



Outlook - Second Quarter 2010

The economy is in a “soft” and “fragile” condition relative to more normal performance in a recovery. GDP grew at a real rate of 2.4% in the second quarter, according to the advanced estimate of the Bureau of Economic Analysis. There is a good chance that second quarter growth will be revised downward closer to 2% when the full impact of international trade is recorded. GDP growth at less than 5% is low for the early stages of a recovery. Even with the upward revision of first quarter real GDP growth to 3.7% the first phase of this recovery is not typical. Unemployment remains at 9.5% with little chance for lower unemployment rates anytime soon. Normal growth in the supply of labor plus increased labor productivity tend to be about 2% to 2.5% annually, meaning that the economy must grow at an annual rate of 2% to 2.5% just to keep unemployment at the current level. For example, the 2.4% real GDP growth in the second quarter did not move the 9.5% unemployment rate. The levels of GDP growth in this recovery are far from sufficient to bring unemployment back to the 4% to 5% targets.

Interest rates are at historic lows but expectations for rising interest rates are on hold due to the economy’s poor performance. Inflation pressures remain very low due to insufficient demand and excess capacity. Since the consumer sector makes up about 70% of GDP, a fundamental resurgence in consumer spending is critical to a more rapid recovery. Consumers are servicing high debt loads and paying off debt balances rather than buying goods and services. Poor job prospects, reduced wealth due to lower real estate and stock values, insufficient and uncertain retirement income, and overall pessimism are key factors behind lower consumer spending and these factors are not likely to improve soon.

Risks are weighted to the downside. Debt levels relative to the ability to pay off debt are excessive and the economy is vulnerable to global shocks such as a new debt crisis in Europe, trouble in the Middle East, or oil shocks. With fiscal stimulus running out later this year and an end to inventory growth, the economy is likely to grow in the 2% to 3% range at best in the second half of 2010. There are no indications of inflation any time soon. With the unemployment rate heading back to 10% and slack prevalent throughout the economy, it is very difficult for firms to raise prices. The Federal Reserve is unlikely to make any move to higher interest rates with low inflation and a weak economy. An increased attention to the size of government debt and the growth of the deficit will make it difficult to put a second stimulus in place.

Monetary and Fiscal Policies may Have Hit their Limits for Now

Monetary policy is standing pat with a Fed Funds rate of zero along with ample liquidity for banks. Expansion of bank deposits into loans and spending has been much less than expected. Traditional approaches to stimulating the economy may have reached their limits. Monetary policy expanded the monetary base to unprecedented levels in response to the recession (see



Chart I) but further expansion of bank reserves through loans and spending is beyond the Fed's control. Fed policy is much more effective in cooling off the economy than it is in stimulating the economy. The money multiplier is low as the velocity of money is collapsing under the weight of consumer efforts to retrench spending and reduce debt (Chart II). Consider the basic identity below:

$$(\text{Money Supply}) \times (\text{Velocity}) = (\text{Price Index}) \times (\text{Quantity of Goods Produced}) = \text{GDP}$$

Chart 1 shows how expansive the Fed has been in expanding the monetary base during the recent recession and Chart 2 illustrates how the velocity of money has crashed over the same period. These offsetting movements leave little real stimulus to GDP.

