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

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The Longbrake Letter*

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I. Blowout Employment Report Lifts Optimism; But, Economy Is Still Fragile and Vulnerable to Potential Negative Shocks

I began the ***January Longbrake Letter*** with the following statement: "In the ***December Longbrake Letter*** I attempted to peer forward into 2012. This is always a high risk venture for any economic forecaster, because surprises, either favorable or unfavorable, which drive economic activity in unexpected directions, always lurk in the shadows." Well, February's surprise was a very upbeat employment report that far exceeded expectations.

Other economic data reports in recent months have also had an upbeat bias.

- Consumer credit was up strongly by $20 billion in November and $19 billion in December — implies stronger consumer spending growth.
- U.S. auto sales increased to a post Great Recession high of 14.1 million annually in January — implies stronger consumer spending growth.
- The S&P stock price index is up 6.8% so far in 2012 through February 10; this is helping boost consumer confidence and wealth — implies stronger consumer spending growth.
- The Rasmussen consumer confidence survey is rising and is almost equal to the post Great Recession peak reached in early 2011 — implies stronger consumer spending.

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- Jobs — firing has declined (unemployment claims are falling) and hiring has picked up a little — implies acceleration in employment growth.
- Manufacturing purchasing managers index rose from 53.1 in December to 54.1 in January (a value greater than 50 implies expansion).
- Construction spending rose 1.5% in January, exceeding expectations.
- Goldman Sachs Analyst Index rose above 50 in January.
- ISI's company surveys advanced to 50.0 as of February 10, 2012, the highest level in nine months.
- During the first 10 months of 2011 domestic energy sources satisfied 81% of demand compared to 70% in 2005; natural gas prices continue to fall.

Risks, particularly those emanating from Europe, have diminished, at least for the time being. Imbalances, such as excess housing inventory, are slowly diminishing.

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.

But, before we celebrate, let us remember that unemployment, as conventionally measured, remains above 8% and GDP growth remains anemic. Other employment measures are worse. A plethora of challenges still confront us — housing foreclosures, consumer debt burdens, unsustainable federal budget deficits and political dysfunction — to mention a few of the more prominent ones.

As Paul Krugman recently wrote, "*How goes the state of the union? Well, the state of the economy remains terrible. . . . But there are reasons to think that we're finally on the (slow) road to better times.*"[1] And Krugman had this to say about the January employment report: "*So, here's what needs to be said about the latest numbers: yes, we're doing a bit better, but no, things are not O.K. — not remotely O.K.*"[2] This sentiment was echoed in

[1] Paul Krugman. "Is Our Economy Healing?" *The New York Times*. January 22, 2012.
[2] Paul Krugman. "Things Are Not O.K." *The New York Times*. February 5, 2012.

a more subdued fashion in a recent speech by San Francisco Federal Reserve president, John C. Williams: "*The good news is that the U.S. economy has been growing for the past two-and-a-half years. ... Nonetheless, we are still suffering from the aftereffects of the worst recession of the post-World War II period. ... I expect the pace of economic growth to be frustratingly slow and the* ***unemployment rate to remain high for years to come*** *[emphasis supplied].*"[3]

These assessments firmly fall into the category of tempered optimism. The Fed's Federal Open Market Committee, a week prior to January's blowout employment report, surprised markets with a decidedly dovish monetary policy statement, reflecting its view that while economic recovery is underway it is fragile and it will take as much as another two to three years to bring unemployment down to an acceptable level. "*To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee ... anticipates that economic conditions — including low rates of resource utilization and a subdued outlook for inflation over the medium run — warrant exceptionally low levels for the federal funds rate at least through late 2014.*"[4]

Thus, there is broad-based agreement that we have a long ways to go. The economy while recovering slowly is still fragile and remains vulnerable to setbacks.

As I described in the ***December Longbrake Letter***, it will be hard to sustain recent momentum in economic activity in some sectors as 2012 unfolds. In addition, risks of a slowdown in global growth and an outright recession in Europe will impact the U.S. and that impact has the potential to be greater than the consensus expects.

Some seem to think that what happens elsewhere will have little impact on the U.S. The word "decouple" has resurfaced. This word implies that the linkages between the U.S. economy and the global economy — think "Europe" in particular — are sufficiently limited that negative shocks in Europe or elsewhere will have limited impact on derailing building momen-

[3] John C. Williams. "The Federal Reserve and the Economic Recovery. Presentation to the Bishop Ranch Forum, San Ramon, California. February 8, 2012.

[4] Federal Open Market Committee. "Monetary Policy Statement." January 25, 2012.

tum in the U.S. economy. In today's highly integrated global economy there is no substantive basis for the decoupling theory, yet discussion of it seems to crop up every time the U.S. economy is improving or doing well as an explanation for why difficulties elsewhere are unlikely to have much impact. What is more likely is that the slowly strengthening U.S. economy will serve to moderate negative impulses in the rest of the world. This is a "coupling", not a "decoupling" story.

In this month's letter, I begin by examining recent developments in GDP, personal income and outlays, employment and monetary policy.

Then, I look back at events leading up to the greatest economic calamity the U.S. has experienced in the last 80 years. This review and assessment includes a theoretical analysis conducted by two International Monetary Fund economists, Michael Kumhof and Romain Ranciere, which links growing income inequality as a primary cause of the 2007-09 financial markets and economic collapse.[5] I also summarize key conclusions and comment on a controversial book, ***Coming Apart: The State of White America, 1960-2010***, recently published by Charles Murray.[6]

I conclude with an update on the four significant risks — China, Europe, U.S. fiscal policy and U.S. residential housing — which I identified in the December Letter as the key risks to monitor during 2012.

II. U.S. GDP

1. 2011 Q4 GDP Advance Estimate

The "Advance Estimate" of fourth quarter GDP growth was 2.76% compared to "Final Estimate" of 1.82% in the third quarter. **Table 1** provides details. While at initial glance it appears that the economy gained momentum during the fourth quarter, details tell a different story.

Consumer Spending. Consumer spending growth was only marginally

[5] Michael Kumhof and Romain Ranciere. "Inequality, Leverage and Crises." International Monetary Fund Working Paper, November 2010.

[6] Charles Murray. Coming Apart: The State of White America, 1960-2010. Crown Forum, 2012.

Table 1
2011 Third Quarter GDP Estimates

	Advance Estimate	Third Quarter	Difference	2011
Personal Consumption	1.45%	1.24%	.21%	1.53%
Private Investment				
Nonresidential	.18%	1.49%	-1.31%	.82%
Residential	.23%	.03%	.20%	-.03%
Inventories	1.94%	-1.35%	3.29%	-.20%
Net Exports	-.11%	.43%	-.54%	.05%
Government	-.93%	-.02%	-.91%	-.45%
Total	**2.76%**	**1.82%**	**.94%**	**1.72%**

higher in the fourth quarter and slightly below the overall growth rate for 2011. Moreover, a slowdown in retail sales in the months of November and December suggest a loss of momentum as the year closed. Because consumer spending accounts for 70% of GDP, for GDP growth to reach 3%, consumer spending needs to be at least 2.1% instead of the 1.45% realized in the fourth quarter and 1.53% for the year. But this will not occur until disposable income growth accelerates. Better employment growth will be helpful, but stagnant real wages, declining government transfer payments and a stabilization in the saving rate will limit the extent of improvement.

Nonresidential Investment — Equipment and Software. This GDP category, which accounted for over half of GDP growth during the first three quarters of 2011, fell to 14% of fourth quarter growth. Even so, this component of GDP growth continued to grow faster than its 5% contribution to total GDP. But, because of how the quarterly GDP growth rate is constructed, its contribution fell from 1.12% in the third quarter to .39% in the fourth quarter, and this accounted for much of the decline in nonresidential investment. The remainder of the decline was in structures.

Residential Investment. Perhaps reflecting that a bottom may have been reached in residential construction, this GDP category eked out a small gain of .23% in the fourth quarter. Going forward the odds favor a gradual increase in the contribution of residential investment to GDP growth. However, the ongoing excess housing inventory and mortgage finance challenges will limit increases in residential construction for another one to two years.

Inventories. At first glance the sharp reversal in inventory growth from the third quarter to the fourth quarter appears to be largely offsetting. Lingering supply chain disruptions probably depressed third quarter inventory accumulation and led to a restocking rebound in the fourth quarter. However, other data sources and industry commentary cast doubt on the size of inventory accumulation in the fourth quarter. If this figure is revised downward in the future, fourth GDP growth will end up smaller than indicated by the "Advance Estimate".

