



The Longbrake Letter*
Bill Longbrake
April, 2012

I. Risks Resurface

Last month I referred to the economy's strong start in 2011 and commented that once again optimism, like spring flowers, is blossoming. I posed the question whether 2012's strong start might fade as the year progressed.

Is this another false start or have we finally achieved break out?

In pondering this question it is important not to lose sight of the severe damage the credit and housing bubbles inflicted on the economy. Healing is occurring but the patient remains in serious condition. While that is far better than being in critical condition, it means that the economy remains quite vulnerable to negative shocks.

U.S. March data reports have been somewhat weaker than January and February's reports. The 120,000 increase in employment in March after six months averaging above 200,000 was a clear disappointment. While some might dismiss the weak employment report as a "bump in the road," it is a reminder that the economy remains fragile and that the road to recovery is likely to be filled with many bumps and potholes. Or, put in economists' language, recession is unlikely, but growth is likely to be feeble with the result that the large GDP output gap and sizeable level of unemployment will diminish only very gradually.

As often happens when data reports don't meet expectations, the initial response of many market participants is to try to explain them away and discount their significance. This denial process started almost immediately

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after release of the employment report on April 6, 2012. However, denial cannot persist if other reports corroborate the initial surprise. The release of the monthly National Federal of Small Business (NFIB) report on April 10, 2012 was surprisingly negative and corroborated renewed labor market weakness. Generally, the market does not pay much attention to this survey. But, the NFIB overall index fell from 94.3 in February to 92.5 in March. It was expected to rise to 95. Details were grim. All ten sub-indices worsened. While small businesses increased employment an average of .22 workers per firm in March, up from zero in January, plans to increase hiring in the future fell from 4% to zero. This was followed by an unexpected rise in the weekly unemployment claims number.

In Europe, as expected, recession is developing. And, as feared, early indications are that the recession will be more severe than official forecasts. In recent days, Spain's auction of sovereign debt was not well received. Yields on Spanish 10-year debt have climbed 115 basis points to 5.92% since the recent low in February. European bank stock prices have declined 14% in recent days, including a 4.6% drop on April 10, although there has been a modest rebound since then.

Is another double-dip recession scare in the offing?

There are reasons to be hopeful that fears of a double-dip recession will not unfold in 2012 as they did in the second half of 2011. Many key risks have abated or been deferred. Nonetheless, risks remain and seem likely to temper growth potential. Some economic forecasters, such as Goldman Sachs (GS) and Bank of America/Merrill Lynch (B of A), expect U.S. growth to slow as 2012 progresses. These forecasters have held their ground in the face of recent strong market optimism. My own analysis is consistent with the more tempered outlook of these forecasters.

There will not be a repeat of the fiscal policy confrontational crisis this year because both Democrats and Republicans have backed away from further fiscal policy confrontation until after the election. Thus, risks on this front are minimal in the near term. However, the stage has been set for a shootout following the election in November. As 2012 progresses anxiety will escalate. Those knowledgeable in the ways of Washington politics expect that tax issues will not be resolved until well into 2013. In the meantime tax increases and spending reductions amounting to about 4.5% of GDP will kick in on January 1, 2013. *Ominously, the federal budget deficit is*

cumulating at a faster pace than anticipated so far in fiscal 2012.

Though not yet talked about, this raises the possibility that the federal debt ceiling limit will be hit around the time of the election, necessitating that it be addressed in a lame-duck session of Congress.

Europe achieved an orderly default of Greek debt. A potential banking system meltdown has been forestalled by the European Central Bank's (ECB) aggressive €1 trillion LTRO (long-term refinance operation) intervention which assured abundant liquidity. Nonetheless, European banks continue to curtail lending and this, along with fiscal austerity in most European nations, is fostering recession in the Eurozone (EZ) and some other countries in the European Union (EU). The good news is that Europe's economic problems will not be as bad as they might have been in the short run, but they still could be pretty bad. In the long run, which now seems to extend to 2013 or later, the viability of the EZ and EU in their present forms is untenable. This means that there will be more crises ahead. And, even in the short run, if recession in Portugal and Spain and other weak European countries is severe enough, renewed financial crisis is possible in 2012, perhaps sooner than later. Unfortunately, fiscal austerity will act as an accelerant.

As April began interest rates once again began to rise in Spain and Italy, indicating that the market has begun to realize that policy actions bought time and limited the potential for disorderly and contagious outcomes, but did not resolve basic underlying problems

Oil prices have risen more than 20% since late last year, although the percentage increase is smaller than in 2011. Also, this year's price increases are focused on oil and not on a broader basket of commodities. A slowdown in Chinese and global growth should diminish the risk of a surge in prices of commodities comparable to what happened in 2011.

Housing risks stem primarily from the potential for prices to fall further as foreclosures accelerate in the wake of the recent state attorneys general settlement with the five largest loan servicers. Falling prices erode household wealth, feed pessimism and weigh on consumer spending. But, the passage of time is slowly reducing excess supply. In addition, rising consumer optimism about jobs could help stimulate demand, thus limiting or eliminating the potential for significant further house price declines. Housing is a long ways from becoming a driver of economic growth but the downside risks have

lessened.

Increasingly, the economic expansion in the U.S. appears to have entered a stage where the feedbacks are having a favorable, self-reinforcing impact. Risk-taking behavior is making a slow come back and the wait-and-see malaise of the last few years is gradually abating. This is a healthy and necessary development for recovery. But this process is still in the early stages of development and remains vulnerable to negative economic shocks.

Thus, before we break out the champagne, let us remember that unemployment, as conventionally measured, remains above 8% and GDP growth remains anemic. And, even though risks have diminished, a plethora of challenges still confront us — housing foreclosures, high unemployment, weak consumer income growth, consumer debt burdens, unsustainable federal budget deficits, political dysfunction, slower global growth — to mention a few of the more prominent ones. Unless one or more of these challenges results in a negative shock, they will not derail recovery but they will assure that improvement in economic growth will be subdued and gradual. In other words, unemployment and the gap between actual and potential GDP will remain at historically high levels for quite some time to come.

In this month's letter, I review recent developments in GDP growth and explore future prospects for potential GDP growth. Then I discuss personal income, consumption, consumer debt and employment. The final section provides an update on economic and political consequences of deepening recession in Europe.

II. U.S. GDP

1. 2011 Q4 GDP Final Estimate

The “Final Estimate” of fourth quarter GDP growth fell very slightly to 2.96% from the “Preliminary Estimate” of 2.98%. **Table 1** provides details.

If inventory accumulation is omitted, fourth quarter real GDP growth was a very anemic 1.15%, considerably below the 1.91% growth rate for all of 2011, net of inventory accumulation. Both fourth quarter growth and annual growth were below the level which is necessary to shrink the 5.48%

Table 1
2011 Fourth Quarter GDP Estimate

	Advance Estimate	Preliminary Estimate	Final Estimate	2011
Personal Consumption	1.45%	1.52%	1.47%	1.53%
Private Investment				
Nonresidential	.18%	.29%	.53%	.79%
Residential	.23%	.25%	.25%	-.03%
Inventories	1.94%	1.88%	1.81%	-.21%
Net Exports	-.11%	-.07%	-.26%	.06%
Government	-.93%	-.89%	-.84%	-.44%
Total	2.76%	2.98%	2.96%	1.70%

GDP output gap.

There were no significant changes from the preliminary to the final fourth quarter GDP estimate. A sizable increase in nonresidential investment was offset by small downward adjustments in personal consumption, inventory accumulation and net exports.

2. 2012 Q1 GDP Growth

Monthly data reports during January and February generally were better than expected, but March reports have been a bit softer.

Although the Federal Reserve's GDP growth forecast range for 2012 is relatively optimistic, the minutes of the recent Federal Open Market Committee (FOMC) meeting cite three downside risks: (1) unusually warm weather might have imparted an overly optimistic skew to recent data reports; (2) the potential negative consequences of the 20% increase in oil prices since last October have not yet filtered through to the rest of the economy, and (3) the impending "fiscal cliff" at the beginning of 2013 and uncertainty about how Congress might deal with it could adversely impact

confidence.