Chart I. Monetary Base (M1) – Expansion since the Start of the Recession

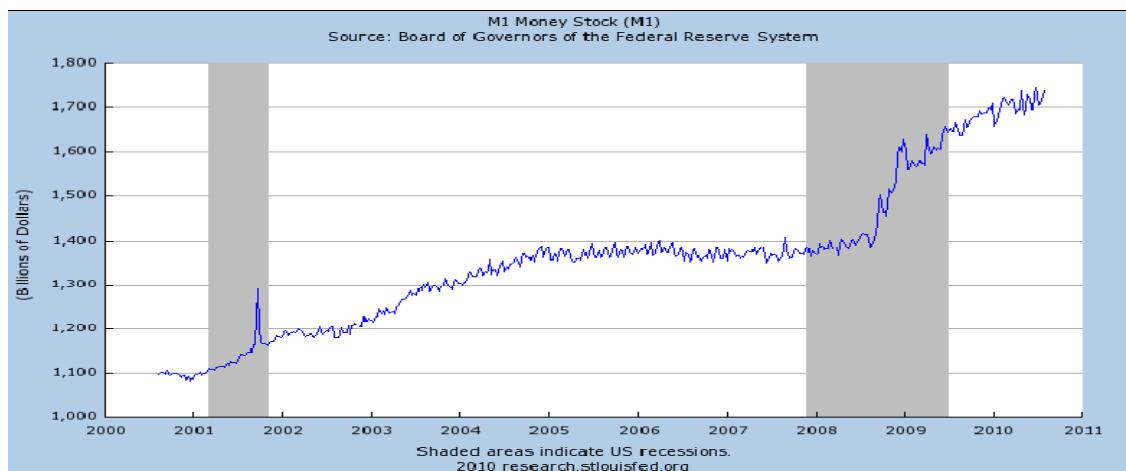
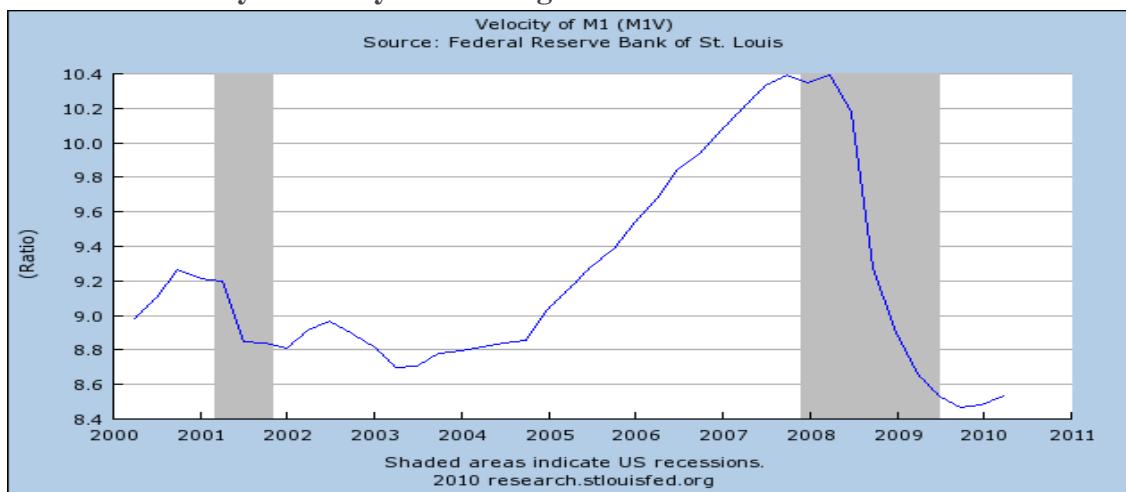


Chart II. Velocity of Money – Declining Pattern since the Start of the Recession

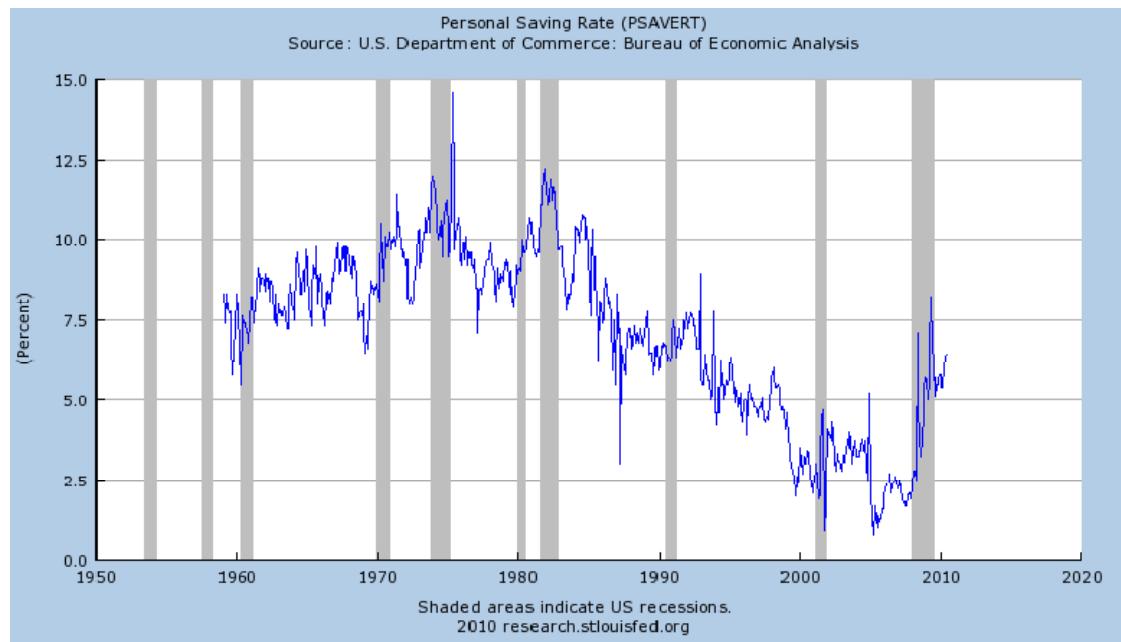




Fiscal stimulation is temporary and designed to “prime the pump.” Government spending replaces private spending and a multiplier effect causes rounds of spending until the economy corrects. The consumer plays a dominant role in this process. The fiscal “multiplier” depends on relatively high consumer spending (low saving) to generate further rounds of spending from the temporary income boost. Drags on the multiplier include consumer saving rather than spending and consumer spending on imports rather than domestic products. Chart III illustrates how consumer saving has increased (effectively lowering the fiscal policy multiplier). The growing trade deficit also presents a significant drag on the multiplier.