Net Exports. The reversal in net exports from the third to the fourth quarter means that imports grew faster than exports. While the trade data tends to be volatile from quarter to quarter, a negative contribution to GDP growth from net exports tends to be weakly correlated with stronger consumer spending growth.

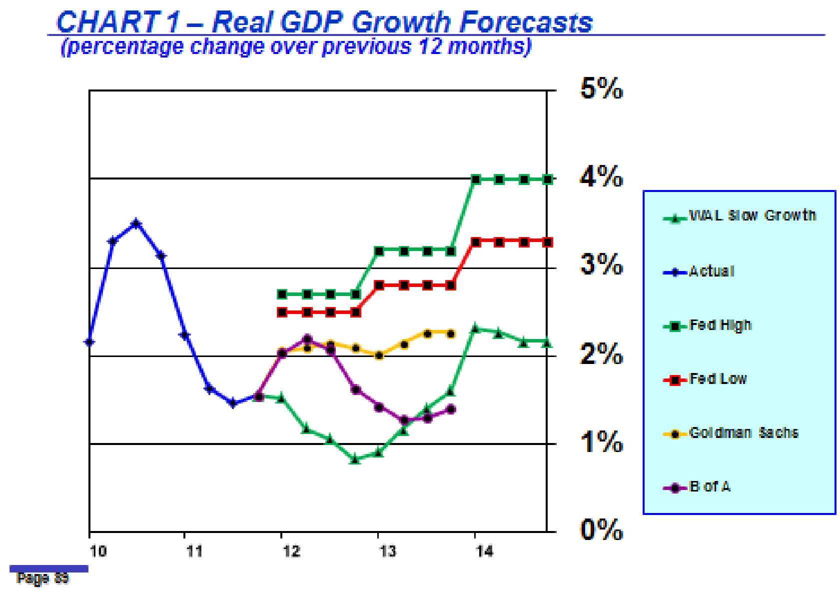
Government. Government expenditures include only direct spending on services and investment. Transfer payments are not included. Expenditures in this category have been decreasing in recent quarters with the impact roughly equally divided between state and local governments and the federal government. During all of 2011, government spending subtracted 0.45% from GDP growth. The sharp deterioration in the fourth quarter contribution to growth came primarily from a decrease in federal spending.Declining government spending seems likely to continue and will depress future GDP growth.

2. 2012 Q1 GDP Growth

Monthly data reports during the first quarter generally have been better than expected. Consumer spending appears to be holding up. Manufacturing has strengthened a little. Goldman Sachs (GS) is currently estimating a 2.2% annual rate of growth and Bank of America/Merrill Lynch (B of A) also expects 2.2% growth. The decline from fourth quarter GDP growth stems primarily from a decrease in the rate of inventory accumulation offset by a slowing in the rate of decrease in government expenditures

3. GDP Forecasts for 2012 and Beyond

Chart 1 shows several GDP forecasts — the Federal Reserve's high and



low; B of A; GS; and my "Slow Growth" scenario. At its recent meeting the Federal Open Market Committee (FOMC) reduced its GDP growth estimates slightly for 2012 and 2013, but the FOMC's forecasts remain at the optimistic end of the forecast range.

Both GS and B of A have upgraded their forecasts for the first half of 2012 modestly. The upward revisions reflect the stronger recent data flow and a more optimistic conclusion about extension of the payroll tax cut and unemployment benefits. Nonetheless, both 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 forecast for 2013.

GDP growth averages 2.1% for the next eight quarters in GS's forecast and 1.7% over the next eight quarters in B of A's forecast compared to the FOMC's median of approximately 2.7%. Both GS and B of A expect the unemployment rate to remain stuck near January's 8.3% for the next two years.

My "Slow Growth" scenario projects lower GDP growth in 2012 than the GS and B of A forecasts. The "Slow Growth" scenario is comparable to the B of A forecast in 2013. Average GDP growth over the next eight quarters for the "Slow Growth" forecast is 1.2%. My forecast is depressed by much lower expected productivity.

III. Personal Income and Outlays

GDP growth is driven primarily by growth in consumer expenditures which in turn rely on growth in personal income. Since the end of the Great Recession growth in personal income has been depressed by slow recovery in employment and hours worked and depressed nominal wage growth. Initially personal income was boosted by increases in government transfer payments and decreases in taxes. However, during 2011 transfer payments declined and taxes grew at a faster rate than income. These negative developments overwhelmed growth in employment and hours worked and would have depressed consumption had consumers not chosen to reduce saving to support existing consumption levels.

Table 2 shows the components of personal income, taxes, consumption and saving for 2011. These data are shown before inflation adjustment (nominal) and after inflation adjustment (real).

Nominal personal income increased 3.85% in 2011 compared to 5.36% in 2010. But, disposable income, what people have available to spend after paying taxes increased only 2.44% in 2011 compared to 4.86% in 2010. Thus, not only did the growth rate in total personal income decelerate in 2011, the growth rate in disposable personal income slowed even more.

These data reveal two negative trends:

- Top line income growth slowed in 2011 to 3.85% from 5.36% in 2010 in spite of a pickup in payroll employment growth from 0.8% in 2010 to 1.4% in 2011.
    - The rate of growth in wages and salaries, which account for 64% of total personal income, increased from 3.14% in 2010 to 3.44%

Table 2
2011 Third Quarter GDP Estimates
(in billions of dollars)

	Nominal	**Pct. Change**	**Real**	**Pct. Change**
Personal Income	**$484.6**	3.85%	**$142.7**	1.27%
Compensation	276.6	3.44%	62.0	0.86%
Proprietors' Income	34.0	3.14%	5.6	0.58%
Rental Income	73.8	20.80%	56.5	17.79%
Asset Income	45.6	2.62%	0.9	0.06%
Government Transfers	- 9.3	-0.40%	-60.3	-2.88%
Less: *Personal Taxes*	143.7	6.43%	75.6	3.78%
Disposable Income	**277.1**	2.44%	**-10.8**	-0.11%
Less: *Consumption*	**435.9**	4.06%	**141.0**	1.46%
Personal Saving	**158.8**	-27.00%	**151.8**	-28.82%

in 2011, which is more in line with increasing payroll employment growth.

  - Proprietors income, which accounts for 9% of total personal income, slowed from 14.02% to 3.14%.
  - Asset income, which accounts for 18% of total personal income, slowed from 6.57% to 2.62%, reflecting the lagged effect of lower interest rates.

- Government transfer payments decreased in 2011 and personal taxes rose at a faster rate (6.43%) than the growth in personal income (3.85%).
  - The discrepancy would have been even worse had payroll taxes not been cut in 2011 from 6.2% to 4.2% of qualifying wage and salary income.
  - Rising state and local taxes have offset some of the benefits of

reduced federal taxes.

Looking to 2012 and beyond the question is one of whether growth in total and disposable income will accelerate as employment growth picks up. The answer to this question is important for two reasons. First, as is clear in **Table 2**, consumption grew slightly faster than total personal income in 2011 and much faster than disposable income. This required consumers to save less. The saving rate was 3.70% in 2011 compared to 5.19% in 2010. Note that the decline in the saving rate in 2011 is approximately the same as the difference between growth in consumption (4.06%) and growth in disposable income (2.44%).

Consumers cannot continue to reduce the saving rate. Either income growth must pick up or spending growth must slow. Which of these occurs during 2012 will provide the answer to GDP and employment growth.

If disposable income growth does not accelerate and spending growth slows to at least match income growth, the incipient favorable feedback loops that appear to be developing in employment will be dampened or even interdicted. The unemployment rate would remain at the recent high level and perhaps even edge a bit higher.

However, if disposable income growth does improve on the heels of improving employment, favorable feedbacks would sustain the virtuous circle of rising employment, rising income, rising spending, rising employment and so on. This virtuous circle would have a much greater effect if consumers do not attempt to restore the saving rate to a higher level.

In reviewing the components of personal income it is difficult to discern where a substantial improvement in the growth rate will come from.

- Certain negative trends such as asset income, taxes and transfer payments still appear to be operative, but should diminish in scope with the passage of time.
- Nominal wage growth should expand a bit as employment and hours worked improves, but will be limited by negligible growth in nominal hourly wage rates, which appear to be stuck at about 2% annually.
- The other categories of income are sufficiently small so that there

would have to be significant changes in them to impact disposable income growth. That seems unlikely.

Unfortunately, the most likely outcome appears to be limited improvement in total and disposable personal income growth and the balance of risks appears weighted in the direction of somewhat slower consumption growth in 2012.

According to the Conference Board's January consumer survey only 13.8% expect their incomes to increase over the next six months, a percentage which is relatively unchanged since mid-2010. Prior to the Great Recession a typical result for this survey was close to 20.0%.

