. Thanks to

the Federal Reserve's quantitative easing program, financial institutions' ratio of liquid assets as a percentage of total assets is extraordinarily high. Also, weak loan growth and a surge in deposits has led to a plunge in the loan-to-deposit ratios in most financial institutions.

For the time being capital and liquidity cushions are extremely high.

Conclusion. *Talk of asset price bubbles is just talk and not substance.* But that does not justify complacency. As the economy heals conditions could change. So, *while systemic risks are minimal at the current time that does not mean that significant risks cannot emerge in the future. Indeed, based on history, some expect that significant asset price bubbles are likely to form over the next two years.* Policy makers, regulators and supervisors will need to maintain vigilance and not get lulled into the kind of complacency that accompanied the "good times" leading up to the financial crisis of 2007-09.

4. Prospects for Inflation

Measures of inflation have been trending down for several months. This is a global phenomenon. 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%.

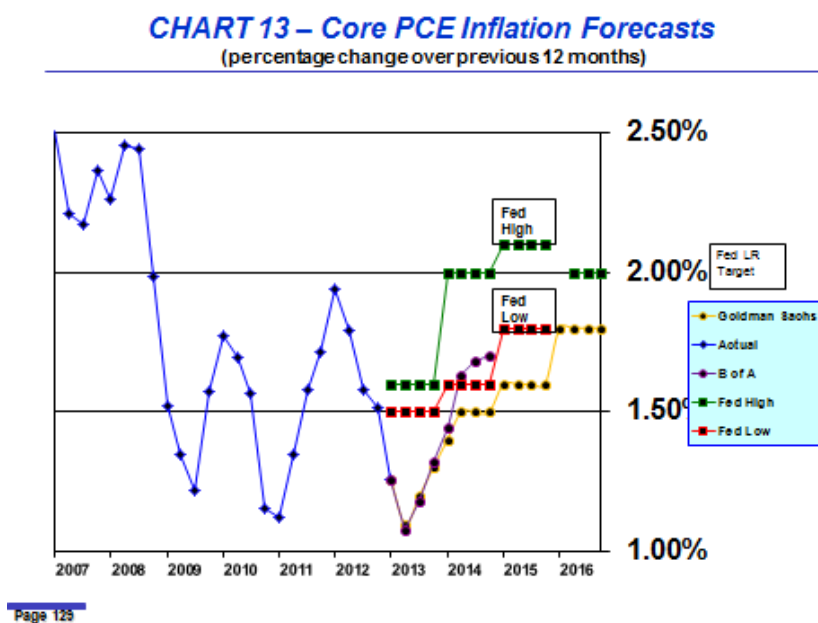
Inflation that is "too low" is not welcome because it discourages spending. Prices could be lower tomorrow, so why buy today. This kind of psychology tends to be self-fulfilling. When prices deflate, as they have in Japan, this becomes a very serious problem which drags down economic growth. Also, low 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.*"³ What is needed is higher inflation, which, of course, is one of the objectives of the FOMC's quantitative easing policy.

But, given the persistent weakness in economic growth, the high level of unemployment and the sizeable output gap, inflation has not dropped as much as might have been expected. Empirical analysis clearly indicates

³Paul Krugman. "Not Enough Inflation," The New York Times, May 2, 2013.

that inflation has become less sensitive to unemployment in recent times. Also, there is reason to believe that the Federal Reserve has been successful not only in anchoring upside inflation expectations but also in anchoring downside expectations. This is good news because it implies that there is probably not much further downside risk to inflation.

Chart 13 shows the FOMC's core PCE inflation projection range. Also



shown are forecasts prepared by B of A and GS.

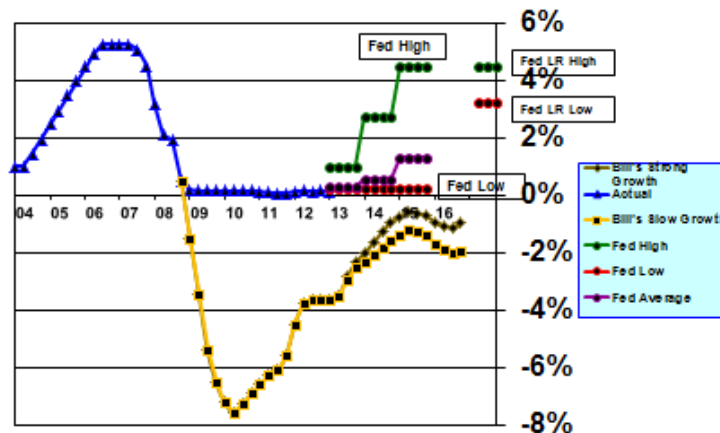
Both GS and B of A forecast core PCE inflation to decline in early 2013 well below the lower end of the FOMC's projection range, although by the end of 2014, both B of A and GS expect core PCE inflation to be about the same as the lower bound of the FOMC's projections. Thereafter GS forecasts core PCE inflation to rise, but its estimate never exceeds the bottom end of the FOMC's projection range.

What is important is that none of these forecasts, including the FOMC's projections, results in PCE inflation rising above 2.0% for the next four years.

5. Federal Funds Rate

Chart 14 shows the FOMC's high and low projections for the federal funds

CHART 14 – Federal Funds Rate Forecast



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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).