Until the release of the disappointing March employment report, the prevailing market narrative was that recent strong employment growth would invigorate a virtuous economic recovery circle of rising financial asset prices and rising consumer confidence, which would lead to greater consumer spending, additional increases in employment and greater income growth.

Reflecting this narrative, the Investors' Intelligence poll indicated that during the last week of March investor bullish sentiment rose to 52.7% and bearish sentiment fell to 21.5% — a gap of 31.2%. The extent of bullishness abated a bit in the first week of April as bullish sentiment fell back to 48.4%, while bearish sentiment remained unchanged. A gap exceeding 30% historically has had a relatively high correlation with significant market sell-offs.

Other recent reports have been mixed, but reports that have been below consensus expectations now are outnumbering those above consensus reports by about two-to-one. The daily Rasmussen consumer confidence survey, which has been rising steadily for several months, turned down in the first week of April. However, ISI's company surveys reached the highest level in five years — since before the onset of the Great Recession — in the first week of April. However, the ISI survey appears poised to drop during the second week of April and might have had an upward skew because of the timing of the Easter holiday.

In Europe, news increasingly indicates that recession is taking hold in many countries, particularly those in the periphery. Generally, trends are a bit worse than expected. European financial market anxiety, which ebbed sharply after the ECB initiated its Long-Term Refinancing Operations (LTROs), began to increase during the first week of April. An auction of Spanish sovereign debt was disappointing and the long-term yields are rising once again relative to German bonds. European bank stock prices are falling once again and are down 14% from recent highs. Also in the first week of April the Italian stock market fell 5% after Prime Minister Mario Monti was forced to water down labor market reforms. Even Germany, which is not officially forecast to experience recession, reported a 1.3% decline in industrial production in February.

Since late last year the market has priced out a lot of European risk

in response to policy actions. These actions did little to solve underlying problems, but did provide liquidity to financial institutions and put in place an improved bailout financial mechanism. Now the unresolved underlying problems are beginning to resurface as European recession slowly takes its toll. While a virulent crisis of the sort that bedeviled European markets in 2011 is probably not imminent, the market is beginning to sense that significant risks remain.

In spite of perceptions of strength, GDP tracking estimates indicate that first quarter 2012 growth will be lower than the 3.0% annual growth rate recorded in the fourth quarter of 2011. Tracking estimates range between 1.8% and 2.3%. ML expects 1.8% and GS is forecasting 2.0% growth. However, the recently released strong trade report may boost first quarter GDP estimates by as much as 0.6%.

GS's tracking estimate of 2.0% represents an unusually large gap from its first quarter GDP current activity indicator (CAI) estimate of 2.9%, although CAI has slowed from 3.2% in January and February to 2.5% in March. GS offers several possible reasons for the difference:

- Different parts of the economy can grow at different rates. Employment has been strong over the last several months but the full impact of this may not yet have flowed through to other data which ultimately impact GDP.
- The GDP tracking indicator is based on data which is less timely than the CAI.
- Statistical sampling error can skew data in the short-run; subsequent revisions wash out errors in preliminary data.
- Our old friend or foe — the weather — may be giving recent data a positive skew because of the warmer than normal winter. GS estimates that warm weather lifted the CAI by 30 basis points in December and 20-40 basis points in January. Mean reversion would occur April and May which would dampen growth.

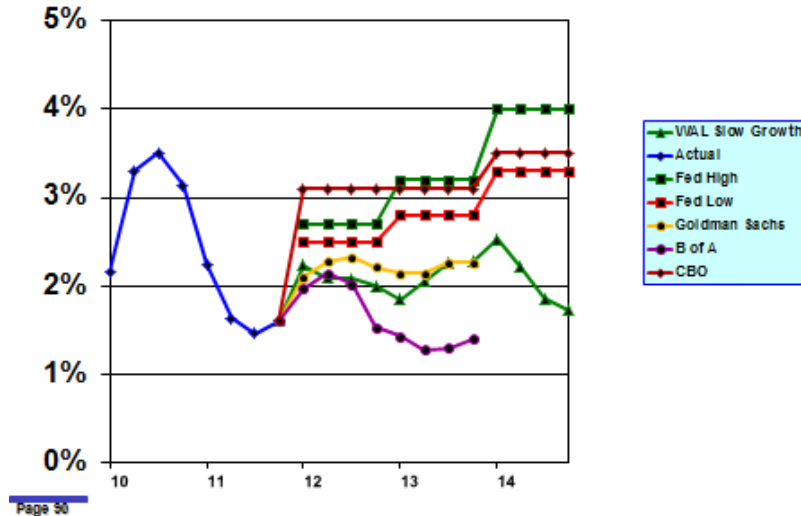
B of A cautions that recent stronger data reports have benefited from the unwinding of last year's oil price and supply chain shocks, the delay in home foreclosures and unseasonably warm weather. These factors have pretty

much run their course or, in the case of oil prices and home foreclosures, are reversing. B of A still has one of the most pessimistic GDP outlooks and so far has not been swayed by market optimism.

3. GDP Forecasts for 2012 and Beyond

Chart 1 shows several GDP forecasts: the Federal Reserve's high and low;

CHART 1 – Real GDP Growth Forecasts
(percentage change over previous 12 months)



B of A; GS; the Congressional Budget Office (CBO); and my “WAL Slow Growth” scenario.

Both GS and B of A forecasts remain on the pessimistic end of the spectrum and are below the Federal Reserve's low forecast for 2012 and well below the Fed's low forecast for 2013. CBO's forecast is more optimistic than the Fed's high forecast in 2012 and falls between the Fed's high and low estimates in 2013 and 2014.

GDP growth averages 2.2% for the next eight quarters in GS's forecast and 1.6% over the next eight quarters in B of A's forecast compared to the

FOMC's median of approximately 2.7% and CBO's 3.1%.

My "WAL Slow Growth" scenario projects GDP growth in 2012 and 2013 slightly below the GS forecast and stronger than the B of A forecast, particularly in 2013. Average GDP growth over the next eight quarters for the "WAL Slow Growth" forecast is 2.1%.

GS offers several reasons that growth is likely to slow as 2012 progresses:

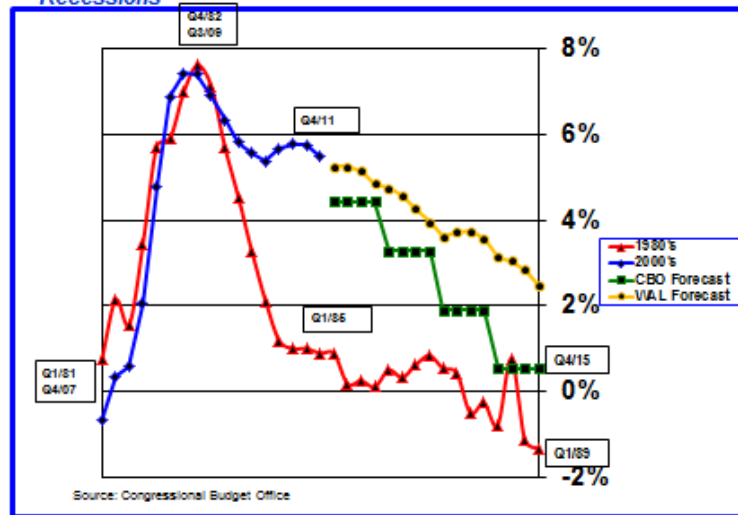
- Warm winter weather has accelerated the seasonal upswing in economic activity. An analysis of employment in cold-weather and warm-weather states indicates that warm weather accounted for an increase in payrolls above seasonal norms by 70,000 to 120,000 through February. To the extent this analysis has merit this excess should disappear in the next few months. The disappointing March payroll report appears to be supportive of Goldman's analysis.
- Inventory accumulation should provide a further boost to first quarter GDP growth before subsiding later in the year.
- Rising gas prices and the summer conversion to higher-priced gas should dampen consumer spending on other goods and services.