What all this means is that an analysis of data details supports a slow and gradual recovery forecast.

IV. Employment

January's employment report had an abundance of good news. In addition to the normal monthly report, which included updates on payroll employment for the two prior months, the Bureau of Labor Statistics (BLS) made two other adjustments to the data.

1. Data Revisions

First, each year when the January employment report is released, the BLS adjusts the payroll survey to include more detailed state level data for the twelve-month period ending with March of the prior year (April 2010 through March 2011) and updates the monthly seasonal adjustment factors. Historically, this adjustment has been positive, as it was this year, during economic expansions and negative during and immediately following recessions.

- Payroll employment increased 165,000 in March 2011 and 266,000 in December 2011.

Second, once every ten years, the BLS adjusts the household employment survey's population controls based on the results of the decennial census (see **Table 3**).

Table 3
Decennial Census Adjustments to Population Controls

	Jan. 2011 Old	Adjustment	% Change
Civilian Non-Institutional Population	238,704,000	1,510,000	.0.63%
Civilian Labor Force	152,536,000	258,000	0.17%
Employed	137,599,000	216,000	0.16%
Unemployed	14,937,000	42,000	0.28%
Not in the Labor Force	86,168,000	1,252,000	1.45%

All household employment measures rose. The census confirmed the recent pattern of a declining employment participation rate — those not in the labor force rose 1.45% compared to an overall increase in the civilian non-institutional population of 0.63%. This reduced the participation rate from 64.2% in January 2011 to 63.6%. Some of this decline in participation is due to demographic factors and some is due to the discouraged worker effect. The contribution of each is unclear.

The BLS makes no backward adjustments to the household data, which means the data for the last ten years prior to January 2012 is not consistent with the revised data in the January 2012 report.

2. Discouraged Workers and the Unemployment Rate

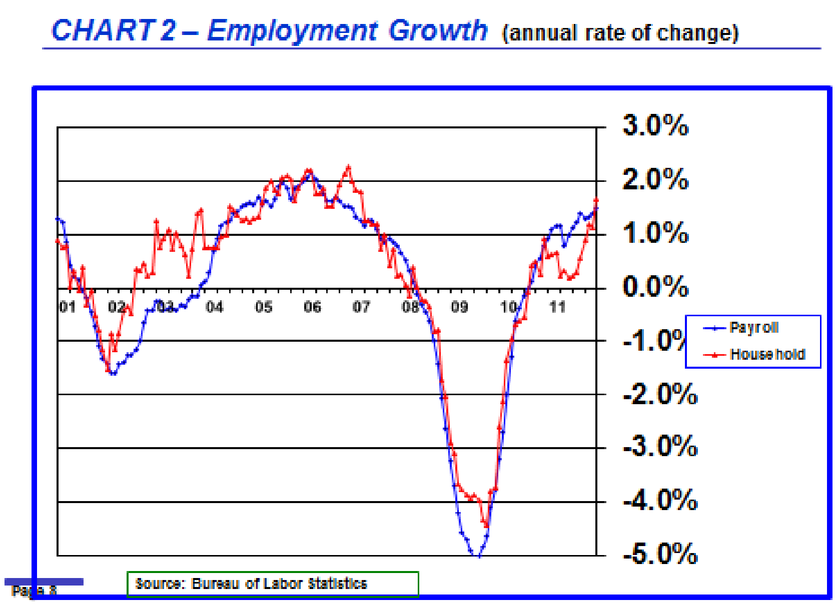
While the recent uptick in payroll employment growth appears solid, the decline in the unemployment rate over 2011 from 9.1% to 8.3% masked an ongoing exit of discouraged workers from the labor force. If the labor participation rate had held constant over the last 12 months, 426,000 more workers should have been in the labor force in January 2012. It is difficult to know whether this is a reliable number for discouraged workers because demographic factors are operating to reduce the labor participation rate. However, there is reason to believe that these downward pressures should be largely offset by typical cyclical improvements in the participation rate at this stage in the labor market cycle.

If all 426,000 were discouraged and dropped out of the labor force, the unemployment rate in January 2012 would have been 8.54% rather than the reported 8.26%.

3. Employment Growth

Employment growth and wage growth are primary determinants of consumer spending power. The good news is that payroll employment has risen 3.2 million from the low reached in February 2010. Household employment has risen a similar 3.0 million over the same period.

An uncritical examination of **Chart 2**, which shows both payroll and

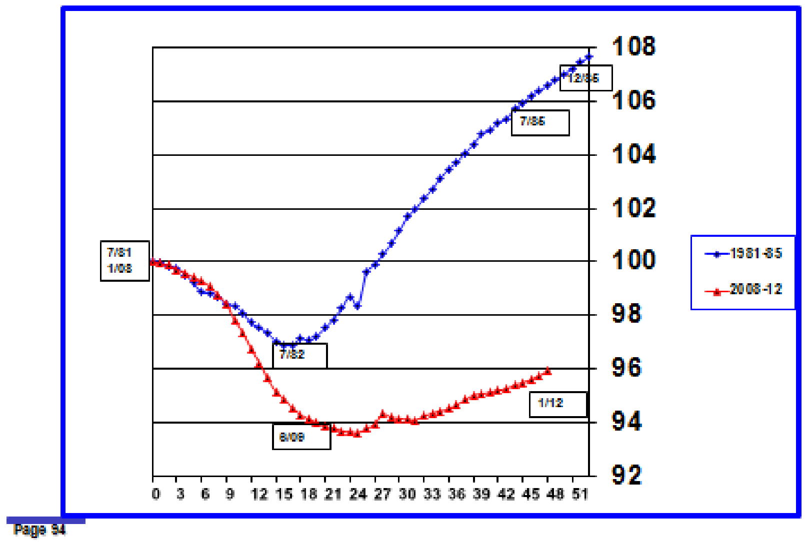


household employment growth, suggests that employment growth appears to be following a relatively typical recovery track.

But, the bad news is that payroll employment in January 2012 was

5.7 million less than peak employment of 138.0 million in January 2008. Indeed, when the level of employment is scaled to the starting month of the recession, **Chart 3** clearly shows how feeble the employment recovery

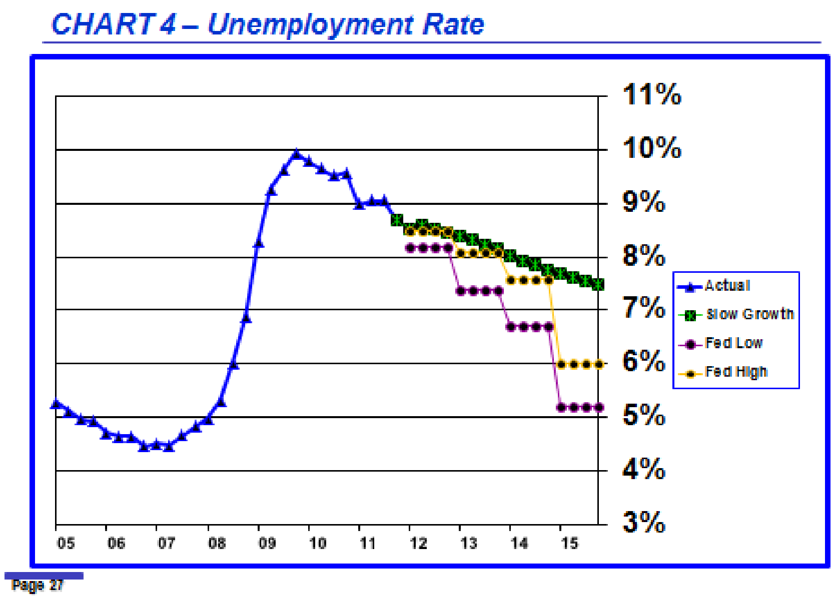
CHART 3 – Monthly Employment Growth Following 1981-82 and 2008-09 Recessions *(Index = 100: January 2008 and July 1981)*



has been. So before getting too excited about monthly employment gains averaging 200,000 over the last three months do the numbers. It would take another 28 months of similar gains simply to get back to 138.0 million. That would mean it would take 6 years just to get aggregate employment back to the pre-Great Recession peak.