The recent fiscal stimulus has a temporary impact on the economy and will run its course by early 2011. The weak response of the economy to the government stimulus suggests that the multiplier effect was small, as might be expected from the rising savings rate. Yet, the level of government spending has reached such high levels that further support for another stimulus is unlikely. An alternative fiscal move would be a tax cut. However, higher taxes are more likely as the Bush tax schedule is likely to expire in favor of a new tax schedule with higher marginal rates at the top end. Fiscal policy is likely to be a drag rather than a boost to the economy in 2011.

Chart III. Increased Consumer Savings in the Most Recent Recession



The Debt Drag – There is No Quick Answer

Debt is often used to fuel growth. The concept of leverage, earning money on borrowed money, is a fundamental part of business. As long as debt can be serviced, there is a capacity to fuel growth through leverage. However, there is a critical tipping point where the debt burden works against growth. When the means to pay back debt slow, a “deleveraging” process begins.



Retiring debt becomes the priority and a pattern sets in with higher savings, lower spending, and a sense of higher risk and uncertainty. These conditions lead to a contraction.

Debt, whether private or public, is paid by the private sector through foregone consumption (debt payments or taxes). If an economy produces ample income it can service large amounts of debt to finance growth. The ratio of debt to GDP is a metric that scales leverage by the means to pay back debt. At some point, the debt to GDP ratio hits a tipping point where leverage goes from making a positive contribution to growth to fueling a contraction.

Chart IV shows that government spending as a percentage of GDP has been increasing. Since taxes do not cover government spending, borrowing to finance the deficit has been increasing rapidly. Chart V illustrates the relationship between deficit spending and GDP. Studies suggest that 60% is a high ratio and economies hit contraction when the ratio approaches 90%.