To this list I would add that reductions in government transfer payments, much of which reflects cutbacks in state and local social services spending, is depressing household incomes to a much greater extent than is generally realized. This trend has been obscured because consumers have tried to maintain living standards by once again dipping into savings. This cannot be sustained for very long. Thus, a decline in disposable personal income growth presages an eventual decline in consumer spending growth.

4. GDP Output Gap and Potential GDP

Chart 2 shows CBO's forecast for the GDP gap, which is simply the difference between CBO's real GDP forecast and its estimate of potential GDP divided by potential GDP. The gap does not fully close until the end of 2015. This estimate is consistent with the FOMC's monetary policy to maintain interest rates at exceptionally low levels until late 2014.

CHART 2 – GDP Output Gap Forecast: 1980-82 and 2007-09
Recessions



Page 34

However, if the B of A, GS and my GDP growth projections, which are lower than CBO's, turn out to be more accurate, the GDP gap will close more slowly as shown in the "WAL Forecast" in **Chart 2**.

It is also possible that CBO's forecasts of both potential and actual GDP are too high. To be more specific, CBO assumes that nonfarm labor productivity grows approximately 2.12% over the next five years. My estimate is 1.35%. My estimate includes an adjustment for the depressing impact of the output gap on productivity growth; CBO's estimate makes no such adjustment. This implies that CBO's estimate of potential GDP is too high, but it also implies that CBO's forecast of actual GDP growth is also probably too high. By 2015 my estimate of potential real GDP is approximately 3% lower than CBO's estimate and my actual real GDP forecast is approximately 4% less than CBO's forecast. The result is that my estimate of the GDP gap declines but is still a relatively high 2.5% by the end of 2015; whereas, CBO's estimate of the gap by the end of 2015 is only 0.5%.

With the passage of time we will know the answer as to which analysis is more accurate. What is important, however, is that the GDP output gap is likely to remain large for the next three years and will diminish only

gradually. This should maintain downward pressure on inflation and limit employment growth.

While my estimate of the impact the output gap has on depressing labor productivity is purely statistical, there is corroborating evidence. First, long-term unemployment results in what economists call *hysteresis*, which in straightforward language is deterioration of skills of unemployed workers. Hysteresis results in structural unemployment. People want to work but no longer possess the skills employers need. To the extent that such people become employed it will be in lower-paying, less productive jobs.

Second, demographic trends over the next few years will result in a large number of highly-skilled baby boomers deciding to retire.

Third, 11 to 13 million households have home mortgages that exceed the current market value of their homes — so-called underwater mortgages. Many of these households are unable to accept employment in a different geographic area because they are unable to sell their homes at a price that enables them to pay off their mortgage. The U.S. mover rate hit a record low of 11.6% in 2011.

Fourth, while business investment was a bright spot for 2011 real GDP growth, the capital stock is growing at a rate considerably below the historical average rate. This is not likely to improve markedly until the output gap shrinks. In short, labor is cheap and there is less incentive to leverage labor through investment in capital stock.

Labor productivity is likely to remain low as long as the output gap remains large. Other factors also imply slower productivity growth. However, significant technological innovation could boost productivity as happened from 1997 to 2004. Nevertheless, it is more likely than not that potential and actual real GDP growth will be much lower in coming years and even CBO's scaled down estimates of potential growth might prove to be too high.

III. Personal Income, Spending and Consumer Debt

1. Income and Spending

Growth in consumer disposal income must accelerate to assure that the current fragile economic recovery strengthens sufficiently to reduce unemployment and the GDP output gap. This did not happen in 2011 as is evident in **Table 2**.

Table 2
Change in 2011 Personal Income and Its Disposition
(in billions of dollars)

	Nominal 2011	Pct. Change	Nominal 2012 Jan./Feb.	Annual Pct. Change
Personal Income	\$584.5	4.65%	\$54.7	2.49%
Compensation	389.5	4.84%	52.1	3.69%
Proprietors' Income	38.2	3.53%	3.5	1.87%
Rental Income	72.4	20.41%	6.7	9.24%
Asset Income	42.8	2.45%	-0.6	-0.20%
Government Transfers	- 8.1	-0.35%	4.6	1.18%
Less: <i>Personal Taxes</i>	139.7	6.25%	42.5	10.69%
Disposable Income	395.2	3.49%	23.9	1.22%
Less: <i>Consumption</i>	452.4	4.21%	134.6	7.20%
Personal Saving	-57.3	-9.74%	-110.7	-120.9%

In 2011 personal income grew 4.65% but growth in disposable income was only 3.49% because income and payroll taxes grew at a much faster rate of 6.25%

Consumption growth during 2011 equaled 4.21%. However, because consumption growth exceeded disposable income growth, the consumer saving

rate declined from 5.19% in the fourth quarter of 2010 to 4.52% in the fourth quarter of 2011.

This means that the improvement in unemployment during 2011 depended to a great extent, not on income growth, but on increased borrowing and reduced saving. This pattern cannot be sustained. Either disposable income growth must accelerate in 2012 or consumer spending must slow.

Personal income and consumption data for the months of January and February portend a very negative outlook. The 2011 pattern of weak income growth and unsustainably strong consumption growth has worsened considerably. This can be seen in the third and fourth columns of **Table 2**. Personal income grew at a much reduced annual rate of 2.49% and personal disposable income grew at an even weaker annual rate of 1.22% during January and February. These numbers are so bad that it seems likely that subsequent data revisions will find missing income.

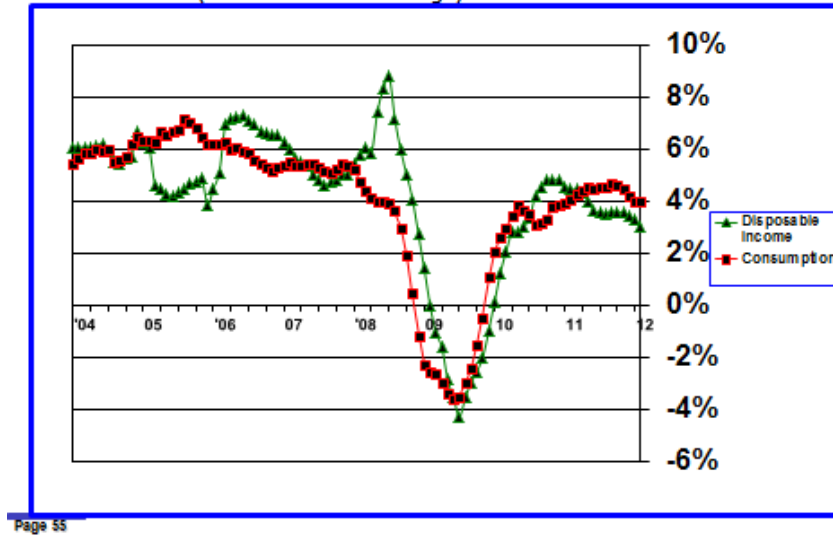
Moreover, to add to this dismal picture, income and payroll taxes grew at an astonishing 10.69% annual rate, taking a huge bite out of disposable income. If the consumption data are to be believed, consumption grew at a 7.20% annual rate. The saving rate fell from 4.67% in December to 3.72% in February.

Either the data are terribly wrong or consumers have returned to profligate spending. My guess is that there are probably elements of both factors at work, which means that the actual situation is probably not as bad as the data indicate, but also that the recent optimism of accelerating recovery is misplaced.

Chart 3 shows the nominal rate of growth in disposable income and consumer spending. The annual rate of growth in disposable income began slowing in late 2010 and has declined from its recent high of 4.9% in December 2010 to 3.0% in February 2012. Growth in consumer spending peaked later at 4.6% in July 2011, but now is declining and reached 4.0% in February 2012. This is not a favorable trend.