4. Unemployment Rate

Chart 4 shows projections for the unemployment rate for my "Slow Growth" scenario and the FOMC's high and low projections. The high and low 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 8.3% through the end of 2013; the unemployment rate in my "Slow Growth" scenario declines to 8.1% by

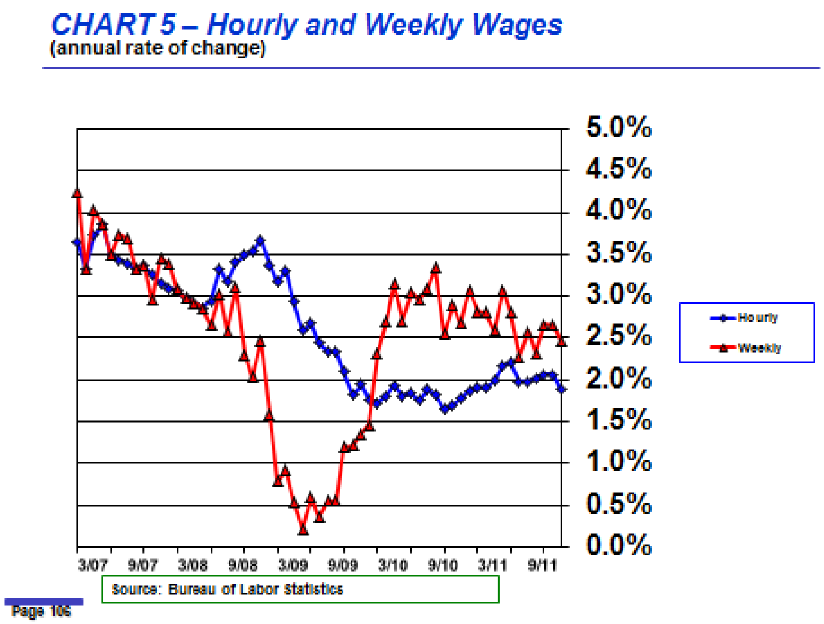


the end of 2013.

Notice in **Chart 4** that the FOMC's long-run noninflationary unemployment rate ranges between 5.2% and 6.0%. This range brackets the 5.5% unemployment rate which the Congressional Budget Office (CBO) assumes is consistent with long run full employment. CBO has raised this rate twice over the last year from 5.0% to 5.5%. However, 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. 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.

5. Growth in Wages

Weak employment translates into slow disposable income growth. This trend is exacerbated by limited improvement in wage rates and the length of the work week. **Chart 5** 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 rate of hourly wage growth was 1.88% in January. The good news is that the rate of growth has stabilized. 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.

Weekly wage growth is more volatile than hourly wage growth because it incorporates the length of the workweek. When the length of the workweek 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 implies that there is little further room for expansion of the workweek and that employers will need to hire additional workers as economic activity picks up. That is exactly what has been happening in recent months.

V. Monetary Policy

1. The Federal Reserve Is Currently in a Monitoring Mode

There is little further the Federal Reserve can do to stimulate the economy at this time. Its program to extend maturities of Treasury securities it holds is underway and will not be completed until June 2012. This action, called "Operation Twist" by some, is intended to flatten the yield curve by driving down longer term rates.

There have been hints that the FOMC might consider a third round of large scale asset purchases, which the market would quickly dub "QE III". But given the very low level of interest rates that already exists, it is hard to perceive how effective such an action would be and there is the potential for the liquidity effect to stimulate financial asset speculation rather than economic activity. This pretty much relegates the FOMC to a monitoring mode. If deflation once again threatens and/or the economy slows significantly — the two usually go together — the FOMC will probably implement QE III, but this is not likely to occur until after Operation Twist has been completed in June. The recent better performance of the economy lessens the likelihood of QE III.

2. Monetary Policy Tool Kit When Interest Rates Are Exceptionally Low

While monetary policy in the aftermath of the Great Recession appears to have been successful in preventing deflation, its ability to stimulate economic activity has been limited. Monetary policy works primarily through changes in interest rates. When the federal funds rate is near zero and the yield curve is relatively flat there is little opportunity to reduce interest rates further. In addition, monetary policy works through credit transmission channels. When the credit mechanism is impaired, as it is currently particularly for housing finance, monetary policy becomes less effective.

Monetary policy also depends on market expectations. Under Ben Bernanke's chairmanship the FOMC has moved deliberately to deploy a series of communications methods with the intent to increase the transparency of monetary policy. It is argued that increased monetary policy transparency should have two benefits. First, it should reduce market uncertainty and this should result in smaller risk/term premia. Second, communication transparency can signal the likely course of monetary policy and induce market participants to act in anticipation. Historically, there has been a long lag between changes in monetary policy and market response. Arguably, clearer communication of the course of monetary policy can shorten time lags.

So, although the interest-rate mechanism currently has limited effectiveness, the FOMC has been successful in depressing longer-term interest rates through communication and also through purchases of longer-maturity Treasury and mortgage-backed securities.

The FOMC communicated after its January 25, 2012 meeting that the federal funds rate would be maintained at exceptionally low levels until at least late 2014. Previously, the FOMC's policy extended only until mid-2013. The FOMC clearly has determined that the recovery will continue to be gradual and that it will take upwards of another three years for the economy to attain full employment.

Already this policy is having the intended effect of keeping longer term rates low and relatively stable. Prior to increased monetary policy transparency, the recent stronger economic news and building optimism would have led to a steepening of the yield curve. That has not happened.

3. Forecasts of Key Economic Measures

Table 4 shows the full range and central tendency projections for real GDP growth, unemployment rate, PCE inflation, core PCE inflation and the federal funds rate.

As promised the FOMC now includes forecasts of the federal funds rate. Market reaction to this addition was relatively limited, perhaps because the market had anticipated details. There was virtually no impact on the

Table 4
FOMC Summary of Economic Projections

	Central Tendency			
Variable	**2012**	**2013**	**2014**	**Long-Run**
Real GDP Growth	2.5 to 2.7%	2.8 to 3.2%	3.3 to 4.0%	2.3 to 2.6%
Unemployment Rate	8.2 to 8.5%	7.4 to 8.1%	6.7 to 7.6%	5.2 to 6.0%
PCE Inflation	1.4 to 1.8%	1.4 to 2.0%	1.6 to 2.0%	2.0%
Core PCE Inflation	1.5 to 1.8%	1.5 to 2.0%	1.6 to 2.0%	
Federal Funds Rate	0.0 to 0.0%	0.0 to 0.75%	0.0 to 2.5%	4.0 to 4.5%
Median	0.0%	0.0%	0.75%	4.25%

	Full Range			
Variable	**2012**	**2013**	**2014**	**Long-Run**
Real GDP Growth	2.5 to 2.7%	2.8 to 3.2%	3.3 to 4.0%	2.3 to 2.6%
Unemployment Rate	8.2 to 8.5%	7.4 to 8.1%	6.7 to 7.6%	5.2 to 6.0%
PCE Inflation	1.4 to 1.8%	1.4 to 2.0%	1.6 to 2.0%	2.0%
Core PCE Inflation	1.5 to 1.8%	1.5 to 2.0%	1.6 to 2.0%	
Federal Funds Rate	0.0 to 0.0%	0.0 to 0.75%	0.0 to 2.5%	4.0 to 4.5%

yield curve. We will have to await the passage of time to determine how these forecasts will affect market response to monetary policy in a variety of different market conditions.

4. Inflation Target

The FOMC set an explicit long-term inflation target of 2% at its January 25$^{\text{th}}$meeting. This came as no surprise because 2% has been the implicit inflation target for some time and was already the rate in the tables that the FOMC publishes quarterly. What remains to be seen is how the FOMC will adjust policy and communicate its intentions once the inflation rate threatens to exceed the target. Given the FOMC's guidance on the federal funds rate, we may have to wait for three years or longer to find out.

VI. Growing Income Inequality — A Cause of the Great Recession

We have experienced the greatest economic and financial calamity in 80 years. Initial optimism about a quick recovery to strong economic growth has given way to the stark reality that our economy is deeply troubled and will take years to heal.

This reality has now been accepted by the Federal Reserve which has acknowledged that monetary policy will need to be exceptionally accommodative for up to another three years. Announced policy is to maintain the federal funds rate at exceptionally low levels until at least late 2014. There are also hints that further quantitative easing may be in the offing, if economic performance stumbles.

1. Tea Party and Occupy Wall Street

Over the last two years we have witnessed the birthing of two spontaneous movements. While the Tea Party movement springs from antigovernment and libertarian sentiment on the right and the Occupy Wall Street movement is aligned with social justice and liberal sentiment on the left, both movements have elements in common.

Those who identify with the Tea Party are opposed to excessive state power. This manifests itself in anti-government rhetoric and opposition to any kind of tax increase. The Tea Party quickly organized itself to engage in the political process and was able to elect a substantial number of Republican Congressmen during the anti-Obama wave election of 2010.

Those who identify with Occupy Wall Street focus on the capture of the government by the financial elite. Unlike the Tea Party, Occupy Wall Street has no structured organization. It is multi-faceted and diffused and lacks all the traditional indicia of a social/political movement. Yet, it is probably best to consider it as a movement since its issues and grievances have broad appeal to many Americans.