My “*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.

Thus, serious budget issues remain unresolved but, as shown above in **Chart 12**, the most contentious issue of the rising public-debt-to-GDP ratio has been resolved by stabilizing it at a relatively high level for the next several years. This accomplishment, plus stronger than expected tax revenues, has taken the urgency out of dealing with difficult fiscal policy issues.

Congress will still have to deal with the debt ceiling sometime toward the end of the fiscal year and it 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. Thus, it appears that fiscal issues will not dominate the legislative agenda in coming months and that little of further significance will occur.

1. Automatic Spending Cuts (Sequester)

To date, the impact of automatic spending cuts has been limited. 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. The BLS’s employment report does not contain data on the length of government workers’ workweek.

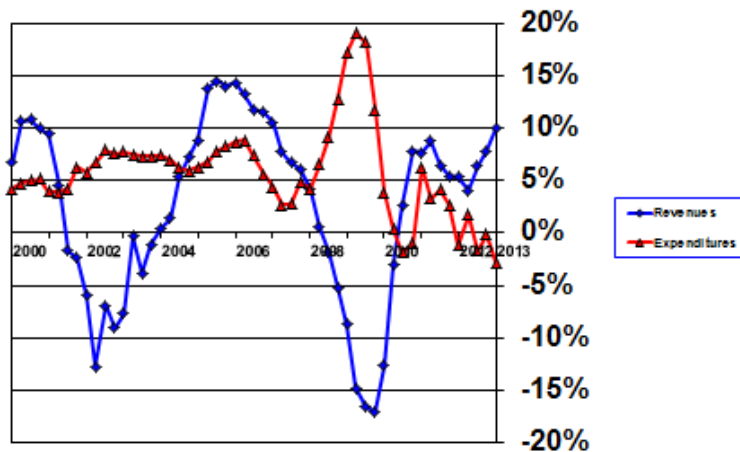
There will be a direct negative impact on second and third quarter real

GDP because government spending 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 0.65% from GDP growth in the first quarter — the annualized rate of decline was -8.4%. 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. Federal Deficit Shrinking More Rapidly Than Expected

One of the surprises this year has been that the federal budget deficit is shrinking much more rapidly than expected. In spite of weak economic growth, tax revenue growth has been very strong. This strength began well before the tax increases that took effect at the beginning of 2013, which are included only in the last data point on the right in **Chart 15**. Primary

CHART 15 – Annual Growth Rate in Federal Budget Revenues and Expenditures (annual percentage change)



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reasons for strong revenue growth over the last couple of years have to do

with corporate profits and stock market gains. Annual revenue growth in 2012 was 7.9%. With higher tax rates on the wealthy and repeal of the temporary cut in payroll taxes, annual revenue growth surged to 10.0% in the first quarter of 2013 and 12.3% in April.

Revenues will get an extra boost in May from the large first quarter dividends declared by Fannie Mae and Freddie Mac. The Fannie Mae dividend of \$59.4 billion was largely due to revaluation of tax credits. This should have an effect on the reported 2013 deficit but because it does not involve actual cash it should have no substantive impact on the amount of public debt outstanding.

Expenditures have been slowing over the last two years and are lower today in nominal dollars than in December 2010. This trend has certainly been influenced by reduced war spending but is likely to continue as the effects of the automatic spending cuts work their way through the budget in coming months.

Notwithstanding the negative impact of fiscal policy on economic growth in coming months, trends in federal revenue and expenditure data suggest that the balance of risks favors continued shrinkage in the deficit at a faster rate than expected.

3. Debt Ceiling

On May 18, 2013, the debt ceiling, which was temporarily suspended, goes back into effect at whatever debt level is outstanding on that date. The estimate currently is \$16.7 trillion. However, there is some uncertainty as to what will be included in determining the amount of debt outstanding as of May 18, 2013. Effective on that date the Treasury will be unable to extend any net new debt until Congress raises the debt ceiling.

As in the past, the Treasury will be able to extend the day of reckoning. Based upon this fact and the uncertainty about how the exact calculation of the amount of the debt ceiling, it is possible that the Treasury will be able to function without an increase in the debt ceiling until the start of the new fiscal year on October 1, 2013.

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. There seems to be little appetite on either side of the aisle for engaging in brinksmanship over the debt ceiling. However, Speaker Boehner may demand spending cuts over the next ten years 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.

When people do the math, the debt ceiling may not need to be raised by a great deal because the deficit is falling rapidly. The sum of the remaining deficit in 2013 and the projected deficits for 2014 and 2015 is approximately \$1.2 trillion.

VIII. Austerity Versus Stimulus — the Reinhart/Rogoff Controversy

Much ink has been spilled in recent weeks about computational errors, which have been acknowledged, and methodological errors, which have been disputed, embodied in a paper published, "*Growth in a Time of Debt*" by Carmen Reinhart and Kenneth Rogoff.⁴ The latest round of controversy was ignited by a paper published by Thomas Herndon, Michael Ash and Robert Pollin.⁵ The controversy has been heated because it is more than an esoteric intellectual debate among economists.