Notice in **Chart 3** that spending growth tends to lead income growth. This relationship is consistent with changes in consumer confidence. However, in the last several months the relationship has reversed, with income growth leading spending growth. Until the March employment report there

CHART 3 – Disposable Income and Consumption
Growth (12-month rate of change)



was some reason to hope that income growth would pick up. Now a more likely outcome seems to be a decline in spending growth to match the lower growth rate in income.

2. Consumer Debt

While mortgage debt continues to decline, consumer debt is growing again. It rose \$8.7 billion in February. But, the increase in consumer debt was due primarily to student loans and to a lesser extent to auto financing. Credit card debt is still contracting. It fell \$2.2 billion in February after falling \$3.0 billion in January.

Rapidly increasing student debt bears close watching as it has earmarks of the bubble in housing credit which occurred prior to the 2007-09 financial crisis. Student loans are long-term debt with deferred repayment schedules. However, this credit can be used to support current consumption. As such it may explain in part the recent decline in the saving rate. The concern is the possibility that student lending, which is now provided almost entirely

by the federal government, may be sowing the seeds of a future problem.

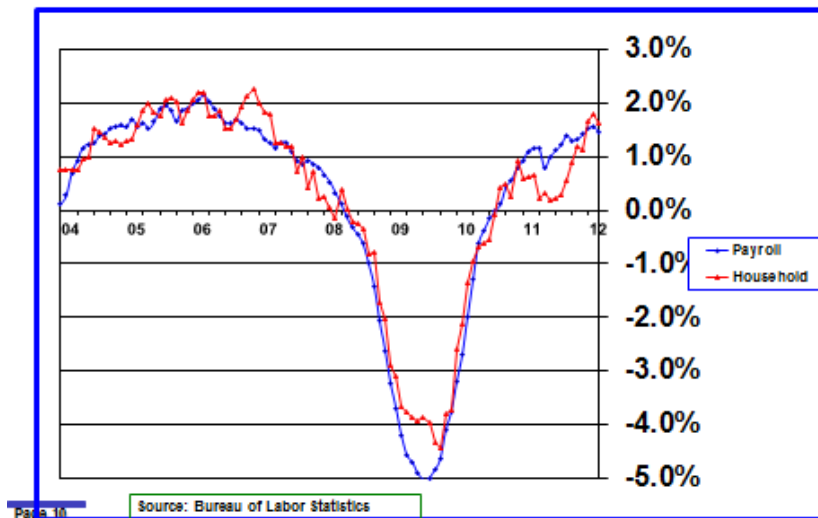
IV. Employment

March's employment report was very disappointing. The 120,000 increase in payroll employment was approximately 100,000 below the consensus forecast and was worse than the most pessimistic forecast. Payroll data for January and February were revised upward by a miniscule 4,000.

1. Household and Payroll Employment Growth

Chart 4 shows that household employment after lagging behind payroll

CHART 4 – Employment Growth (annual rate of change)



employment during much of 2011 has caught up. Household employment survey data are never revised, but payroll employment data are revised several times. These adjustments historically have added to employment growth during economic expansions and subtracted from employment during

recessionary periods. This cyclical regularity is driven by estimates of net business formation, or the so-called “birth-death” adjustment. Because we are currently in the expansion phase of the cycle, payroll adjustments for April 2011 through March 2012, when they are reported in January 2013 are likely to add to payroll employment growth. The further question is one of whether these positive adjustments will be small or large.

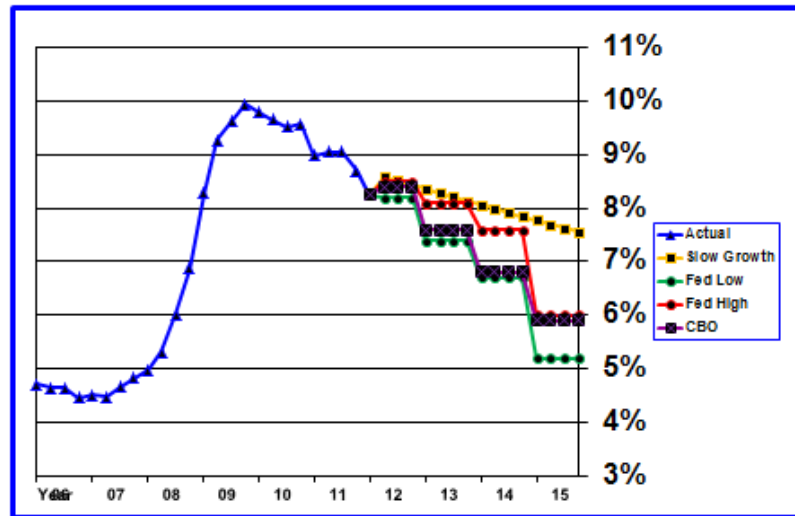
March data indicated a slowing in the rate of growth in both household and payroll employment. Indeed, household employment declined 31,000, after increasing an average of 210,000 monthly over the previous 12 months. The sampling error for monthly household employment is large, so one should not read too much into March’s decline. However, it remains significant that both the household and payroll employment reports were weak in March.

2. Warm Weather Might Have Contributed To Recent Strong Employment Growth

Unusually warm weather over the last several months might have accelerated hiring which ordinarily would not occur until springtime. If this has been the case, this acceleration in hiring should be reversed in April and May employment reports. Consistent with this view, the Bureau of Labor Statistics reports indicate that there have been fewer weather-related layoffs. GS has conducted extensive statistical analysis and finds that employment growth in “cold states” has been about 70,000 to 120,000 above normal. Further, based on an analysis of weather-sensitive employment sectors, GS estimates that only 15,000 jobs in March were related to reversal of weather-related hiring. This would mean that “adjusted” payroll employment was 135,000 in March, still a disappointingly low number. GS expects the remainder of the seasonal acceleration in employment growth to reverse in April and May, which implies that overall employment growth should be soft in both months.

3. Unemployment Rate

Chart 5 shows projections for the unemployment rate for my “Slow Growth” scenario, the FOMC’s high and low projections and CBO. The high and low

CHART 5 – Unemployment Rate

Page 25

FOMC unemployment numbers for 2015 are not forecasts; rather they are the FOMC's upper and lower bounds for the long-run noninflationary rate of unemployment. While not shown, the GS and B of A unemployment forecasts both remain near the current level of 8.2% through the end of 2013; the unemployment rate in my "Slow Growth" scenario declines to 8.1% by the end of 2013.

Notice in **Chart 5** that the FOMC's long-run noninflationary unemployment rate ranges between 5.2% and 6.0%. This range is similar to CBO's short-term and long-term potential full employment unemployment rates. Many believe that structural unemployment has risen and that the long-run full employment unemployment rate has risen to approximately 6.0%, which is the FOMC's upper bound and is CBO's short-term rate. Structural unemployment occurs when workers who would like to work and thus are counted in the labor force are unable to find jobs because their skills do not match available jobs. Structural unemployment tends to rise during and following recessions and also tends to worsen the longer workers are unemployed. Persistent unemployment has been much worse following the Great Recession than after other recessions over the last 60 years.

In spite of the decline in household employment in March, the unemployment rate actually declined. This occurred because the size of the labor force, the denominator of the unemployment rate, declined 164,000 while the numerator, the number of unemployed workers, dropped 133,000. On the surface it appears that the unemployment rate improved simply because unemployed workers dropped out of the labor force. If this is what actually happened, it is a perverse result and indicates a very weak labor market.

4. Chairman Bernanke and Okun's Law

Federal Reserve Chairman Ben S. Bernanke recently gave a series of lectures at George Washington University. In one of the lectures he discussed the surprising decline in the unemployment rate during 2011 and early 2012 in the face of below potential real GDP growth. Bernanke argued that this outcome appears to be a catch up from "excessive" job losses during the Great Recession rather than a significant increase in structural unemployment. This assessment is based upon a systematic relationship between changes in real GDP and the unemployment rate which is called "Okun's Law."