What both movements have in common is intense anger at financial institutions which they hold responsible for the terrible economy. Both view the financial elite as primarily interested in serving its own interests to the detriment of the public at large. The subtle difference lies in the belief by Occupy Wall Street that the financial elite have gained control of the government while the Tea Party is focused more directly on opposing the political elite's accumulation of power to serve their interests to the detriment of the public at large.

Both movements agree that the government is not serving the people effectively and that change is needed. Such movements historically spring out of deep and far-reaching social and economic problems that seem to be resistant to reform through established political processes.

The Tea Party and Occupy Wall Street have made it clear that America's crisis is not simply one of recovery of the economy and the financial system. The crisis is far deeper and involves our political system and its effectiveness of governance and it also involves the evolution of America's culture and its impact on individual rights and the aggregate welfare of the collective public.

2. General Observations

Before I launch into a discussion of the economic and cultural ethos of America, I offer some general observations that will frame the discussion.

- The subject matter is complex
- There are many forces at work
- These forces interact and prompt feedbacks
- The context continues to evolve
- Many believe that "The Market" is an omnipotent, omniscient, and omnipresent regulator of human economic activity; others dispute the

efficacy of this belief[7][8]

- Beware of oversimplification — it is much more complicated than debating whether "The Market" is to blame or whether "The Market" is the answer
- It is much more complicated than simply focusing on and blaming growing income and wealth inequality for all that ails us

My intent in this section of this month's letter is to provide bits and pieces of information which I hope will help inform the nature of America's economic and cultural crisis. However, I will not attempt nor am I presumptuous enough to presume that I have answers and solutions.

3. 2012 Presidential Election

Often presidential elections have a primary theme that drives debate. In 2008 that primary theme centered on a debate on race relations. Increasingly, it looks like a dominant theme in the 2012 presidential election will be a focus on capitalism. How ruthless do Americans want capitalism to be? Debate is likely to be driven by emotions rather than facts and those on various sides of the debate will select facts to fit their point of view.

Mitt Romney recently stated his belief in a clear and unapologetic defense of the American ideals of economic freedom. President Obama wants to curb capitalism's excesses — tax the rich. Expect to hear much debate about capitalism and whether and how it should be modified or constrained as the presidential election campaign unfolds.

4. The Rights of Man and the Welfare of the Community

There has always been a tension between emphasizing individual rights versus focusing on what is collectively in the best interest of the community as

[7] Harvey Cox. "The Market as God: Living in the New Dispensation." *The Atlantic Online*. March 1999.

[8] Elizabeth Hinson-Hasty. "As Any Might Have Need: Envisioning Communities of Shared Partnership." Research presented to the World Council of Churches North American Forum and Hearings on Poverty, Wealth, and Ecology. Calgary, Canada. November 2011.

a whole.

Individual rights are embedded in the Bill of Rights of the American Constitution. They also are the driving force behind pursuit of economic freedom and social justice. It was individual rights that propelled the civil rights movement and undergird many other social movements in recent times.

Yet, a singular pursuit of individual rights risks subverting the collective well-being of the community. Few would argue that community interests are paramount when security is at stake, yet a tension persists nonetheless between the rights of the individual and the rights of the community. Similarly, unchecked individual pursuit of economic freedom and individual economic interests can foul the environment for the community at large.

Public education became a collective community mandate because people realized that there was power in collective action and all would be better off in the long run if education were broadly available.

Government exists to provide services that are in the collective interest and that maximize social welfare. But government also exists to regulate excesses that are inherent in unhindered pursuit of individual interests.

This inherent tension between individual and collective rights requires balancing. Over emphasis of individual rights tends to lead to oppression of some individuals and subgroups. Governments are intended to provide a forum for maintaining balance. But governments are subject to capture by elites who are focused on their own more narrow interests.

5. Growing Inequality in Income and Wealth Caused the 2007-09 Financial and Economic Crisis

Occupy Wall Street has helped focus attention on growing income and wealth inequality — "we are the 99%."

Two papers, one a theoretical economic analysis prepared by two International Monetary Fund economists, Michael Kumhof and Romain Ranciere,[9] and the other a white paper authored by Anant Thaker of the Boston Con-

[9] Michael Kumhof and Romain Ranciere. "Inequality, Leverage and Crises." International Monetary Fund Working Paper, November 2010.

sulting Group and Elizabeth Williamson of the Frontenac Company,[10] assert that the 2007-09 financial and economic crises was a direct outcome of income and wealth inequality that built up over 40 years.

Data. Kumhof and Ranciere provide time series data for the share of income received by the top 5%.

These data indicate the following for share of income earned by the top 5%:

- 1920 — 24%
- 1929 — 34%
- 1983 — 22%
- 2007 — 34%

During the same two periods (1920 to 1932 and 1983 to 2007) Kumhof and Ranciere found that the ratio of household debt to GDP nearly doubled in the earlier period and more than doubled in the latter period and reached a higher level in 2007 than in 1932.

Thaker and Williamson report share of income data for the top 1%, which was originally compiled by Piketty and Saez, but updated by Thaker and Williamson:[11]

- 1920 — 16%
- 1929 — 24%
- 1968 — 8%
- 2007 — 24%

[10] Anant A. Thaker and Elizabeth C. Williamson. “Unequal and Unstable: The Relationship Between Inequality and Financial Crises.” New America Foundation. January 2012.

[11] T. Piketty and E. Saez. Income Inequality in the United States, 1913-1998.” *Quarterly Journal of Economics*, 118(1), 2003, pp. 1-23, with updated data to 2008: U.S. Census Bureau; U.S. Federal Reserve Flow of Funds; National Bureau of Economic Research.

Piketty and Saez use two different data series to track the debt to GDP ratio. The earlier series is individual and non-corporate private debt to GDP and the recent series is the more common ratio of household debt to GDP:

- 1920 — 60% (individual and non-corporate private debt to GDP)
- 1932 — 95% (individual and non-corporate private debt to GDP)
- 1968 — 60% (individual and non-corporate private debt to GDP)
- 1968 — 40% (household debt to GDP)
- 2007 — 95% (household debt to GDP)

The pattern in both measures in the years preceding crisis is clear and eerily similar.

Mechanism through Which Growing Income Inequality Leads to Financial Crisis. The triggering event is a shift in relative income bargaining power in favor of the top 5% relative to the bottom 95%. This initial shift in bargaining power sets in motion a series of events that takes decades to develop.

First, as the share of income of the bottom 95% shrinks that group attempts to maintain consumption through borrowing. Second, as the top 5% gains income, and thus wealth, that group needs to find ways to invest its accumulating wealth. Accordingly, it provides the funds that the bottom 95% borrows.

Borrowing is enabled by financial innovation, such as subprime mortgages and home equity loans in recent times. All of this activity facilitates tremendous growth in the financial sector of the economy.

As the financial sector grows relative to the rest of the economy its political power grows as well. This leads to adoption of policies that promote and protect the interests of the financial elite, which in turn tends to reinforce the building inequality. One can place deregulation, reduced capital requirements and other “free market” elements into this basket.

Financial crisis eventually erupts because there is an ultimate limit to how much debt households can support. Increases in debt and decreases in savings reduce a household's ability to manage through a life crisis — illness, loss of job, divorce and so forth.

Sum this increase in financial vulnerability across millions of households and in the aggregate the economy's ability to withstand a shock, such as a sudden and sharp increase in oil prices, steadily erodes. Also, as we now know, runaway speculation in housing propelled a bubble in prices which was aided and abetted by abundant and cheap debt, steadily diminishing credit underwriting standards, and a laissez-faire attitude on the part of government regulators perhaps swayed by the belief in "The Market" as an efficient regulator or perhaps inhibited by the political power of the financial elite.

And, as I have opined frequently, the greater are the excesses during the bubble period, the harder will be the crash when it eventually unfolds. The same is true for income inequality. As income inequality escalates, the macro economy becomes increasingly fragile. The crash, when it finally arrives, is horrific and the convalescence period is painful and extended.

Does any of this sound familiar with recent experience?

IMF Theoretical Economic Model. Kumhof and Ranciere constructed a simple theoretical model which describes almost exactly the sequence of events described above. The benefit of a simple model, which describes real world phenomena well, is that it can be used to test how events might continue to unfold given different policy interventions.

Kumhof and Ranciere's simple model consists of two groups of households — investors who comprise the top 5% of the population and workers who comprise the remaining 95%. Investors derive utility from consumption and wealth. Workers derive utility only from consumption. In addition to the utility functions for investors and workers, the model includes an aggregate production function for the economy in which returns to factors of production incorporate a variable for workers' bargaining power. Capital and loans are also included in the model.