Reinhart and Rogoff's research finds that economic growth declines as the government-debt-to-GDP ratio increases. Specifically, when the ratio eclipses 90%, economic growth drops sharply. The computational error had to do with the importance of the 90% cliff. Reinhart and Rogoff have acknowledged this error and agree that there is not a cliff effect, but argue vehemently that economic growth declines, nonetheless, as the government-debt-to-GDP ratio rises.

Reinhart and Rogoff's research, and especially the so-called 90% cliff

⁴Carmen Reinhart and Kenneth Rogoff. "Growth in a Time of Debt," American Economic Review Papers and Proceedings, May 2010.

⁵Thomas Herndon, Michael Ash and Robert Pollin. "Does High Public Debt Consistently Stifle Economic Growth?" PERI Working Paper 322, April 2013.

effect, has been cited by some as justification for curtailing government deficits. The name for the fiscal policy that focuses on driving down government deficits is referred to as “**austerity**”. Austerity can involve spending cuts or tax increases or both. In the U.S. austerity policy has been championed by Republicans and is expressly embedded in Paul Ryan’s House of Representatives version of the 10-year federal budget. Ryan’s austerity plan encompasses only spending cuts.

European Union (EU) fiscal policy is decidedly focused on austerity but encompasses spending cuts, tax increases and other kinds of economic reforms. The EU has set a 3% annual budget deficit target and member countries are expected to adopt policies to attain that level within a relatively short period of time, generally two years.

Critics of austerity argue that withdrawing fiscal stimulus through spending cuts and tax increases will depress GDP growth and could decrease growth to such an extent that the debt-to-GDP ratio would rise, rather than fall, because the denominator falls faster than the numerator.

To put this debate into perspective requires a discussion of macroeconomic theory.

1. Keynesian Macroeconomic Policy

There has been an ongoing policy debate among economists and policy makers about the conduct of fiscal policy in times of economic duress. The Keynesian response is that when private aggregate demand declines government must intervene and replace the lost spending power. Then, as private sector demand improves, government stimulus can gradually be withdrawn. Keynesians view fiscal policy as a macroeconomic stabilization instrument. Government stimulus should be added when the economy is at less than full employment but be withdrawn when the economy is at full employment. Government fiscal policy should be neutral over the entire cycle.

Keynesians further argue that without government stimulus there is no assurance that an economy operating at less than full employment will be able to return to full employment on its own. The economy can get caught in a liquidity trap or worse in which a negative reinforcing downward spiral takes hold. The famous economist, Irving Fisher, described this phenomenon

in a seminal paper published during the Great Depression which described the debt-deflation process.

Politicians, being the people who they are, especially in democracies, have difficulty withdrawing government stimulus when the economy is strong with the result that a permanent structural budget deficit tends to become embedded. Then, when the economy falters and the budget deficit explodes, the government-debt-to-GDP ratio spirals out of control. And, as Reinhart and Rogoff argue, economic growth may be permanently depressed.

2. Austerity Macroeconomic Policy

Those who espouse a policy of austerity generally are skeptical of government interference in the marketplace. They argue that government intervention is inefficient and messes things up. Worse, those who promote government intervention seek to reallocate resources in ways that diminish aggregate social welfare. In other words, proponents of intervention sponsor income transfer programs that may increase opportunity for those who are less well situated but that reduce opportunity in the aggregate for everyone — that is, total potential GDP contracts.

Thus, those who favor austerity tend to be advocates of the view that government is better when it is small than large and, thus, a policy of “starve the beast” should be pursued. This interconnects with a bias to minimize deficits even in a time of economic duress. In this context evidence that growth is slower as deficits pile up is taken as direct proof that deficit reduction needs to be pursued vigorously.

3. Good Deficits and Bad Deficits — Fiscal Multipliers

There is plenty of evidence that government replacement of lost spending power in an economic downturn is essential to interdict the vicious circle inherent in a liquidity trap and to prime a virtuous circle. In other words, government deficits are an essential ingredient in arresting an economic decline and initiating recovery.

But not all forms of government fiscal policy intervention have the same impact dollar for dollar. The important aspect of stimulus is that it leads

to spending that creates jobs. If the stimulus goes into the bank without being spent its impact on economic activity will be limited. The relationship between a type of government stimulus and its longer-term impact on economic activity is measured by the fiscal multiplier. If a dollar of stimulus stimulates a dollar of economic activity, the multiplier is equal to one. Multipliers greater than one are highly desirable while multipliers less than one are not.

When the EU reinforced discipline to reduce budget deficits a couple of years ago it believed fiscal multipliers were less than one. Were this actually true, then debt-to-GDP ratios would have contracted even as GDP declined. In addition, per Reinhart and Rogoff, future GDP growth potential would rise as deficits fell.

Unfortunately, we know from the experience of the last two years that the belief that multipliers were less than one was false. European countries forced to adopt stringent austerity measures have seen their economies collapse with limited if any improvement in their debt-to-GDP ratios. The International Monetary Fund (IMF) owned up to this outcome in research published last year which concluded that fiscal multipliers in times of enormous economic slack are much greater than one.

What all of this means is that when there is a large output gap fiscal policy should focus first on boosting aggregate demand but the mix of fiscal policy programs should emphasize high-multiplier initiatives. Then, only as economic recovery gains traction should deficit reduction rise to the fore.