Chart IV. Total Government Spending as a Percentage of GDP since 1950

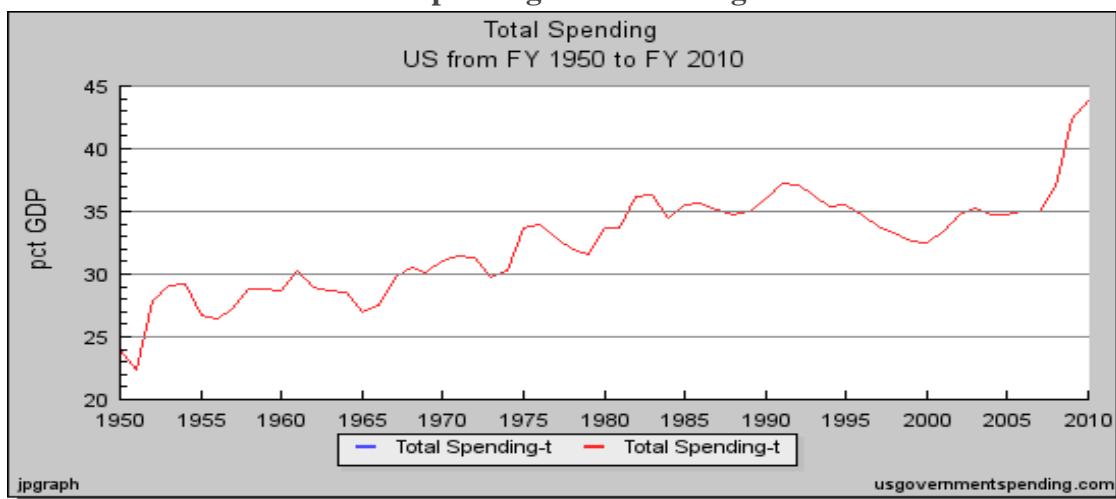


Chart V. Government Deficit as a Percent of GDP

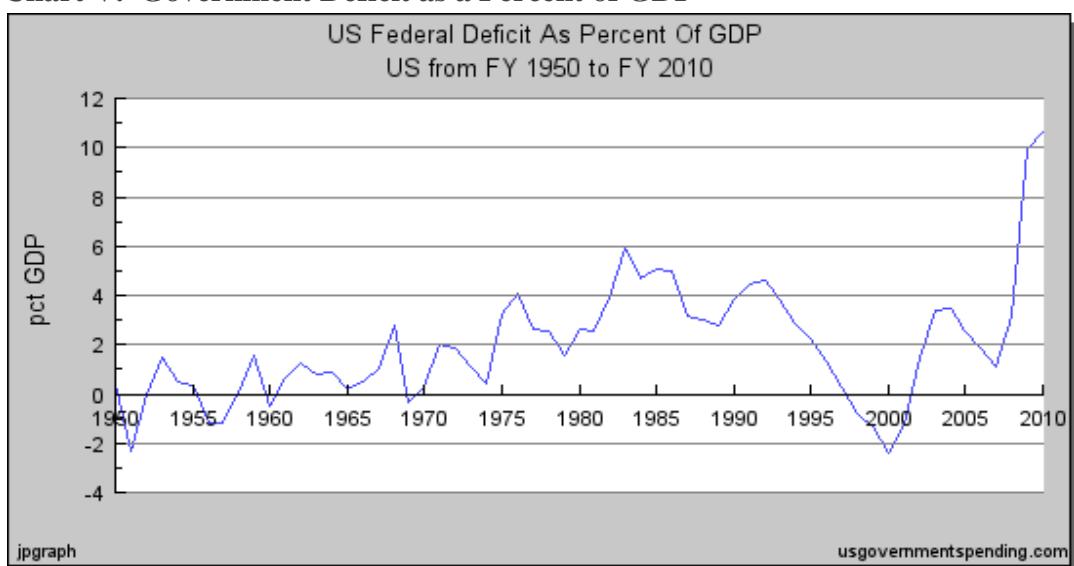




Chart VI illustrates the relationships of government, private, and aggregate debt to GDP since 1920. The two large spikes in total debt to GDP occur in the periods of the Great Depression and in our most recent recession. A disturbing fact is that the ratio is still climbing. Private debt has been coming down in the most recent quarters but government debt growth has far outpaced private debt reductions.

Chart VI. Ratios of Government, Private, and Total Debt to GDP



When viewed this way, it appears that a primary problem with the economy has been the massive increase in debt levels that were not matched with similar increases in income. A large portion of our past growth has been based on excessive use of leverage. The unwinding of excessive leverage will take time. Meanwhile, further leveraging by the Federal Government will only serve to aggravate the situation. The private sector is making a painful adjustment that will need to occur. It is not clear when or if the government sector will make a similar adjustment. In any event, there is a significant drag on economic growth in store for some time to come.

Prepare for Fat Tail Risk

The analysis of current economic conditions suggests a significant downside risk that is best described as a very long adjustment with slow growth and little inflationary pressure. Even so, a shock to the system could tip it into an even worse set of outcomes. It is impossible to know for sure how the economy will work out. The following schematic represents a reasonable assessment of near term economic performance. Note that the downside risk of deflation represents the “fat tail” risk.



Economic Scenarios taking Shape			
Below 2% Growth “Deflationary”	2% -3% “Soft Growth”	3-6% Growth “Normal Growth”	Above 6% Growth “Super Growth”
-3% to 1% Inflation	1% to 2.5% Inflation	2.5% to 4% Inflation	Above 4% Inflation
/	x	/	/
25% Probability	60% Probability	10% Probability	5% Probability



Summary of Recent Economic Data

GDP and Production – *Soft and fragile economic growth continues. A downward revision in second quarter growth is likely as the full extent of the net trade deficit is recognized. Imports are becoming a major drag on growth with inconsistent contributions from other GDP components. Low growth is expected for the remainder of 2010 with only modest improvement in consumer spending. The last boost from stimulus spending is scheduled to take place during the remainder of 2010 and the effects will diminish going into 2011.*

- Real GDP rose 2.4% in the second quarter at an annualized rate, according to the advance estimate from the Bureau of Economic Analysis. Real GDP grew 3.7% in the first quarter of 2010, revised up from 2.7%. Real GDP has now increased for four straight quarters. On a year-ago basis, real GDP rose 3.2% in the second quarter. This is the largest year-over-year gain since the first quarter of 2005. Positive GDP growth in the first half of 2010 is a good sign, but the rates of growth are low for a recovery period and signs of fundamental weakness in the economy persist.
- Table 1 summarizes quarterly growth in GDP and its components from the third quarter of 2008 through the second quarter of 2010. Declines are shown in red. Prior to the third quarter of 2009, weakness in the economy was widespread across all GDP components except government and net exports. The beginning of a recovery in the third quarter of 2009 has not had strong and consistent support from any single component. Inventories and consumption provided most of the improvement in GDP, as expected in the early stages of a recovery. Nevertheless, the contributions to growth are modest and without momentum. This pattern is unlike the typical pattern of a healthy rebound in consumption and fixed investment. The recovery numbers are weak even with unprecedented government stimulus, historic Federal Reserve liquidity expansion, and the quick response to the downturn. At best, this is a soft and fragile recovery.

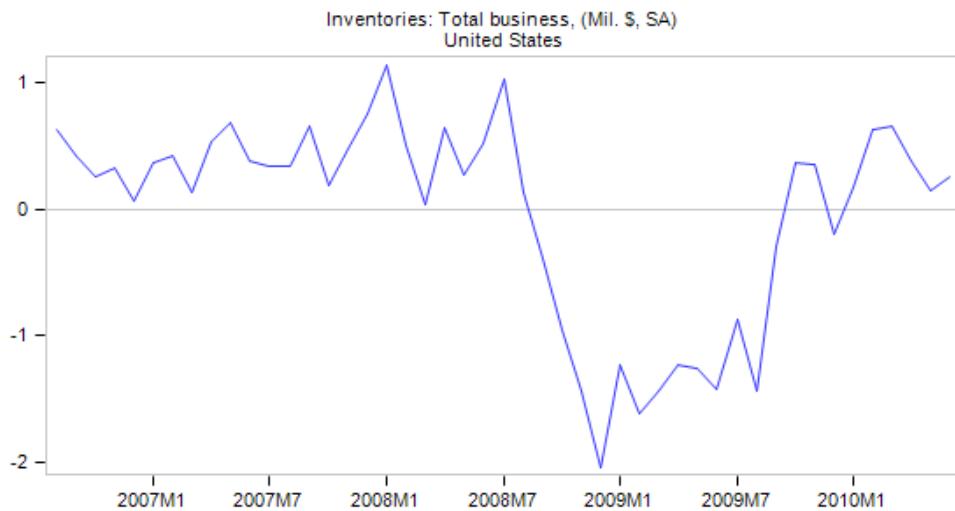
Table 1. Real GDP Growth and GDP Components