A change in relative bargaining power is introduced to the model and imbalances build over successive iterations. A crisis event can be introduced to the model at any iteration.

The performance of the model can be tested through simulated scenarios.

Policy Reponses to Crisis. Once the crisis unfolds, the impact of policy responses can be tested. There are two types of solutions.

One solution is to restructure debt by moving it from creditors to taxpayers — the socialization of debt. This is what Ireland did with its banks. This solution also is being applied in part to the Greek sovereign debt problem and more generally is the approach in principle that the European Financial Stability Facility and European Stabilization Mechanism incorporate. The model reveals that this solution buys time but ultimately is relatively ineffective in curing the problem of overleverage because individuals, not directly but as taxpayers, ultimately are still saddled with excessive debt.

An alternative solution is to grow out of the problem. This involves increasing economic growth so that the debt burden, which remains unchanged in nominal terms, shrinks in relative terms as income increases. The challenge, of course, is to devise a policy that stimulates growth without creating additional leverage.

Austerity, which focuses on reducing debt, is a counterproductive policy because it results in depressing income and in so doing increases the burden of debt relative to income. This wrongheaded policy is driving the collapse in the Greek economy and will damage other European economies in coming months.

Kumhof and Ranciere use the model to demonstrate that the only way to grow earnings of workers successfully over time and reduce the debt burden is to restore the original income bargaining power balance. This solution results gradually over time in a reversal of income inequality. But, it takes a very long time to unfold.

There is a third solution, of course, and that is to tinker a bit with policy but do little of substance. So far, the U.S. response has been on the side a socialization of debt and that has shifted the debt problem from households to taxpayers. But, what is the real difference between households and taxpayers?

However, debt restructuring of residential real estate has been limited in scope. Homeowners have been left largely to fend with their own resources, which has resulted in a great deal of pain and anguish and numerous foreclosures with extended negative impacts on other homeowners and neighborhoods as housing prices fall.

Without income growth overleverage and the accumulated debt burden will be an ongoing drag on economic recovery. It will take a very long time to return to a more normal economic environment and unresolved income inequality will remain an ever present threat both to the economy and to social/political stability.

Reducing Income Inequality Is the Only Effective Long-Term Solution. If one accepts Kumhof and Ranciere's model at face value, the only effective long-term solution is to alter relative income bargaining power between investors and workers. Over time the distribution of income will shift back toward workers and debt burdens will shrink. That is what the model shows and that is what happened between 1932 and 1968.

But powerful forces stand in the way of implementing such a solution. First and foremost is the absence of a political consensus that purposeful intervention is required to alter the balance of income bargaining power between workers and investors. Part and parcel to this is the entrenchment of vested interests (economists call them rent seekers) in the status quo which have nothing to gain personally by permitting a change in relative bargaining power. These vested interests generally are the same people that Kumhof and Ranciere define as investors. Their entrenchment is supported by U.S. political campaign financing, which was exacerbated by the Supreme Court's decision permitting individuals to establish "super PACs." It is hard to alter or break entrenched power alliances between the political and financial elite.

There are other obstacles which may be subject even less to successful intervention. An example is competition in a globally-integrated communications and technology era which has rendered geographic and political boundaries meaningless. How does America grow income when competitive pressures from other countries constantly limit the ability of workers to negotiate?

What Prompted the Shift in Relative Bargaining Power Between Workers and Investors Beginning in 1968? There were many contributing factors but no apparent single catalyst:

- Shift from a manufacturing-based to a service-based economy led to greater impact of individual rights
- Decline in union membership, which followed from the shift toward a service-based economy, altered John Kenneth Galbraith's principle

of "countervailing power" in which big labor, big business and big government struck a balance of power

- Rise of the BRICs (Brazil, Russia, India and China) and rapid expansion of global competition
- Explosion of communications technology which reduced the importance of geographic boundaries in constraining economic activity
- Financial liberalization as statutory and regulatory limits to competition were modified or discarded
- Rise in belief in "The Market" as an effective and efficient regulator of financial and economic activity

All but the last two causes probably are irreversible. Going forward it is not clear to me exactly what political and policy changes would restore relative income bargaining power between workers and investors. But the status quo and benign neglect are clearly not answers.

6. Neo-Classical Economic Theory and the Rise of Financial Economics

Neo-Classical Economic Theory. Neo-classical economic theory was developed in the late 1800s and early 1900s. It is based on the theory of perfect competition, which results in the maximization of aggregate economic welfare. The theory is based on simplifying assumptions of human behavior that describe in broad general and ideal terms behaviors of participants in the economy.

Neo-classical economists understood that the real world is far more complex than the world assumed under the tenets of perfect competition. They realized that the actions of individuals do not adhere strictly to the simplifying assumptions. Nonetheless, the theory of perfect competition is a useful construct for understanding how an economy functions. By comparing the idealized assumptions to actual behaviors, economists and policymakers can better understand how to govern the economy to maximize aggregate public welfare, given the inherent self-interested and sometimes irrational behaviors of individuals.

Rise of Financial Economics. Modern finance had its genesis in the 1950s. The defining event was Harry Markowitz's doctoral dissertation on portfolio theory. Development of modern financial theory proceeded rapidly during the 1960s and 1970s and keyed off of the neo-classical theory of perfect competition.

Assumptions of the Financial Economics Theory.

1. All participants are rational
2. All participant have access to all information
3. All participant share the same decision-making framework for using information to make decisions
4. The decision-making framework is accurate and complete

All of these assumptions are oversimplifications of observed real world behaviors. The fourth assumption, if accepted uncritically, is especially problematic. What the term "accurate and complete" means is that the decision-making framework is stable and does not change over time. But that assumption is patently inconsistent with the rapid development of new technologies and the constantly evolving structure of the global economy and financial markets.

Financial economics theory posits that if all of these assumptions hold (which they do not), the collection of all individual decisions, which is "The Market," will assure optimal outcomes both for individuals and the community as a whole. Thus, any form of intervention will lead to a suboptimal outcome.

Operationalization of Financial Economics Theory. Had financial economists been content to stay in the world of theory as had neo-classical economists financial economics theory would have remained a useful device for understanding the imperfect working of financial markets.

However, the theory, which assumes that financial events (phenomena) are random and normally distributed — both simplifying theoretical assumptions — was operationalized through the development of market-traded financial instruments. The assumptions of randomness and normal distribution are a simplification of the fourth assumption that the decision-making framework is stable over time.

The famous Black-Scholes option-pricing model embedded the assumptions of randomness and normal distribution. This model was relied upon to develop pricing methodologies for a plethora of financial derivatives using historical data. The historical data were presumed to be normally distributed and to be stable over time. In other words, the pricing algorithms assumed that future price variability could be defined by and explained by past price variability.

These pricing models appeared to work well over a variety of market circumstances. As a consequence, the mathematical elegance of the model and the apparent accuracy of how it explained financial market behaviors strengthened the political movement toward deregulation and embracement of "The Market" as an effective and efficient market governance mechanism.

Failure of the Theory of Financial Economics. But, people lost sight of the reality that financial phenomena are neither random nor normally distributed. They lost sight of the reality that the model is not stable but ever changing as technological innovation and global competitiveness has evolved.

The macroeconomic consequences of growing income/wealth inequality had no place in the theory of financial economics.

Myopia and faith in the efficacy of micro financial theory blinded people to the building macroeconomic fragility.

There were warnings along the way that the assumptions underlying the construction and pricing of financial derivatives were deeply flawed. The collapse of Long Term Credit Capital, a mathematically-based arbitrage operation, in 1998 exposed the limitations of the assumption of normally distributed events. The reality was that the distribution had large fat tails in times of extreme duress. This hardly was a startling revelation. The centuries-long history of booms and busts and of speculation indicates that extreme events and fat tails are a natural occurrence in human existence.

Yet, the elegance of the theory and its operationalization led to uncritical belief in its efficacy. As financial markets embraced the theory and developed lucrative financial instruments based on it, self-interest entrenched commitment to its tenets and led to the capture of government policy and regulatory processes.

Thus, in this way modern finance theory contributed to rising income inequality and was a significant contributor to the escalation of unchecked market euphoria during the bubble years.

Perhaps disturbingly, in spite of the failure of the application of modern finance theory in recent years in governing market processes, the pricing of financial derivatives continues to be based on the simplified theory. Moreover, the beliefs, vested interests and political influence of the financial elite remain relatively unchanged.