4. U.S. and European Experiences

Europe has pursued austerity aggressively and has limited its use of monetary policy. Many European countries are still mired in recession and prospects for imminent turnaround are doubtful. Little progress has been achieved in addressing government deficits and high levels of debt. In the meantime social unrest is building and political stability is slowly unraveling.

In contrast, the U.S. initially pursued a traditional Keynesian stimulative fiscal policy. However, many argue that the policy was deficient both in scope and also in composition as the program did not allocate significant resources to high multiplier programs such as investment in infrastructure,

education and research.

The U.S. emerged from recession nearly four years ago, but growth has been disappointingly slow since then. Could the recovery have progressed more rapidly in the U.S.? Keynesians argue in the affirmative, but that would have required greater amounts of stimulus.

Now U.S. policy has switched from stimulus toward austerity while the output gap remains extremely large. In the short run this will slow growth. What is important is whether the slowdown is temporary or protracted. My sense is that the negative consequences will linger and the expected strong bounce back in GDP growth that most expect may not materialize. I continue to be concerned about a sustained decrease in productivity growth because of insufficient investment. When deficit reduction is the policy of choice government investment suffers along with other forms of government spending. Reduced investment spending will depress productivity growth and that will decrease potential GDP growth.

5. Does a High Debt-to-GDP Ratio Cause Slow Growth or Does Slow Growth Cause a High Debt-to-GDP Ratio?

Although Reinhart and Rogoff's 90% cliff finding that economic growth drops dramatically after the government-debt-to-GDP ratio reaches that level has been discredited, GDP growth is still negatively correlated with that ratio. Critics have correctly pointed out that the statistical analysis merely reveals that a correlation exists but does not prove that high debt ratios cause slower growth. The reverse could be true — lower growth leads to higher debt ratios. This debate will continue and I cannot shed any light on the issue of causality.

However, from my own statistical analysis I can corroborate Reinhart and Rogoff's finding that there is a strong negative correlation. Reinhart and Rogoff analyzed three data sets. The data set that Reinhart and Rogoff (RR) and their critics, Herndon, Ash and Pollin (HAP) focused on covers 20 advanced economies over the period 1945 to 2009. Data were grouped by ranges of debt-to-GDP ratio and the arithmetic mean and median were provided for each range. **Table 4** shows the results of both RR's and HAP's calculation based on this data set.

Table 4
GDP Growth for Developed Countries Covering the Period from
1949 to 2009 Classified by the Size of the
Government-Debt-to-GDP Ratio

Debt/GDP	RR Mean	RR Median	HAP Median	Bill-US only [#]
0 to 30%	4.1%	4.2%	4.2%	3.8-3.0%
30 to 60%	2.8%	3.9%	3.1%	3.0-2.2%
60 to 90%	2.8%	2.9%	3.2%	2.2-1.5%
Above 90%	2.3%*	1.6%	2.2%	1.5%

*Originally reported by RR as -0.1%; this was the errant calculation that led to the assertion that there is a 90% cliff effect [#]Bill's analysis is a statistical correlation for the U.S. only covering the time period from 1971 to 2013; debt/GDP ratio is public debt only rather than total debt

Because RR and HAP used the same data set the differences in medians has to do with HAP's and RR's disagreement about calculation methodology. To my way of thinking the differences are not particularly material. The negative correlation is apparent and that correlation is monotonic, which means that growth steadily declines as the debt ratio rises. Clearly, there is no 90% cliff effect and RR acknowledged that fact when they corrected their data.

Also shown in the last column of **Table 4** are the results of statistical analysis I conducted on U.S. GDP and the U.S. public-debt-to-GDP ratio for the period 1971 to 2013. For a lot of reasons my analysis is not strictly comparable to that of RR and HAP. However, the direction of correlation and the general order of magnitude among all of these results are similar.

6. Conclusion

Whether high debt-to-GDP ratios lead to slower GDP growth will continue to be debated. However, what is clear from the analyses is that neither low growth nor high debt ratios is a desirable place to be. However, driving down debt ratios without understanding the transitional impacts on GDP growth can have disastrous consequences. Austerity entails high risks. Outcomes for countries that have pursued austerity are discouraging. Keynesian stimulus

appears to achieve better outcomes but a Keynesian fiscal policy, too, can be designed poorly and produce troublesome results.

IX. Europe — Deterioration Continues

Most analysts expect the European Union (EU) and the Eurozone (EZ) to return to growth by the second half of 2013. This belief appears to be based upon the quiet that has prevailed in financial markets since last August when president of the European Central Bank (ECB), Mario Draghi, announced that the ECB would “do whatever it takes” to preserve the euro.

I think this expectation will turn out to be optimistic. As I have mentioned repeatedly, European policy makers have been effective in stabilizing financial markets through a variety of initiatives, but none of these has addressed effectively fundamental political and economic reforms which are necessary in the long run to assure the viability of the EU and the common currency, the euro, used in EZ countries. And, as feared, stabilization of financial markets since last August has reduced the sense of urgency on the part of policy makers to pursue essential reforms.