Okun's law is an empirical relationship between a change in the unemployment rate and the change in the real rate of GDP growth. If unemployment increases 1%, GDP decreases approximately 2%. GS estimated a simple Okun's Law regression. The regression indicated that the unemployment rate rose much more during the Great Recession than the 1998-2011 relationship indicates that it should have. The actual unemployment rate peaked at 9.9% in the fourth quarter of 2009, but the model indicates that the unemployment rate should have been 8.3%. However, by the fourth quarter of 2011 the actual unemployment rate and the rate implied by Okun's law had converged at 8.7%. In the model, the unemployment rate continued to rise in 2010 and 2011 consistent with below potential GDP growth.

Chairman Bernanke suggested that employers overreacted during the early stages of the Great Recession and laid off more workers than warranted by declining production. Then, when recovery began, employers' anxiety about worse to come dissipated with the result that the unemployment rate returned to the historical relationship with GDP growth.

GS thinks that there may be another interpretation. It suggests that

the relationship between changes in unemployment and real GDP growth is nonlinear such that when real GDP growth is negative, increases in the unemployment rate accelerate. It is not clear that this view is inconsistent with Bernanke's explanation.

If Okun's Law is reliable and assuming the overshoot in the unemployment rate has now been eliminated, further declines in the unemployment rate will depend on acceleration in real GDP growth above the potential rate. *Because most forecasts, including the Federal Reserve's, expect GDP growth in 2012 to be near or slightly below the potential rate, the unemployment rate should not improve much further during 2012, if Okun's Law still holds.*

However, decreases in the employment participation rate, discussed below, could lead to further declines in the unemployment rate, even if real GDP grows at or below potential.

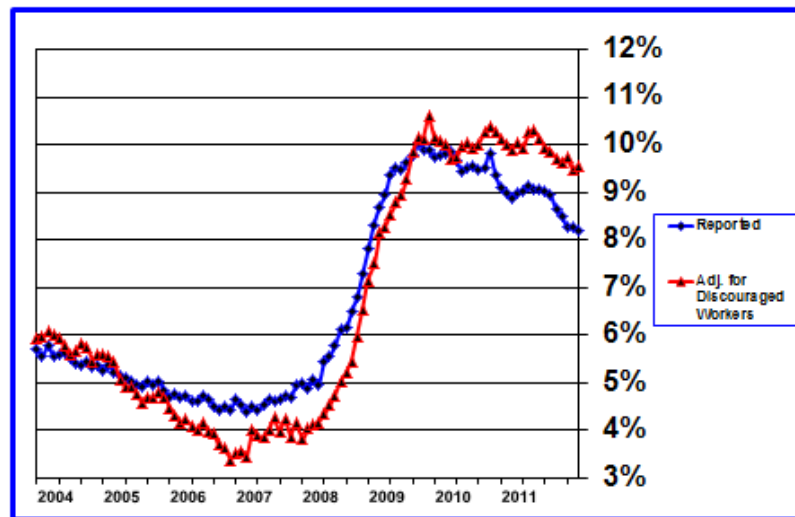
5. Employment Participation Rate

Another disturbing fact in the March employment report was a further decrease in the ratio of the labor force to the population eligible to work. This ratio is commonly referred to as the participation rate. It was .6377 in March, just a smidgen above the recent low of .6373 in January. Labor force participation has not been this low since January 1982. Some of the recent decline in the participation rate is the natural result of the aging of the baby boomers; some is due to later entry of a portion of young people into the labor force as they pursue a college education; but some of the decline also stems from discouraged workers who have dropped out of the labor force.

B of A recently stated that it expects cyclical increases in the participation rate to outweigh demographic decreases in coming months. B of A's research indicates that cyclical factors have depressed the participation rate by about .01, or approximately 2.18 million people. Demographic shifts will drive the participation rate down about .003 per year, or about 700,000 annually. I have derived two separate statistical estimates of the cyclical shortfall in the participate rate, which are virtually identical to B of A's estimate. One method results in a shortfall of 2.10 million workers and the other indicates a shortfall of 2.04 million.

Chart 6 shows that the unemployment rate would be about 9.5% instead

CHART 6 – Reported Unemployment Rate & Adjusted for Discouraged Workers



Page 30

of 8.2%, if cyclically-discouraged workers were counted as unemployed.

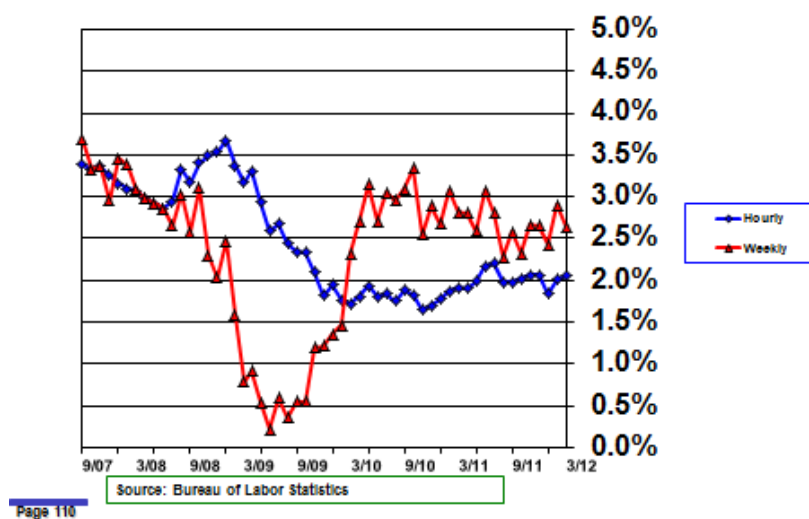
6. Growth in Wages

Growth in the hourly wage rate and weekly wages continues to be very weak and shows little improvement.

Weak employment growth and limited increases in wage rates translate into slow disposable income growth. **Chart 7** shows that from 2007 to the end of 2009 the annual rate of growth in hourly wages decelerated from about 3.5% to less than 2.0% and has remained near 2.0% ever since. The 12-month change in hourly wages was 2.05% in March. As long as the unemployment rate remains unusually high, labor will have very little bargaining power and this is likely to limit increases in hourly wages for the foreseeable future.

Weekly wage growth is more volatile than hourly wage growth because it incorporates the length of the workweek. When the length of the workweek

CHART 7 – Hourly and Weekly Wages
(annual rate of change)



Page 110

is stable, the two measures will track each other closely. Divergences occur during and following recessions. During recessions employers tend to cut the length of the workweek before shedding workers. The opposite happens in recoveries — employers increase hours before adding workers. The recent convergence of the two measures means that there is little further room for expansion of the workweek.

V. European Sovereign Debt Problems Re-emerge

Just a month ago it appeared that markets had concluded that the completion of an orderly default of Greek sovereign debt, the extension of unlimited amounts of 3-year credit to European banks and the agreement to enlarge the sovereign debt bailout facility had defused the Eurozone sovereign debt crisis.

However, I stated: “*Underlying fundamental problems have not been resolved. Consequences of these problems for financial markets have been deferred for now, but because they have not been resolved, new crises will even-*

tually erupt. A thorough understanding of the underlying problems leads to the conclusion that the European Union will not survive as currently configured.”

More quickly than anyone expected market anxiety has re-emerged. The focal point is Spain. However, market participants are also responding to evidence of deepening recession in many European countries. And, perhaps market participants are beginning to grasp that fiscal austerity can re-enforce recessionary trends and exacerbate, rather than improve, the magnitude of the sovereign debt problem.