Contributions to Real GDP (Annualized)	II Q 2010	I Q 2010	IVQ 2009	IIIQ 2009	II Q 2009	I Q 2009	IV Q 2008	IIIQ 2008
Consumption	1.2	1.3	0.7	1.4	-1.1	-0.3	-2.3	-2.5
Fixed investment	2.1	0.4	-0.1	0.1	-1.3	-5.7	-4.0	-1.8
Residential	0.6	-0.3	0.0	0.3	-0.5	-1.2	-1.2	-0.8
Nonresidential	1.5	0.7	-0.1	-0.1	-0.7	-4.5	-2.8	-1.0
Inventories	1.1	2.6	2.8	1.1	-1.0	-1.1	-2.3	-0.1
Net exports	-2.8	-0.3	1.9	-1.4	1.5	2.9	1.5	-0.6
Government	0.9	-0.3	-0.3	0.3	1.2	-0.6	0.3	1.0
Annual % Change in Real GDP	2.4	3.7	5.0	1.6	-0.7	-4.9	-6.8	-4.0



- Fixed Investment was one of the few bright spots in the second quarter. Fixed investment rose 19.1% annualized in the second quarter, adding 2.1 percentage points to growth. Business investment grew at an annualized rate of 17%, adding 1.5 percentage points to growth. Spending on nonresidential structures rose for the first time in two years, and business spending on equipment and software rose for the fifth consecutive quarter. Residential investment rose after falling for two quarters, in part because of temporary tax incentives for home purchases.
- Inventories are relatively lean despite recent gains. The I/S ratio is behind where it was a year ago and is in line with the long run trend. Nevertheless, businesses are rebuilding stockpiles, but at a slower pace than earlier in the year. Chart A below illustrates how inventory investment continues to support the recovery, but the support is fading.

Chart A. Monthly Percentage Change in Inventory from 2007 through Mid-2010



Note: Monthly Percentage Change

SA: Seasonal adjustment

2010M1 represents January of 2010

- The trade deficit presented the most significant drag on GDP as net exports subtracted 2.8 percentages point from growth in the second quarter. Stronger imports subtracted 4 percentage points, while stronger exports added 1.2 percentage points.
- Government's contribution to GDP increased by an annualized 4.4% rate in the second quarter, adding 0.9 of a percentage point to growth. Both federal and state and local government spending were positives for growth. Stimulus spending continues but the temporary effects of such spending will most likely be through the system by the end of the year.



Employment – The economy is not growing fast enough to make a significant dent in unemployment. Employment gains will be hard to achieve if the recovery remains soft. GDP growth must be 2 - 2.5% just to keep pace with rising labor productivity and growth in the labor market. The labor participation rate remains low as many workers have simply left the labor market. Firms are finding ways to make profits through efficiencies and cost reduction rather than expanded sales.

- The labor market remained weak in July. Payroll employment fell by 131,000, partly due to the dismissal of 202,000 census workers from the government payrolls. Although this is far less than needed to bring down unemployment, the jobless rate was unchanged at 9.5%. The unemployment rate would be higher if hundreds of thousands of workers had not left the labor force in the second quarter. Table 2 provides monthly data on changes in the unemployment rate, labor force, hourly earnings, and workweek.

Table 2. Monthly Labor Market Data

	Jul 2010	Jun 2010	May 2010	Apr 2010	Mar 2010	Feb 2010	Jan 2010	Dec 2009
Unemployment rate, %	9.5	9.5	9.7	9.9	9.7	9.7	9.7	10.0
Labor force, change (000s)	-181	-652	-322	805	398	342	111	-661
Labor force participation rate, %	64.6	64.7	65.0	65.2	64.9	64.8	64.7	64.6
Nonfarm payrolls, change (000s)	-131	-221	432	313	208	39	14	-109
Average hourly earnings, % change	0.1	0.1	0.3	0.3	-0.1	0.1	0.3	0.3
Average workweek (hours)	33.5	33.4	33.5	33.4	33.3	33.2	33.3	33.2

Source: Bureau of Labor Statistics

- The unemployment rate was unchanged at 9.5%. However, the labor force continued to decline. Some of the net loss of 181,000 is likely the departure of temporary census workers who stepped into the labor force to take these short-term positions. The labor force participation rate declined as a result to 64.6% and is now down to where it was in December. The employment-to-population ratio fell to 58.4%, the lowest since April and only slightly above the cyclical low of 58.2% reached in December of last year.
- The economy lost about eight million jobs since the beginning of 2008, as shown in Chart B below. So far in 2010, employment gains in 2010 are modest and the future is uncertain. Initial claims for unemployment insurance continue to be above 450,000 with continuing claims averaging about 4.5 million. These levels of unemployment claims are consistent with a still-troubled labor market.