Political risks are rising. Euro-skeptic parties, while still far distant from obtaining real political power, are growing in many EU countries. A majority of Italians voted for euro-skeptic parties. In Greece, polls indicate that the euro-skeptic party, Syriza, which is not part of the current governing coalition, commands a majority of popular support. A new political party, Alternative for Germany, has formed in Germany. This party is a collection of elites and not populists, as in other EU countries. Alternative for Germany’s principal policy position is to terminate the European currency union. Polls indicate that as much as 25% of the German electorate is sympathetic to the new party’s policy position, but whether that will translate into a significant number of votes in the September German parliamentary elections remains to be seen.

Social unrest continues to escalate in peripheral countries like Portugal and Greece.

1. Current Economic Situation

Recent data continue to tell a story of a struggling economy — one that generally is not getting a lot worse, but isn't signaling the kind of turn around that most expect.

Unemployment in March rose to a record high of 12.1% in the EZ from 11.0% in March 2012. Greece's unemployment rate was 27.2% in January, Spain's was 26.7% in March, and Portugal's was 17.5%. Inflation in the EZ is falling rapidly and was 1.2% in April.

Bank business lending to all but the largest companies in the EZ is moribund and is not expected to revive to any significant extent until late 2014.

Reflecting the increasing difficulties EZ member countries are having in meeting mandated budget deficit targets, the European Commission recently granted both Spain and France two additional years to reduce their annual budget deficits to 3% of GDP.

In response to falling inflation and rising unemployment the ECB finally cut the repurchase rate to 0.5% and the marginal lending rate to 1.0% and extended liquidity provisions until July 2014. Still, the ECB has not engaged in quantitative easing, which means that monetary policy in the EZ is not nearly as accommodative as it is in the U.S, U.K. and Japan.

Optimism about Europe's ability to emerge from recession has been based on two considerations. First, slowly improving global growth will be positive for European exports. Recent evidence indicates that global growth is not improving but is trending at 2012 levels. However, because of aggressively easy monetary policy in the U.S. and now in Japan, the value of the euro is appreciating against the yen and is stable against the dollar. If this situation does not reverse it will negatively impact European exports over time. Germany's manufacturing-export-based economy is particularly vulnerable to an extended strengthening of the euro relative to the yen. The ECB does not appear inclined to engage in policies, specifically quantitative easing, aimed at decreasing the value of the euro. At best these developments will delay Europe's emergence from recession; at worst they will contribute to deepening and extending the recession.

Second, there is a presumption that the banking and sovereign debt crises are slowly being resolved. As the recent events in Cyprus clearly demonstrated, this presumption is not soundly based. Abatement of turmoil in financial markets is not an indicator that the underlying problems have been addressed and resolved. Provision of unlimited amounts of liquidity, which is what the principal remedy has been to date, can treat the symptoms but cannot cure the disease. The disease is deeply rooted in balance of payments mismatches among members of the EU and EZ, differences in competitiveness among countries and the absence of effective economic and political governance mechanisms. Can Europe emerge from recession when these fundamental problems remain unresolved? Perhaps, but a return to normal growth seems to be more fantasy than reality. The European financial system remains deeply dysfunctional and like the Japanese financial system of the 1990's will not be in a position anytime soon to facilitate the kind of credit creation essential to promote economic growth.

2. France's Economy is Deteriorating Rapidly

In the *April Longbrake Letter* I described the reasons why it is likely that the European Project will eventually fail. The two most important reasons I expect this outcome are serious design flaws in the governance structure of the EU, which are not being addressed, and Germany's economic policies.

In this month's letter I describe the rapid deterioration in France's economy and potential consequences. France is headed into recession. Once recession is underway feedback loops will cause matters to worsen, perhaps rapidly. In the following paragraphs I describe the kinds of impacts that can be expected to occur over the next few months.

France's manufacturing index has been substantially below 50 for many months signaling that manufacturing output is declining. Unemployment has been increasing. GDP growth is nonexistent and is likely to be declining at a rate of 1% or greater within a few months. The INSEE Business Climate Survey has fallen two standard deviations below the long-term average, which indicates that recession is at hand.

France's problem is that government accounts for 57% of GDP. It's debt-to-GDP ratio is near 90%. As recession unfolds, it will be the private sector that bears the brunt of the decline and the private sector in France is very

small. As the private sector declines unemployment will rise, tax revenues will fall and tax expenditures will rise. The budget deficit will increase rapidly, perhaps in the vicinity of 4 to 6 percentage points. If that occurs, the debt-to-GDP ratio will ratchet up sharply. The extra two years France has been granted by the EC to reach a 3% of GDP deficit target will turn out to be meaningless.

French banks are already contributing to the strangulation of the French economy because of their inability to extend credit to businesses. This situation will worsen and contribute to an ever deepening vicious circle.

As consumer incomes decline, French imports will shrink and that will have especially adverse effects on Italian and Spanish exports. Both of those economies are already deeply mired in recession. France's economic difficulties will serve to worsen the recessions in both countries.

France's economy has lost enormous competitiveness. Entrepreneurs are a nearly extinct species.

Significant divergence in the performance of the French and Germany economies will place enormous stress on the political relationship between the two countries, which is key to holding together the EU and EZ. If the Germans are lucky, the extent of France's evolving economic challenges will not hit with full force until after the German elections in September.

Add to this grim outlook the stunning unpopularity of Francois Hollande barely a year after he ousted Nicolas Sarkozy from the French presidency.