What is in play is the *fiscal speed limit*. If austerity causes GDP to fall too fast, the sovereign debt to GDP ratio will rise rather than fall. That is because government tax revenues fall faster than spending reductions and the denominator, GDP, also falls. The increase in the cost of debt, which Spain and Italy are experiencing, exacerbates the problem. When the fiscal speed limit is breached and the public-debt-to-GDP ratio is already at a high level, it usually leads relatively quickly to a sovereign debt market riot and a bailout. This is what has already happened with Greece, Ireland and Portugal. Both Spain and Italy have been in the cross-hairs since last summer, but a full-scale riot has yet to occur.

Policy initiatives bought time, but some of these initiatives, such as requiring banks to increase capital, unleashed recessionary pressures. It takes time for a recession to develop and to damage growth and increase credit losses. Once underway, a recession usually gathers momentum for a period of time. Expansive monetary and fiscal policies can slow or reverse this momentum. The ECB has eased monetary policy and the LTRO program, by providing unlimited liquidity, has helped ease credit conditions. However, fiscal policy has not been expansionary. To the contrary, austerity has served as an accelerant and re-enforced recessionary pressures. Not surprisingly the consequences have been greatest for the peripheral European countries with the weakest economies, the highest sovereign-debt-to-GDP ratios and the greatest mandate to reduce budget deficits.

1. European Risks Remain Significant and May Be Increasing

Recession Unfolding. Consensus thinking is that Europe will experience a brief shallow recession during the first half of 2012. The ECB downgraded

its GDP growth forecast for the EZ in March to -0.1%, with a range of 0.3% to -0.5%, from +0.3% in December. This seems optimistic in light of the annualized -1.3% contraction in real GDP during the fourth quarter of 2011. The IMF's forecast is somewhat more negative for the Eurozone — it expects real GDP to contract -0.5% in 2012. Other forecasts are generally more negative. For example, B of A expects real GDP in the EZ to contract -1.0% in 2012 and ISI expects -1.5%. Incoming data support the more pessimistic forecasts. For example, retail sales are down 2.1% over the last year.

Risks appear to be tilted to the downside. Risks include rising unemployment, higher gas prices, tight credit and ongoing high uncertainty about future economic and financial market prospects.

On the positive side, the LTRO program has diminished risks. However, bank recapitalization and tighter credit underwriting cut the other way. One should also remember that deteriorating economic conditions can result in self-fulfilling feedback loops by prompting even greater credit underwriting caution.

Resistance to Economic Reforms. Social unrest and political melt-down in Greece is a distinct possibility. With parliamentary elections now scheduled for May 6, expect protests and perhaps even more dramatic developments. While 70% of Greeks reportedly support keeping Greece in the EZ, the economic collapse that is occurring and the upcoming election will catalyze a national debate that could lead Greece in a different direction.

Unions in Spain conducted a general strike on March 29 and will continue to work to prevent significant labor market reforms, which policymakers believe are necessary to help reduce Spain's competitiveness gap.

In Italy, in spite of Mario Monti's overwhelming popularity, he has had difficulty persuading parliament to adopt meaningful labor and business reforms.

All of this simply makes it painfully apparent how exceedingly difficult it will be, if not totally impossible, to improve competitiveness. Differences in competitiveness are not just a matter of laws but are also deeply embedded country cultures. Nonetheless, in the long run improving competitiveness by tearing down legal and cultural barriers is crucial to a country's prosperity. But, the reality is that it takes time to implement reforms and more time

for them to have impact. In the meantime the period of transition can be extremely disruptive. And in conjunction with economic distress unpopular reforms can catalyze political movements that lead to unexpected and potentially undesired outcomes.

Monetary Policy. The ECB has reduced its lending rate to 1% and provided €1 trillion in three-year collateralized funds (LTRO) to European financial institutions. Mario Draghi has stated in clear terms that the ECB has no intention to ease monetary policy further or provide additional liquidity. That doesn't mean one or the other will not happen. It just means that the bar is very high. The economy would have to get a lot worse than expected and a real liquidity crisis would need to re-emerge.

As yields on Spanish debt have risen, some have suggested that the ECB could intervene as it has done in the past and buy Spanish sovereign debt in the secondary market. It is hard to square this with the ECB's clearly stated policy that assistance is contingent on a country's commitment to making fiscal adjustments consistent with the terms of the Fiscal Compact. Spain, by unilaterally announcing that it does not intend to meet the original 2012 public-debt-to-GDP ratio target, has already acted in a way that is inconsistent with the ECB's requirements.

Fiscal Policy. Fiscal policy is decidedly contractionary in every EZ country and most other member countries of the EU as well. This is opposite of what is called for to combat a recession. The question is one of whether the negative consequences of fiscal consolidation in a recessionary environment have been underestimated. That is certainly the case in Greece and may also prove to be the case in Portugal, Spain, Italy and elsewhere.

As always the answer will be clear to all of us in a few months' time. My sense is that just as the extent of optimism in the U.S. currently is not warranted, limited pessimism in Europe denies the consequences of significant potential risks.

Credit Availability. The ECB's LTRO program, by providing unlimited funding, helped ease credit conditions substantially. However, while this initiative restored interbank credit, it did not reverse the decline in lending. Loans to nonfinancial corporations declined 0.82% from December through February. Loans to households declined 0.18% over the same period.

2. Eurozone Bailout Mechanisms — Recent Developments

EU finance ministers agreed on March 30, 2012 to details of the bailout funds. The EFSF will continue until mid-2013. However, the ESM will not reach full capacity of €500 billion until mid-2014. **Table 3** shows the amount and timing of available bailout funds and potential demands for deployment of those funds. The combined EFSF and ESM reach €500 billion in mid-2013, but then the amount of available funds declines when the EFSF is terminated and takes another year to reach the final size of €500 billion. This occurs because capitalization of the ESM is phased in over the next two years. The ESM treaty requires a 15% capital ratio, which means that available funds will be less than €500 billion until full capitalization of €80 billion is reached in the first half of 2014.

Table 3
European Bailout Funds (in billions of €)

Available Funds	July 2012	Dec. 2012	June 2013	Dec. 2013	June 2014	Dec. 2014	Dec. 2015
ESM Capital	16	32	48	64	80	80	80
ESM Capacity (15% Capital Ratio)	107	214	321	428	500	500	500
Unused EFSF	240	240	240	0	0	0	0
TOTAL	347	454	500 ^a	428	500	500	500
IMF Bilateral Loans		275	275	275	275	275	275
TOTAL with IMF	347	729	775	723	775	775	775
Potential Required Funds							
Greece, Portugal, Ireland					81	157	222
Spain, Italy					348	643	973
TOTAL					429	800	1,195

^aAmount limited to a maximum of €500 billion

It is anticipated that the IMF could have up to an additional €275 billion that could be made available. €150 billion is expected to come from EZ countries with the remaining €125 billion coming from other countries.

It is clear in **Table 3** that there are enough funds available to extend bailouts for Greece, Portugal and Ireland beyond 2013, should that become necessary. However, there are not sufficient funds to provide a bailout for Spain and Italy. In short, sometime in the future more bailout funds probably will be required. However, the alternative of breakup of the EZ should not be ruled out for reasons I have discussed in previous letters.

3. Greece

Orderly default was accomplished successfully with the restructuring of Greek sovereign debt. However, even though the media has paid little attention to Greece in recent weeks, this is not the end of the story.

Greek Economy Is In Free Fall. The Greek economy is in free fall. GDP fell 6.8% in 2011 compared to an IMF forecast decline of 2.6% when the first bailout was put in place in spring 2010. Most of 2011's GDP decline occurred in the fourth quarter.

Since the onset of the crisis Greek GDP has fallen 14%, industrial production has declined 25%, the money supply has plummeted 30% as depositors moved their euros to non-Greek banks, and unemployment has risen above 21%. Austerity requirements in the latest bailout agreement will only serve to accelerate economic collapse. The budget deficit was 10% of GDP in both 2010 and 2011. The 2011 target was 8%. Getting to a primary surplus by 2013, even though interest rates on new Greek debt have been cut, seems nigh on to impossible.