Chart B. Total Nonfarm Employment in Thousands of Jobs



Note: Ths: Data are in thousands

SA: Seasonal adjustment

2010M7 represents July of 2010

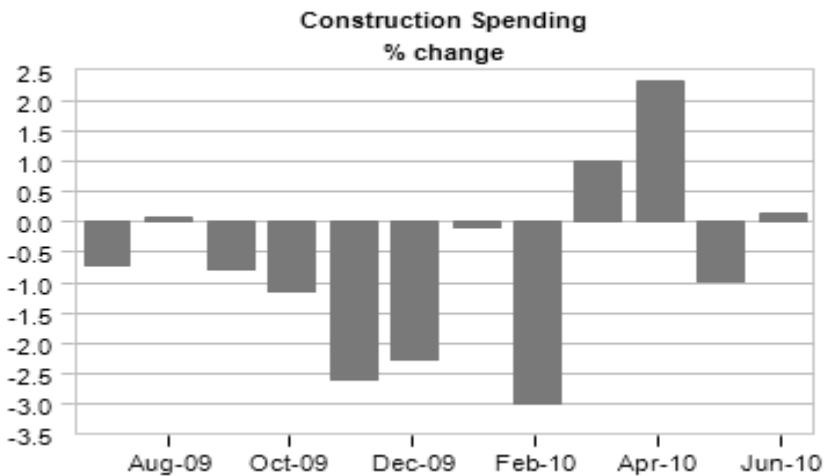
- Average hourly earnings increased 0.2% month to month in July and 1.8% year over year. Year-over-year growth has been decelerating for the past 12 months, indicative of the weak bargaining power on the part of workers and a change in the mix of jobs.
- On a year-ago basis, total compensation growth rose to 1.9% in the second quarter of 2010, up from 1.7% in the first quarter
- Growth in wages and salaries rose to 0.45% in the second quarter to catch up to the growth rate of late 2009. On a year-ago basis, growth in wages and salaries was little changed at 1.6%.
- Compared with one year ago, benefits were up 2.5% compared to the 2.3% year-ago growth in the first quarter. Overall, benefits are growing faster in 2010 than in 2009. Rising health benefits had the fastest growth.

Construction – The slump in construction spending may not be over. Only public construction is contributing to GDP as both private residential and non-residential spending are in the doldrums.



- Construction spending increased slightly in June, reaching \$836 billion. June's spending is 0.1% above the revised May level and is 7.9% below June 2009 totals. Chart C below illustrates the overall pattern in construction spending for the past calendar year.

Chart C. Monthly Percentage Change in Construction Spending



- Private residential and nonresidential construction spending fell by perceptible amounts in June but were offset by a burst in public construction spending. Public construction has fallen steadily from mid-2009, but the second wave of ARRA stimulus funding has helped revive spending.
- Excess capacity prevents private nonresidential and residential spending from growing more like what would be expected in a recovery.

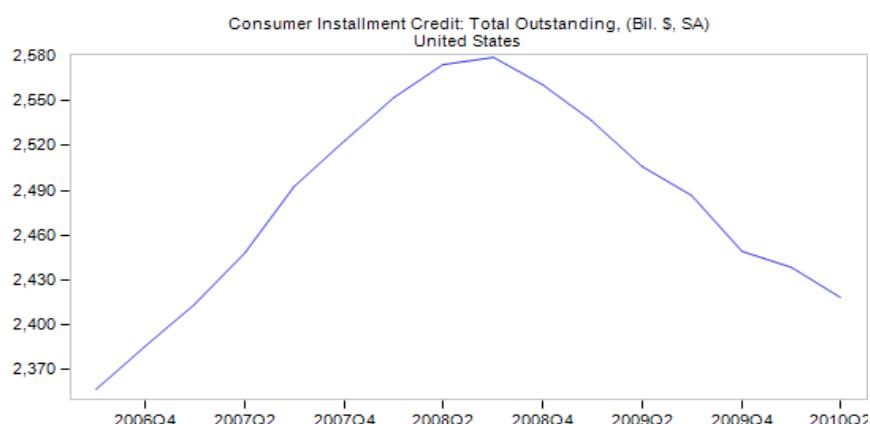
Personal Income and Saving – Personal income is slowing while savings rates increase. Consumers are not positioned to provide normal stimulus to a recovery as they pay down debt and build savings.

- Personal income and spending were flat in June following small increases in prior months. Overall, the second quarter had weak growth in personal income and consumption while the savings rate increased. Households continued to pay off debt and change spending patterns. Table 3 below summarizes the changes in personal income consumption, and saving since November of last year.