Stay tuned for further developments. Perhaps France can muddle through just as the EZ has been able to do for the last three years. Given the rigidities and lack of competitiveness which have built up in the French economy, it is difficult to see how France can contain the damage that recession in many EZ economies and its crippled banks are inflicting upon its own economy.

3. Where Are the EU and EZ headed?

Given the fundamental flaws inherent in the EU and EZ governance structures, adverse demographic trends and political constraints on substantive

reform, it is difficult to see an outcome that preserves the EU and EZ in their current forms. But European political elites are committed to the European Project and will continue to struggle to preserve it. This means that the unraveling process is likely to be an extended affair. However, deterioration is proceeding and damage is accumulating. Social unrest is building and legitimacy of the ruling political elite is slowly eroding. In short, the crisis is far from over. Indeed, more and worse episodes lie ahead.

X. Japan's Aggressive Reflation Policies Pose Significant Global Risks

Four months have elapsed since Shinzo Abe became Japan's prime minister and three months have passed since he announced Japan's aggressive reflation program. One month ago Haruhiko Kuroda, Governor of the Bank of Japan's policy board, announced far-reaching changes in monetary policy intended to end Japan's two-decade long deflation.

1. Current Situation

Abe's and Kuroda's shock and awe treatment was intended to be dramatic and to change expectations which would result in accelerating spending thereby killing deflation. Early returns indicate that these policies are having exactly the intended effects. Consumer confidence has surged. Retail and car sales are up. Industrial production is rising rapidly as is the manufacturing purchasing managers' index. ISI's economic diffusion index has surged to the highest positive level in over 20 years. Another survey of current economic conditions is at its highest positive level in years.

Stock prices continue a steady upward march. The Nikkei average has skyrocketed 55% from 9500 when Abe was elected to 14800 on May 13th. Many companies have announced expectations for huge profit gains ranging from 20% to 70% or more. Many of these companies have international operations which will benefit significantly from the depreciation of the yen.

The yen is plummeting in value. It is down 24% against the dollar, 25% against the Korean won, and 26% against the Chinese yuan. If this sizable

devaluation sticks for any length of time, it will result in an enormous surge in Japanese exports.

On the home front Abe is “encouraging” companies to increase wages. After the summer elections for the upper house of the diet, it is expected that Abe will push through legislative measures intended to improve Japanese productivity and global competitiveness. Another “encouragement” initiative is to entice women to enter the labor force and encourage companies to offer them jobs. This is an especially important initiative in as much as one of Japan’s most intransigent problems is a declining population and a shrinking labor force.

2. Bank of Japan Economic Forecasts

Early indications are that GDP growth will be positive in the current quarter after three quarters of negative growth. The Bank of Japan expects growth for fiscal year 2013, which began in April, to be 2.9%. Growth will continue in 2014 and 2015 at slightly more modest rates of 1.4% and 1.6%, respectively. These growth rates appear to be somewhat optimistic, especially for 2014 and 2015. The surge in government spending will help growth in 2013 but unless spending is boosted even more in 2014, government spending will not help growth. A consumption tax increase is scheduled for April 2014 and this could also weigh on growth. The Bank of Japan estimates that potential GDP growth is only about 0.5% to 0.6%. This appears to be consistent with Japan’s shrinking work force and current level of productivity.

Consumer prices are forecast to rise 0.7% in fiscal year 2013, 1.4% in 2014 and 1.9% in 2015, thus achieving the promising 2% target within two years.

3. Significant Challenges Lie Ahead

There is little doubt that Japan’s policy initiatives will boost output and inflation in coming quarters. However, the important question is whether these policies will lead to a permanent transformation of the Japanese economy or whether Japan will eventually slide back into a low growth, deflation-plagued pattern.

There are two enormous challenges to sustaining growth and inflation over a longer period of time. First, Japan is unambiguously pursuing a “beggar-thy-neighbor” policy. It is hard to imagine that Korea, China, Germany, and other countries will do nothing to counteract the appreciation of the yen against their currencies. If they do nothing, trade and other kinds of business will flow to Japan. Remember! It is a zero sum world. Japan’s gain will be another country’s loss. Changes in currency valuations take a long time to impact the real economy. This means that the pain for other countries is ahead. But it will build over time and as it does political pressures to respond will also build.

Second, the policies Japan has adopted are classic Keynesian policies to jump start an economy that has inadequate aggregate demand and is mired in a liquidity trap. This is clearly the problem currently facing the U.S. economy. But, it doesn’t appear to be Japan’s problem. Japan’s problem is that its population has been declining for more than two decades. It’s insufficiency of aggregate demand is not due to underutilization of available resources, it is due to a declining population. There is a big difference between the two causes. If there were truly an insufficiency of demand in the classic Keynesian sense, why would the unemployment rate be at a barely visible level of 4% and why would per capita real growth in GDP be as strong as it has been in recent years. Declining nominal GDP can turn into strongly rising real per capita GDP when adjusted for deflation and a declining population.

The direct cause of the deflation has not been flawed policy but rather an aging and declining population. We are used to thinking about economic issues in the context of a growing population, not a declining population. It is time that we do so, because fertility rates are dropping in all developed nations and declining populations are just around the corner in many countries and already exist in a few countries such as Germany and Russia. In this context Japan is the canary in the coal mine because it is the first developed economy to experience the consequences of negative population growth. But, Germany is close behind. And, China is headed in that direction.