Latest Greek Bailout Likely To Fail. The fundamental reason that the bailout will fail is that the Greek economy is simply uncompetitive with other members of the European Union.

Greece's uncompetitiveness has many facets. First, the prices of Greek goods and services need to decline relative to prices in other European Union countries. This could be accomplished in a single stroke if Greece could devalue its currency — but it doesn't have its own currency, so this is not an option.

Second, Greek wages need to decline relative to wages in other countries. It does not matter whether they are already lower, which they are,

than wages in other European countries. They just need to decline. While this is a good textbook solution, it is not a politically viable solution because it requires high levels of unemployment to force wage deflation. Greek unemployment is already 21% and rising. Moreover, deflation will raise the value of debts denominated in the euro and increase the likelihood and cost of bankruptcies. In short, deflation is an ugly, destructive solution.

Third, Greece can boost productivity. That is easier said than done because it means breaking entrenched cultural and institutional behavioral contracts. Moreover, productivity enhancing reforms take a very long time to bear fruit.

No amount of austerity or economic restructuring will cure Greece's uncompetitiveness. Indeed, austerity is worsening the problem. Greece can resolve the competitiveness problem by leaving the euro and devaluing its substitute currency — the new drachma. Of course, this solution will not be without significant consequences and costs for Greece. But, this alternative may eventually come to be seen as less bad than the course Greece is currently on.

Greece — Political Reasons Bailout Will Fail. Greece is rapidly devolving into social chaos. Elections have been scheduled for May 6. Only the leaders of the two major political parties, Pasok and New Democracy, have pledged to implement the mandated austerity program. Polling in mid-February showed only 11% support Pasok (former Prime Minister George Papandreou's party) and 27% support New Democracy. Support for a combination of far left parties was 44% and the extreme-right party, Golden Dawn, polled nearly 3%. Needless to say the situation is very fluid and the increasing sense of desperation could lead to near total annihilation of the two centrist parties — Pasok and New Democracy. If that occurs, all bets are off in terms of Greece's compliance with terms of the bailout.

At best Greece appears headed for significant social and political upheaval as 2012 unfolds. This probably would lead to an attempt to renegotiate the terms of the bailout. At worst, revolution might occur. In any event it is hard to see how Greece can stay in the EZ and increasingly its exit probably will occur well before 2020.

4. Spain

All eyes are now on Spain. And, the additional scrutiny is not reassuring market confidence.

Spain Misses Fiscal Consolidation Targets. Spain has attempted to be fully cooperative in pursuing recommended fiscal consolidation policies, even though it is not subject to any formal agreement. However, Spain is having difficulty in meeting voluntary budget targets. The target deficit for 2011 was 6.0% but the actual deficit ended up at 8.5%. Prime Minister Mariano Rajoy surprised European officials recently by unilaterally announcing that Spain was revising its 2012 budget deficit target from 4.4% to 5.8% but still intended to hit the European Union's overall target of 3% in 2013. This may prove very difficult as unemployment is 25%.

Unfortunately, the Spanish economy is already in recession and it appears to be worsening rapidly. Industrial production in February was 3.0% below the year earlier level. Loans to businesses and individuals shrank 4% in January. The consensus expects Spanish real GDP to decline 1.2% during 2012, but some forecasters expect a much worse performance, perhaps as great as a 2.7% decline. Prime Minister Rajoy seems to agree at least in part with gloomier forecasts as he plans to submit a budget based on a 1.7% decline in GDP during 2012.

Importantly, it is not at all clear how Spain can restore economic growth. Unemployment has been very high for a long period of time. In recent years, economic growth depended inordinately on housing construction. Like in the U.S. too many houses were built. Construction has come to a standstill and housing prices have declined 11.2% over the last year. Some expect prices to fall as much as another 35%. Were this to occur, even partially, the consequences for solvency of Spanish banks, particularly the savings banks (cajas), would be severe. Unfortunately, in the near term without the option of fiscal stimulus and without a clear alternative economic model to replace the one based on leverage and housing, Spanish prospects are dismal indeed.

Spanish officials are caught between a desire to comply with the EU's new fiscal compact and a realistic desire not to kill the economy as the European recession gathers momentum. My sense is that Spanish deficit reduction targets are still too aggressive and probably violate the fiscal speed limit. Since Rajoy has already demonstrated a degree of independence, he may do

so again if circumstances deteriorate further.

Although Rajoy may be pursuing a pragmatic policy designed to avoid total economic collapse, market reaction has been negative in two respects. First, markets now doubt Spain's resolve to comply with fiscal austerity targets. Second, and more importantly, a deeper examination of details of the Spanish economy has exposed significant risks.

Reasons Why A Spanish Sovereign Debt Bailout May Be Inevitable.

First, although Spain's sovereign-debt-to-GDP ratio appeared to be at a manageable level of 70% in 2011, it is expected to rise to at least 79% in 2012 as deficits continue and GDP shrinks. However, what is only now beginning to be understood is that the Spanish government has provided explicit and implicit debt guarantees for regional governments and private projects which, if included, would increase the debt-to-GDP ratio by 50%. Moreover, the total Spanish debt to GDP ratio aggregated across all economic sectors was 344% in 2011 and rising. The same ratio in the U.S. was 250%.

Second, the end of the housing construction boom will reduce GDP growth by as much as 2.0% over the next couple of years, with nothing in the wings to replace it.

Third, when prospective loan losses are factored in many Spanish banks are woefully undercapitalized and solvency is at risk. At the very least, credit conditions will tighten further with detrimental impacts on economic growth.

Fourth, at 25% Spain has the highest unemployment rate among developed countries, although Greece appears to be catching up. Moreover, within the EU Spanish labor is extremely uncompetitive. A solution to uncompetitiveness is wage deflation, but this will serve only to drive unemployment up to even greater heights. Already disgruntled labor unions have engaged in general strikes, including one on March 29, protesting government austerity and social reform policies.

Fifth, when the time inevitability arrives when the market loses faith in Spain's ability to solve its economic and sovereign debt problems on its own, it is difficult to see how the EFSF and the ESM will have enough resources to provide a credible bailout. This risk is greater than a cursory look at the numbers might suggest because a Spanish meltdown is more likely than not

to be accompanied by the market's loss of confidence in Italy as well (see below).

On April 11th Prime Minister Rajoy stated that Spain will continue to implement reforms and insisted that Spain will not require a bailout now or in the future. What else can he say? In the meantime the cost of Spanish sovereign debt continues to increase. A market riot is not yet at hand, but one must wonder just how far off the day of reckoning might be.

5. Portugal

For now all is quiet in Portugal. That is because the terms of last year's bailout eliminated the need for Portugal to go to the debt markets until late 2013.

However, the economic situation is deteriorating rapidly. Market implied default probabilities can be derived from credit default swap prices. The 5-year default probability is approximately 65% for Portugal and the 10-year probability is 75%. The next most troubled European nation is Ireland with a 40% 5-year default probability and a 60% 10-year default probability. Interest rates on Portuguese sovereign debt remain at very high levels. Thus, the market believes not only that another Portuguese bailout is likely, it also believes that private investors might be forced to take losses, just as occurred in Greece, in spite of the European Union pledge to the contrary.

Terms of Portugal's €78 billion bailout require it to cut spending and raise taxes the equivalent of 6% of GDP in 2012. This is plunging Portugal into deep recession which the Portuguese central bank forecasts will reduce GDP by 3% in 2012. Based on what has happened in Greece, this estimate is probably very optimistic. Portugal's debt to GDP ratio is forecast to rise from 107% to 118%, but again this will turn out to be optimistic if GDP falls by more than 3%.