**Table 3. Personal Income, Consumption, and Savings Rates**

% Change – 1 Month	June 2010	May 2010	April 2010	Mar. 2010	Feb. 2010	Jan. 2010	Dec. 2010	Nov. 2009
Personal income	0.0	0.3	0.4	0.4	0.1	0.3	0.5	0.5
Consumption	0.0	0.1	-0.1	0.5	0.5	0.1	0.4	0.3
% Change -1 Year Ago								
Personal income	2.6	1.5	2.9	3.0	2.3	1.4	0.4	-1.1
Consumption	3.1	3.7	3.8	4.0	3.0	2.6	3.2	1.7
Savings rate, %	6.4	6.3	6.0	5.4	5.4	5.8	5.8	5.6

- The saving rate increased to 6.4% on a year- over- year basis in June. In the short run, higher savings rates contribute to weak consumer spending and a slow GDP growth. Consumer spending represents about 70% of GDP, causing a major drag on the economy when consumer spending is weak. In the longer run, higher savings rates help repair the wealth of households, which took a major hit with stock market losses and declining housing prices.
- Consumer credit balances declined at an annualized rate of 0.7% in June. This was the slowest rate of decline since January's brief increase in credit balances. Revolving credit balances fell for the 21st month in a row, although the -6.3% annualized rate of change was well above the average for the year so far. Retail sales excluding motor vehicles held steady in June compared with the previous month.
- Chart D below illustrates the dramatic reversal in consumer installment credit. Overall, households are “deleveraging” from high debt levels.

Chart D. Consumer Installment Credit from Mid-2006 to Mid-2010

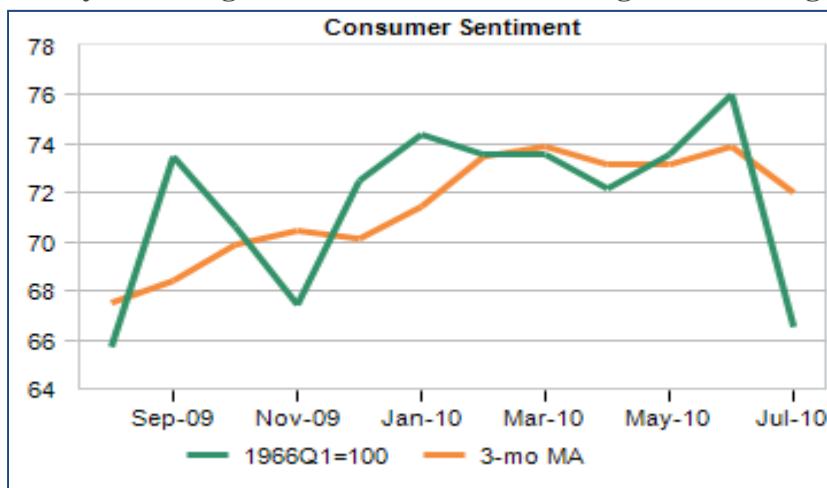


- Nonrevolving credit increased for the second month in a row, rising at an annualized rate of 2.4%. Vehicle sales have been fairly steady in recent months after rebounding from their early-2009 trough. More favorable terms on credit also supported demand for nonrevolving credit. The average interest rate on new car loans from auto finance companies decreased to 4.02%, which is the lowest it has been since January. Consumers also extended the maturity of auto loans to an average of 63.1 months.
- High unemployment and a lack of cash flow continue to take a toll on household credit. Defaults rose to 3.1% in July, the highest level since March. The only segment with a balance above their year-ago level is student loans.

Sentiment and Confidence – Confidence and sentiment measures weakened in the second quarter. Consumers remain depressed over recent stock market movements, job losses, modest growth in wages, difficulty obtaining credit, debt burden, low housing values, uncertainties over enacted and proposed reforms of healthcare, financial regulation, environmental regulation, immigration, tax increases, and uncertainty surrounding the upcoming election. The weakness in confidence clearly increases downside risks for the remainder of 2010.

- The University of Michigan consumer sentiment index increased slightly in August following a collapse in July. The index came in at 69.6, compared with July's 67.8. The weakening in confidence is consistent with the general weakening in the pace of the recovery for both the economy and for consumers. The pace of spending growth has clearly slowed from the first quarter. Chart E below illustrates the movement of the University of Michigan consumer sentiment index from August of 2009 to August 2010. Improvement of the index has been uneven since the bottom of the recession.

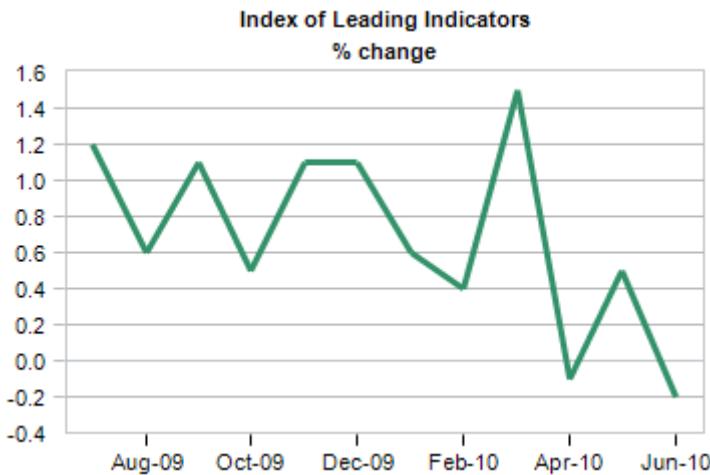
Chart E. University of Michigan Consumer Sentiment August 2009 -August 2010