When population ages and declines so, too, does aggregate demand. Internal investment opportunities diminish which forces savings to seek investments in other countries with growth potential. An external investment focus and internal price deflation led to a steady appreciation of the yen un-

til the recent reflation policies were unleashed. This is the natural state in an economy with a declining population. Japan's current policies are trying to overcome this natural tendency.

As internal demand shrinks, growth can be maintained only by adopting an export strategy. Of course, such a strategy was Japan's way of promoting rapid development in the 1960s, 1970s and 1980s. And it is China's strategy today. But, the steady appreciation of the yen eroded Japan's trade competitiveness. In fact, over the last several months Japan has experienced a trade deficit. This occurred, in part, because of the appreciation in the yen but has been exacerbated in recent months by the need to import expensive energy supplies after nuclear facilities were shutdown. Overall Japan's balance of payments is still positive because net capital flows exceed the trade deficit. Japan's new policies will lead to a dramatic and favorable surge in Japan's trade balance.

4. Policy Response.

Shinzo Abe determined that letting Japan grow old and accepting low to negligible growth rates and a constantly appreciating yen was not acceptable. Also, deflation steadily increases the burden of the large accumulated government deficit. Inflation, if sustained, could lessen this problem, although this would require shrinkage in current budget deficits, which seems unlikely.

Based on the limited and relatively ineffective reflation policies over the last 20 years, Abe realized that any attempt to boost aggregate demand and end deflation would require massive policy intervention. And, that is exactly what he has initiated.

Abe's reflation encompasses three policy initiatives — enormous fiscal and monetary stimulus and a moral suasion campaign to encourage the private sector to boost wages and investment.

5. Reasons for Policy Change.

The obvious reason for pursuing an aggressive reflation policy appears to be driven by economic considerations, namely to increase aggregate demand

and end deflation. This is the classic Keynesian response to deficient aggregate demand. An increase in aggregate demand is intended to be driven both internally and externally. From an internal standpoint, there are two considerations. First, an acceleration in aggregate demand should occur as expectations shift from deflation to inflation. Second, aggregate demand should be boosted by the wealth effect as the values of financial assets appreciate. From an external standpoint, a more attractively priced yen will stimulate demand for Japanese exports. Certainly, those are the officially stated objectives.

However, there is another possible set of reasons which has to do with the ascendancy of China as an economic power. China's growing economic clout threatens Japan's political sway, particularly in Asia, and could evolve into Japan becoming dependent upon Chinese policy decisions. Given the historical enmity between the two countries, this is hardly an acceptable outcome for Japan to accept.

U.S. policy makers are supportive of Japan's economic initiatives because a stronger Japanese economy will provide a "wedge" against a rising China.

6. Summary

In summary, Japan's reflation policy should boost aggregate demand and result in a small amount of inflation. But that policy will not and, in fact, cannot create a higher rate of growth on a sustained basis. The aging and declining Japanese population will prevent this kind of outcome. And since Japan is fundamentally a xenophobic society, it will never embrace an open immigration policy that could counter the economics of population decline. A significant negative consequence of Japan's current policies is a rapid increase in debt. In conjunction with a shrinking population, an eventual return to deflation would likely prove to be disastrous.

Close study and monitoring of developments in Japan will be important because the economics of an aging population and slowing population growth will become increasingly important in the U.S. and elsewhere in coming years. It will also be important to study the global political ramifications of slowing population growth and aging. Demographics is already a significant driver of Europe's current economic and political challenges. And, in spite of China's rapid growth currently, its one-child policy will result in similar

demographic challenges in the not too distant future.

Japan's aggressive reflation policies are bold. Short-term success from Japan's vantage point appears to be developing. However, long-term sustainability is far from assured. Matters could end very badly, if deflation and low growth return. In the meantime, Japan's policies pose enormous global economic risks.

XI. China

It is well understood that China cannot sustain rapid growth through an economic model which relies on massive infrastructure investment and export of manufactured goods. It is also well understood that China needs to develop a robust consumer-driven economic model. The challenge is how to manage the transition. Vested interests within the Communist Party and state-owned enterprises are likely to resist reforms which they perceive will diminish their spheres of influence. But, the emerging middle class, which is beginning to accumulate wealth and discretionary purchasing power, is demanding reforms. The new leadership's challenge is to steer China through both an economic and political transition without creating either an economic or political crisis. Economic transformation is essential to sustaining China's growth, but maintaining the Communist Party's primacy is also an imperative.

President Xi Jinping's and Premier Li Keqiang's list of needed reforms is long. To enable realization of the necessary economic transformation, the overall thrust of reforms must be to increase the efficiency of investment by decreasing the public sector's role and increasing the private sector's role. Needed reforms include:

- ***Political reforms*** that corral entrenched interests of Communist Party elite, which foster corruption, without threatening the Party's overall political power.
- ***Structural reforms*** that boost private-sector growth — deregulating administrative approvals, limiting the preferred competitive position of state-owned enterprises.

- *Financial reforms* that enable capital to flow freely to high-return initiatives in the private sector.
- *Governance reforms* that ensure that public-sector investments, such as low-income housing, are efficiently designed and implemented.