It is in this vein that a debate about the future of capitalism is just beginning to emerge. The risk is that the debate will not develop into a substantive and critical evaluation of the causes of income inequality and the shortcomings of the application of simplified financial theory to the operation of financial markets. Without such an in depth assessment solutions, which have broad-based consensus, will not emerge. We have already witnessed the consequences of the current paradigm. So, clearly the status quo is not an optimal outcome. Indeed, adherence to the status quo could either lead eventually to social unrest and political reform under duress or alternatively it could foster the gradual decline in America's economic, financial and political ascendancy.

VII. Evolution of American Culture

There are other forces at work besides those which have impacted income and wealth inequality and the functioning of financial markets that are affecting America's culture. Cultural changes are also important drivers and regulators of individual and community well-being.

Even if we found solutions to the economic and financial causes of income and wealth inequality and were able to put the economy on a course to resolve the current economic imbalances and inequities, cultural change might limit or even block success.

Culture is shaped by many factors. Economic phenomena and financial markets are important influencers, but they are not the only important drivers of culture.

1. "The American Way of Life"

We used to hear and believe in "The American Way of Life" and "The American Dream." Nowadays we hear less about these aspirations. Why has that occurred? Perhaps it is because, unlike times past, these aspirations no longer seem to be true for a large portion of America's population.

But what did the concept of "The American Way of Life" embody? According to Charles Murray, it involved a civic culture that swept an extremely large portion of Americans of all classes into its embrace.[12] This civic culture muted the importance of differences in income and wealth inequality. Even though there were broad income and wealth differences we believed that an extremely broad middle-class dominated American life and that this was a good thing.

2. Hollowing Out of the Middle Class

Murray asserts in his book that a new upper class and a new lower class are evolving, which in effect is hollowing out the old broad-based middle class.

Key attributes of members of the new upper class include:

- College bachelor or advanced degrees
- Shared tastes and preferences that set members apart from mainstream America
- Live increasingly in geographically separate markets (super-zips)

Key attributes of members of the new lower class include:

- High School education or less

[12] Charles Murray. Coming Apart: The State of White America, 1960-2010. Crown Forum, 2012.

- Defining cultural characteristic is withdrawal from America's traditional core cultural institutions such as fraternal societies and churches
- Poverty (income) is not a key defining characteristic

3. Murray's Data Analysis

Murray compares key data for white-only members of the new upper and lower classes as he has defined them. The focus on whites only is intended to eliminate confusion and debate about the effects of race and ethnicity on changes in the data over time. Specifically, Murray compares data for 1960 to data for 2010 where ever possible for white males between the ages of 30 and 49. He intentionally omits consideration of income differences.

As Murray defines it, the new upper class (college degrees) embraces 20% of white males between the ages of 30 and 49 and the new lower class (high school degree or less) includes 30% of white males between the ages of 30 and 49. The remaining 50% are in the middle class and have some education beyond high school.

Marriage

	Upper Class	Lower Class
• 1960	94%	84%
• 2010	83%	48%

The sharp decline in marriage among members of the lower class is a significant negative cultural development. Unattached males tend to be less responsible. Revealing perhaps his personal biases, Murray argues that unattached males are less industrious.

Single-Parent Births

	Upper Class	Lower Class
• 1970	1%	6%
• 2010	6%	44%

Incidence of Criminal Behavior

- Upper Class: no change in incidence
- Lower Class: incidence has risen 4.7 times but has declined in recent years

Religiosity (defined in reverse as secular orientation)

	Upper Class	Lower Class
• 1972-76	29%	38%
• 2010	40%	59%

According to Murray the importance of religiosity is in involvement in community-based social value creation initiatives. Thus, a decline in religiosity, particularly among members of the lower class, reflects an increasingly shift toward focus on self rather than on community. Religiosity is important because historically about half of American philanthropy and community volunteerism has been church related. Furthermore, religious organizations account for much more non-religious social capital creation than that which flows from Americans with a secular-only orientation.

4. Causes of Cultural Inequality

Based on his assessment of data trends, Murray believes that significant cultural inequality has evolved in America. Further, he believes that resolving income and wealth inequality issues will not by itself cure the deleterious impacts of cultural inequality.

Great Society and Substitution of the State for Non-Government Organizations. Murray speculates about why the new upper and lower classes emerged and permitted cultural inequality to assume such a significant and negative role. One source was the social reforms of the 1960s embodied in Lyndon Johnson's Great Society. The broadening of the social safety net and expansion of social welfare programs made it more feasible to have a child out of wedlock. The responsibility of the individual male to care for the child shifted to the state. There is ample evidence that children of single parents are less successful and create a variety of criminal and non-criminal societal costs much greater than occurs for children of dual-parent households.

In addition, the state increasingly deals with social problems which churches, fraternal organizations and community organizations used to deal with. It can be argued that while the delivery of programs by the state from a process standpoint is more comprehensive and fairer, this gain is more than offset by the loss of flexibility and human empathy that typically accompanies delivery of social services through non-governmental organizations.

Tilting the Balance from Community to Individual Rights. For all the evils that the civil rights movement addressed in the 1960s and 1970s, it did result in strengthening the emphasis on individual rights. While not challenging the importance of this development, it is reasonable to question whether balance has been maintained between individual rights and overall community welfare.

Technology. Technological innovation has increased the returns to education and may be contributing unintentionally to the separation between the new upper and lower classes.

Shift from a Manufacturing to a Services-Focused Economy. Services focus less on groups and more on individuals. Developments in the workplace may in unintended ways be diminishing the strength of non-work place organizations. In so doing, the shift toward services may be reinforcing the shift toward individual rights and away from community.

Internet and Social Networks. At first glance the internet is a powerful vehicle for individual expression. However, social networks, such as Facebook, may be in the early stages of creating the infrastructure for a new set of non-governmental organizations. However, a further question is one of whether the evolution of social networks will reverse of simply reinforce growing cultural inequality.

5. Consequences of Cultural Inequality

Emerging cultural inequality is defined by a breakdown in the old social norms which governed behaviors deleterious to overall community welfare. According to Murray, the old social norms began to unravel as government programs diminished the importance of non-governmental organizations. And the weakening of these institutions led to a weakening in the role of these institutions as enforcers of the social norms. Feedback loops kicked in and the decline in non-governmental organizations and the breakdown in social norms evolved over time and the negative consequences of growing cultural inequality grew.

6. What Is To Be Done?

Murray's analysis is already under attack, particularly from those of more liberal persuasion. His data, flawed as they may be, still point out substantive changes in America's culture which are troublesome. Murray is better at providing analysis than he is at providing solutions.

The value of Murray's book is that it challenges the prevailing view that increasing income inequality is the source of what ails America and all we need do is find solutions to reverse income inequality. Murray correctly argues that the challenges America faces go beyond pure economic considerations and include cultural phenomena, social norms, and societal values as well. In short, we need to rethink not just the role of capitalism in our economy and society, we also need to rethink the balance between individual rights and community welfare and the roles of government and non-governmental organizations.

VIII. Significant Risks

In the ***December Longbrake Letter*** I described in detail significant risks which, if realized, would depress U.S. economic growth and might even lead to recession. These risks include: significant slowing in Chinese economic growth; European recession and attendant sovereign debt and financial system distress; tighter U.S. fiscal policy and negative impacts of increased policy uncertainty; and further decline in residential home prices.

Notwithstanding recent stronger data reports and increasing optimism all of these risks remain in play. At this juncture these risks appear a little less threatening than they did in December. But, given the fragility of the U.S. economy, it would not take much to change this apparent improvement. An update follows.

1. China

Imbalances in the Chinese economy continue to grow. An increasing share of Chinese GDP comes from investment in infrastructure. And a massive property bubble appears to be unwinding. The question is whether the necessary transition will be managed and orderly or whether it will be disorderly and disruptive. What we know from past experience is that the longer these imbalances continue to build, the greater will be the correction whenever it eventually occurs. But China's day of reckoning is not likely to happen in 2012. And, there is evidence that China is in the early stages of attempting to manage an orderly transition. But an ugly outcome in Europe could change all of this and precipitate a Chinese correction. China's economy is very dependent on the health of global trade. In this regard the improvement in Europe's near-term outlook is a welcome development.

Recent economic news from China is mixed. On the positive side reported inflation is declining and monetary policy has become moderately accommodative.

But, on the negative side there is some evidence that growth may be slowing more than anticipated. It is hard to know for sure, but those on the ground in China remain more optimistic than those not engaged in day to day Chinese economic activity.

These developments are more indicative of slowing global growth than they are of an investment top-heavy Chinese economy poised for significant setback. While an eventual correction of China's economic imbalances and financial excesses is probable, the timing appears to be a long ways off.