Odds of a more favorable outcome would rise sharply if Portugal's debt were restructured sooner than later when it becomes obvious to all that there is no other choice. That, too, would have been the case for Greece had its debt been restructured in the spring of 2010 rather than two years later. By waiting two years and by forcing draconian austerity on Greece, not only did debt restructuring become inevitable, the economy was so damaged in

the process that the haircut ended up being far larger than would have been necessary if restructuring had occurred earlier. Unfortunately, the same logic applies to Portugal and European policymakers are following the same disastrous pathway.

However, restructuring Portugal' debt would not produce a sustainable long-run solution. Like Greece, Portugal suffers from a significant lack of competitiveness and like Greece it cannot solve this problem through the traditional mechanism of currency devaluation. The Bank Credit Analyst estimates that Portugal's currency would need to depreciate by 32% to eliminate its current account deficit. To put this into perspective, comparable figures are 35% for Greece, 21% for Spain, 17% for Italy, and 6% for Ireland.

6. Ireland

Since last year's EFSF bailout there has been little media coverage of developments in Ireland. But, one should not assume that silence is good news.

In 2008 the previous Irish government agreed to honor €31 billion in bank debt and issued promissory notes to the Irish Bank Resolution Corporation (IBRC). The IBRC used the notes as collateral to borrow from the Irish central bank, which, in effect, means that the ECB has provided credit to the IBRC through the Irish central bank. When Ireland agreed to EFSF and IMF bailout terms in 2011, the government agreed to repay €3.1 billion annually until 2023 with smaller payment amounts thereafter until the debt is paid in full by 2031. Annual payments amount to 2% of Irish GDP and interest payments will count as part of the Irish budget deficit beginning in 2013.

When the mathematics of these commitments are worked through, it becomes clear that the Irish government will have to cut spending and/or raise taxes to meet budget deficit reduction targets or it will have to attempt to renegotiate the repayment schedule and stretch payments out over a longer time period.

All of this casts doubt on the ability of Ireland to secure funding directly from financial markets in 2013 as the current bailout agreement provides for. Thus, Ireland, like Portugal, may have to negotiate another bailout in

2013. This is why Irish credit default swap premiums are hefty and second only to Portugal.

There is an additional upcoming event that could complicate matters sooner. When members of the EU agreed to the Fiscal Compact, Ireland indicated that it would be necessary to hold a public referendum on the terms of the Fiscal Compact. The referendum will be held sometime in May or June. Once a date is scheduled, there will be more press coverage. While Irish voters really don't have a choice, nonetheless they might engage in a bout of petulance by defeating the referendum. Voters' mood might also depend on developments in other European countries in the interim, particularly elections in Greece and France and bond market developments for Spanish and Italian sovereign debt.

7. Italy

In a way, Italy's situation is worse than Spain's. It's debt-to-GDP ratio is expected to rise to 126% by 2013. While Italy's budget deficit is not a serious problem, it, too, suffers from a lack of competitiveness within the EU.

In the early going Prime Minister Mario Monti was able to get the Italian parliament to pass significant tax and spending reforms. During this honeymoon period he garnered a very high approval rating.

Now, however, he has encountered formidable resistance to economic reforms — so-called growth reforms — intended to improve Italy's competitiveness. Italy's labor laws make it very difficult for businesses to lay off workers. Another proposed reform which has encountered fierce resistance is relaxation of professional licensing requirements which restrict competition in many professions ranging from lawyers and pharmacists to gas station operators. As a consequence, Monti proposed relatively weak labor market reforms and then was forced to weaken them further to gain parliamentary approval. As a consequence, there is little likelihood of any significant reduction in Italian labor costs.

Thus, in Italy, like Spain, improving competitiveness, which is the main long-term requirement to help Italy grow out of its fiscal problems, is not being addressed in any meaningful way. Without meaningful economic re-

forms, the only policy tool remaining in the absence of the currency devaluation tool is fiscal consolidation. This leads in the short-run to deep recession and in the longer run possibly to social unrest and political change favoring more extreme elements. Stay tuned! Further trouble is ahead.

In the meantime, recession is already deepening and unemployment is rising. Already one-third of young Italians are unemployed. Strict labor laws make it virtually impossible to fire employees and this favors older workers. Greater than expected declines in GDP will inevitably lead to demands from EU policymakers for Italy to increase fiscal consolidation measures to assure that budget reduction targets are achieved. Such action, unfortunately, as we know from the experience of other European countries, will deepen the Italian recession.

8. France

France's two-stage presidential election is scheduled for April 22 and May 6. Recent polls suggest that Nicolas Sarkozy will lose to Françoise Hollande. It is unclear what this potential political shift might mean for the on-going EZ crisis. At the moment it is just another element of uncertainty.

9. Germany

Unambiguously, Germany is by far the strongest economy in the EZ. Germany is largely responsible for the ongoing strong performance of the euro. But, Germany cannot carry the rest of the EZ and EU economies by itself. Nor will its economy be immune from recessionary trends in other countries.

Germany's economic strength lies in its robust manufacturing sector and large favorable trade surplus. As I have commented in other letters, the large trade surplus may be good for Germany but in the long-run it has had unhealthy consequences for the EZ and the EU.

Roughly half of Germany's exports go to other European countries. As the economies of those countries struggle, German exports to them are declining. While German economic growth has slowed, exports to the rest of the world remain strong and thus far this has kept Germany out of recession. Germany's GDP is expected to grow 0.6% in 2012.

But, there are warning signs. Industrial production fell 1.3% in February and January's initial estimate was revised downward.

If recession in Europe turns out to be worse than the consensus expects, which increasingly seems more likely than not, Germany's growth will be dragged downward. However, a greater threat to Germany as 2012 progresses is a global slowdown which would depress German exports. As yet, this is a risk, not a reality.

10. United Kingdom

Although the United Kingdom (UK) is not part of the EZ, it is conducting its own experiment with fiscal consolidation. So far the results of this experiment are hardly an endorsement of the efficacy of a fiscal consolidation policy initiative, especially at a time of massive debt deleveraging in the private sector. UK real GDP is 14% below its pre-Great Recession trend level, but its output gap, according to the UK Office for Budget Responsibility (OBR), is only 2.5%. Assuming this assessment is reasonable, the UK apparently has suffered a permanent diminution in output exceeding 10%. To put this into perspective, U.S. GDP is approximately 12% below its pre-Great Recession trend level, the output gap, according to CBO, is 5.5%, resulting in a permanent output loss of about 6%. OBR estimates that 70% of the permanent loss in output in the UK is due to weaker productivity.

Stresses emanating from the UK's very large financial sector relative to GDP contributed initially to the severity of the decline in GDP. After all, the Great Recession's uniqueness relative to other recessions was the financial panic and debt deleveraging that accompanied it. It stands to reason that solvency issues in the UK's large and globally significant financial institutions would have an outsized impact on UK GDP. This was reflected in a 25% decline in the pound relative to both the euro and the dollar during the crisis. This made UK imports much more expensive and contributed to higher inflation. Also, tax increases, which were initiated to reduce the budget deficit also contributed to higher inflation. This clobbered consumer spending power and unleashed a negative deflationary economic circle, resulting in depressing the standard of living.

In this context the UK's fiscal consolidation policy has had the effect of chasing one's tail. The budget deficit grew because of a permanent decline

in GDP and tax revenues. Government spending decreases and tax increases in an attempt to reduce the budget deficit depressed GDP growth and tax revenues further. Nonetheless, the UK government continues doggedly to pursue fiscal consolidation.

11. Summary

This summary of developments in Europe is much more pessimistic than acknowledged by policymakers. Currently, market participants, while perhaps not as optimistic as policymakers, still have an optimistic bias. Policies to date have “kicked the can down the road” and have been successful in the short run in containing the crisis and averting contagion. But, importantly, underlying problems are not being resolved. Thus, expect that the EZ/EU crisis will ebb and flow in coming months with the potential for negative surprises. In the long run I continue to believe that the EZ and EU will have to be restructured and some countries will either voluntarily exit or will be forced to exit.

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