Up to this point in time it has been relatively easy to manage high rates of growth through policies that allocate cheap credit to state-owned enterprises which engage in infrastructure investment and export manufacturing. However, pursuit of these policies has occurred not without consequences. Growth has relied on extensive debt financing. But, many of the debt-financed projects are relatively inefficient. Opening up competition and eliminating administrative processes that steer credit to preferred entities will lessen the extent of inefficient investments in the future. However, deregulating financial markets too quickly, which means letting interest rates rise and opening up access to credit, will put many of the existing inefficient investments at risk of default. That is the potential stuff of a hard landing, which authorities are committed to avoid at all possible costs. However, if reform moves too slowly, inefficient investments that are over-leveraged with cheap financing will continue to pile up and increase the risks of an eventual hard landing.

Thus, China's policymakers must walk a tightrope. GKDragonomics uses a different metaphor to describe the situation. It likens the task of the Chinese leadership to that of guiding a sailboat. In the face of opposition and resistance leaders must constantly change course to move forward. Sailing directly into the wind will preclude reaching the intended destination. Tacking back and forth will take longer but the destination eventually will be reached.

As an example of how tenuous the situation is, consider the property market. There is no question that China needs substantial amounts of housing to accommodate the rapid migration from rural to urban areas. However, housing programs have led to speculative activity in "high-end" properties. In early 2012 policymakers tightened credit and imposed property controls. This was followed quickly by declining property values and slowing investment in real estate. GDP growth also slowed. At the same time downward adjustments in inventories exacerbated matters. In reaction to the greater than expected slowing, policymakers relaxed credit and property controls toward the end of 2012. Almost immediately property prices took off, which

was facilitated by rapid credit expansion enabled by “wealth management” financial products. While GDP growth reaccelerated and investor anxieties diminished, these developments ran in opposition to needed longer-term reforms and demonstrated just how dependent the Chinese economy has become on speculative investments and cheap and abundant funding.

In response to the surge in property prices, the State Council recently announced five property control measures. While none of these measures is particularly substantive, the intent is to limit the reemergence of speculative excesses in the property market. In addition, China’s banking regulator announced controls on shadow finance which cover wealth management products. As mentioned above, this type of financing, which promises high rates of return, has fueled property speculation. All of these measures appear to be aimed at curtailing the reliance of local governments on revenue from land sales. Perhaps in response new housing starts have stagnated — they have actually fallen 3% over the last year.

These developments have made China watchers and investors more wary. That is because credit drives growth in China and, if the credit cycle is peaking, then so is GDP growth.

Chinese officials apparently plan to release a detailed policy paper sometime in June which will spell out China’s plan for urbanization through 2020. This policy paper purportedly will describe a plan to reform China’s centuries-old hukou residency system as well as rural land reform. It is hoped that this will clarify the rules of the road and that housing momentum will reaccelerate.

In the long-run a stable and sustainable consumer-driven economy will grow more slowly than the investment driven economy of recent years. That would be a good outcome because such an economy would be more stable and less subject to the kinds of excesses and imbalances that end in hard landings. Nonetheless, the prospect of near-term slowing in China’s growth, which is once again on the minds of investors, will be treated as a negative development in the short run.

If growth slows during 2013, as looks increasingly possible, it will be a test of the new leadership. A reversal in policy, such as occurred in late-2012, might ease market and internal political pressures but would delay implementation of necessary reforms. Clearly the road ahead for the new

leadership team will be very challenging. We should all hope that they are successful at walking the tightrope.

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 2.5%; second quarter growth is expected to be less than 2.0%; forecasts for all of 2013 are clustered between 2.0% and 2.5%.***
- ***Real GDP output gap*** will remain very high and close little, if at all, during 2013.
 - ✓ + ***The output gap was 5.62% 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 four months of 2013 payroll growth has averaged 196,000.*
- *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 7.51% in April, 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 March both disposable income and consumer spending growth is 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 three months of 2013.*
- *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 3.4% of GDP in December to 3.2% in March; export growth is stable while import growth is 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 rose in January and February but fell in March and April. The January/February improvement appeared to be related to replenishing inventories, which grew abnormally slowly in the fourth quarter.*
- *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.*
- *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 968,700 in the first quarter, up 24% from 782,000 in 2012*
- *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 could begin toward the end of the year but is more 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.
 - ✓ + *March PCE inflation was 1.0% and core PCE inflation was 1.1%.*
- *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 during 2015 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 1; fiscal policy is now expected to subtract -2.0% from GDP in 2013 and -0.5% in 2014; the deficit is shrinking more rapidly than expected.*
- *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 0.7% 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.
 - ✓ + *Cyclical improvement is forecast, but to a lesser extent than previously.*
 - *China's new leadership* understands the need to design and implement *economic reforms* and avoid repeating a massive infrastructure spending program.
 - ✓ ? *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 reports have been uninspiring; political instability and social unrest are not yet serious, but the trend is unfavorable; financial markets remain calm.*
 - *Chinese* leaders have difficulty implementing *economic reforms*; growth slows more than expected.
 - ✓ ? *Too early to tell.*

- *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 slower growth.*
- 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 shakes global financial markets.
 - ✓ ? *There has been a lot of saber rattling, but nothing has happened yet; the crisis has quieted down in the last month.*

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