2. Europe

ECB's LTRO It is now apparent that the European Central Bank's (ECB) introduction of the Long-Term Refinancing Operation (LTRO) has been enormously successful in preventing the potential for European sovereign debt problems to ignite financial contagion and cause bank runs and insolvency. The LTRO provides any member financial institution with unlimited 3-year terms funds at an interest rate of 1%. Actually, the ECB requires LTRO loans to be collateralized, but collateral requirements have been liberalized substantially. There is no apparent indication that collateral availability will be an issue. This program effectively ring-fences European banks and practically eliminates the potential for negative feedbacks between sovereign debt difficulties and bank liquidity to take hold.

LTRO has resulted in a lessening, but not to an elimination of financial stress. LTRO is replacing bank financing that is no longer available from other sources. Thus, liquidity issues have been addressed and are probably off the table as a concern for a long time to come.

However, European banks are still required to reach increased capital levels by the end of June. This has led to deleveraging of balance sheets and more restrictive underwriting and diminished lending. U.S. banks have also tightened lending to companies with European operations. This tightening in financial conditions is likely to be ongoing and will adversely impact European economic growth in 2012.

Thus, Europe is already in the grip of a severe credit crunch, several countries are already in recession and indicators strongly imply that growth in the stronger nations will slow appreciably and perhaps even morph into recession. In short, the damage has already been done and will become increasingly evident as 2012 unfolds.

With as much as a two to three quarter lag the consequences of European recession will spill over to the rest of the world through trade and financial linkages. Those potential consequences, because of the ECB's LTRO, appear to have lessened.

Greece The Greek economy is now in free fall. Since the onset of the crisis two years ago Greek industrial production has declined 25%, the money supply has fallen 30% as depositors move their euros to non-Greek banks, and unemployment has risen above 20%.

On March 20, 2012 Greece must refinance a substantial portion of its debt. The Greek parliament has just agreed to severe austerity requirements that the troika of the European Union, the European Commission and the International Monetary Fund have demanded as a condition of advancing funding.

Greece is in the final stages of negotiating a voluntary debt exchange agreement which will reduce the present value of debt held by private investors by approximately 70%.

Yet, even with all of this the situation in Greece is untenable and eventual exit from the euro and the European Union is probably inevitable. The reason is that the Greek economy is simply uncompetitive. No amount of austerity will cure this problem. 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.

Increasingly, it appears that unstated European Union policy is to let or even encourage Greece to exit the euro. However, the time is not yet right to pull the trigger. The risk all along has been that a disorderly default by Greece would spread contagion and threaten the survival of the euro. The ECB's LTRO program ring-fences the banks. When the European Stability Mechanism (ESM) is operational later this year, it should have sufficient fire power along with increased IMF financial resources to ring-fence other sovereign nations — particularly Italy and Spain. Portugal may still be a casualty.

In addition the terms of the next injection of funds for Greece provide for an escrow arrangement which means that non-Greeks will control disbursement of the funds. This will assure that the funds are not diverted to other uses and that they go to repaying investors, which include European banks.

Once all of this is in place, Greek default will no longer pose contagion risk and surgical removal of Greece from the European Union and the euro becomes feasible and probably desirable.

European Recession Unfolding. Consensus thinking is that Europe will encounter a brief shallow recession during the first half of 2012. This might be a reasonable expectation if governments were already engaging in fiscal stimulus, but exactly the opposite is occurring. For example, Spain reported that its deficit was 8% of GDP in 2011, which was 2% above its target. The Spanish government responded to this miss by taking additional measures to reduce the deficit.

Recent data reports indicate that recession is probably already underway. Germany reported that real GDP grew 3.0% in 2011, but contracted at an annual rate of approximately 0.9% in the fourth quarter.

Credit conditions remain tight and this is slowly but surely strangling spending and investment. One must understand that once a course of events is set in motion, such as a credit crunch, it reverberates throughout an economy and gathers momentum for a period of time through feedback loops. Eventually, but not always, a negative shock and its ramifications will exhaust themselves, but not before considerable damage occurs. The risk in Europe is that as recession unfolds and gathers momentum feedbacks contribute to a steadily deteriorating situation such that a financial crisis takes hold. For the time being, the actions of the ECB and the handling of Greece's sovereign debt situation appear to have lessened the risks.

3. U.S. Fiscal Policy

Most expect Congress to extend the payroll tax cut and unemployment benefits when they expire at the end of February for the remainder of 2012. Both parties agree this should be done but there is no agreement for how to pay for the cost. Thus, while unlikely, it is possible that these benefits will not be extended. If that were to occur it would have a direct negative effect of decreasing consumer spending power and it would have the indirect consequence of depressing consumer confidence. A stalemate is unlikely because it is an election year and though each party wants to score points with the electorate neither wants to be blamed for impasse.

Thus, fiscal policy will probably not pose a meaningful risk until toward the end of 2012. Fiscal policy is set to tighten by as much as $586 billion or 3.5% of GDP on January 1, 2013:

- $109 billion in spending cuts mandated by the sequestration provision of the Budget Control Act;

- $255 billion from the expiration of the Bush tax cuts;
- $21 billion in Medicare tax increases mandated by the Obama health care legislation;
- $112 billion from the expiration of the payroll tax reduction, assuming Congress renews a 2% reduction in 2012;
- $51 billion from the expiration of extended unemployment benefits, and
- $38 billion from the alternative minimum tax temporary fix.

The estimate of $586 billion is high because some offsets will accompany extension to the payroll tax cut and unemployment benefits.

There are three general categories of outcomes:

- **Do nothing**. Worst case — Congress and the president reach a complete impasse and all tax increases and spending cuts go into effect as scheduled. Negative impact on GDP of 3% in 2013.
- **Extend everything**. Almost as bad and perhaps worse in the long run — All tax cuts are extended and the spending sequester is repealed. No long-term deficit reduction plan is adopted. While this would maintain plenty of economic stimuli, rating agencies would downgrade U.S. debt. Financial markets could riot.
- **Grand Bargain** — Congress and the president agree to a short-term/long-term deficit reduction plan similar to that proposed by the Simpson/Bowles Commission.

Financial markets would prefer a "Grand Bargain" outcome but will worry about some of the short-run consequences for economic activity if deficit cutting kicks in too quickly.

As the year progresses anxiety will build. Because it is a presidential election year and because the parties have staked out extremely divergent positions and have locked into inflexible hardline positions it is difficult to see how there can be much certainty about how this whole mess might be resolved. The election might clear the air or it might not if the outcome leaves neither party with a strong mandate. Unfortunately, the dysfunctional partisan antics of 2011 are fresh in everyone's memory. This and ongoing politically heated rhetoric will only serve to fuel anxiety. Uncertainty is not the friend of growth.

For now the risk of a fiscal disaster in 2013 is far away and there is plenty of hope that reason will prevail. But in several months' time this sanguine attitude will deteriorate if sincere dialogue about meaningful and shared solutions has not commenced in earnest.

4. Residential Housing

Housing prices are likely to decline in 2012 because of acceleration in the disposition of foreclosed homes. Most forecasters expect prices declines to be moderate in a range of 2% to 5%. The risk is that the decline in home prices will be much greater than expected. That could occur if the economy slows more than expected and unemployment increases. The probability that this risk materializes on its own accord is low, but if other negative economic shocks occur, they could lead to a much worse decline in housing prices and that, in turn, would negatively impact sentiment and consumer spending, setting in motion a series of negative feedbacks that would reinforce downward momentum. If such risks materialize, some U.S. financial institutions would incur additional financial losses and solvency issues could reemerge. Multiple pending mortgage litigation lawsuits already pose the potential for much greater losses than market participants currently expect and, needless to say, a greater than expected decline in housing prices would only serve to exacerbate that risk.

Several existing federal housing programs, such as the Home Affordable Mortgage Program intended to help distressed borrowers restructure their home loans and the Home Affordable Refinance Program intended to enable "underwater" borrowers refinance their loans at lower interest rates, have been expended. Other new programs are in various stages of development such as selling foreclosed homes in bulk to investors for rental purposes. The intent of such a program is to diminish the depressing effect of a flood of foreclosed homes on prices.

While none of these programs is likely to have a very material impact, collectively each may do a little good so that the extent of the residential housing problem gradually diminishes. The passage of time is already at work in slowly healing the housing market. Vacancies are declining and prices have already fallen to levels that are more than competitive with rental housing. Pent up demand exists but fear of further home price declines and difficulty in obtaining mortgage credit is keeping this latent demand on the sidelines.

Multifamily construction is strengthening and residential construction appears to have bottomed. While the worst is clearly behind us, the situation remains fragile and is vulnerable to negative shocks. That is to say that the housing market is no longer a primary source of risk but it definitely could accentuate the consequences of a risk that materializes from some other source.

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