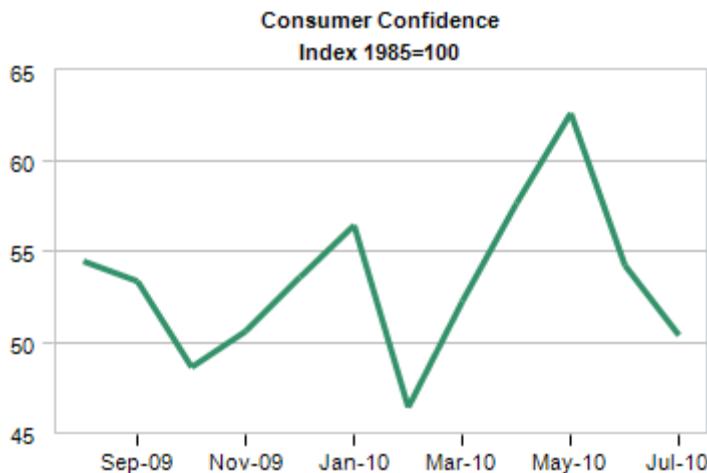
- The Conference Board's index of leading indicators provides a good picture of the overall state of the recovery. The index fell in two of the past three months. Chart F below illustrates the weakness of the leading indicator series over the last quarter, suggesting weaker than expected economic performance in the latter part of 2010.

Chart F. Conference Board Index of Leading Indicators



- Chart G shows that the Conference Board index of consumer confidence fell sharply in June and July. The Conference Board Index of Consumer Confidence shows the same pattern of weak confidence found in the University of Michigan Index and the Index of Leading Economic Indicators in the second quarter of 2010.

Chart G. Conference Board Consumer Confidence Index – August 2009 – July 2010



Housing – A full economic recovery hinges on a much improved housing sector with stable prices. Inventory is declining but remains at a robust 7.6 months. While temporary tax credits



stimulate housing demand for a short period they bleed demand from the trailing months and have little overall effect. A plan for stimulating the economy must include more concerted efforts to revive housing and slow down foreclosures.

- Home sales fell following the expiration of the homebuyer tax credit in April. Pending home sales in June fell by 2.6% from May. This decrease follows last May's 30% decline. At 75.7, the index stands at its lowest level on record. Table 4 below illustrates the reversal in pending home sales since April.

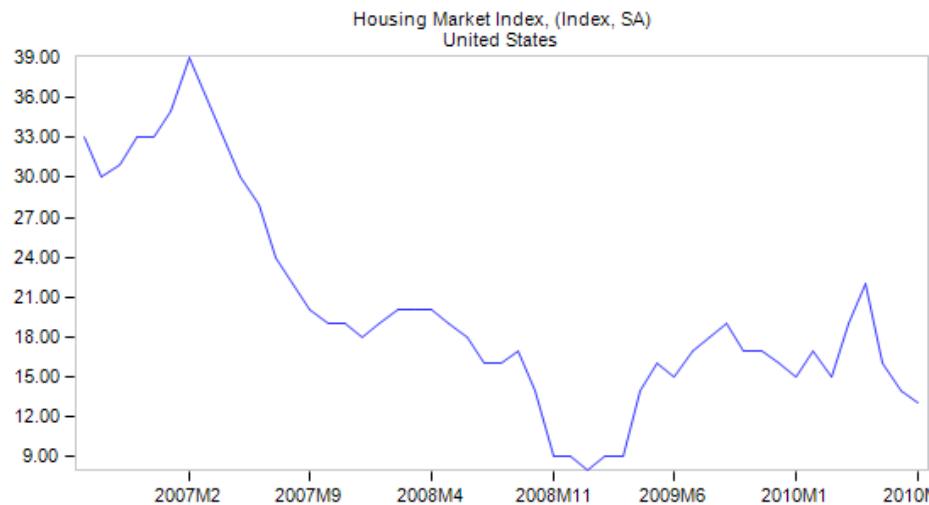
Table 4. Pending Home Sales by Month in 2010

	Jun 2010	May 2010	Apr 2010	Mar 2010	Feb 2010	Jan 2010
Index (2001 = 100 index)	75.7	77.7	110.9	104.6	97.7	90.2
3-mo MA	88.1	97.7	104.4	97.5	95.2	95.0
% change	-2.6	-29.9	6.0	7.1	8.3	-7.8
% change yr ago	-18.6	-15.8	22.4	23.1	17.4	12.0

Source: National Association of Realtors

- The NAHB housing index is still below a “recovery” reading and is at its lowest point since April 2009. The NAHB housing market index fell to 13 this August, down by 7.1% from the revised July level of 14 and down 27.8% from the August 2009 level of 18. Chart H below shows the movement of the NAHB index from Mid-2006 to Mid-2010.

Chart H. NAHB Market Index from Mid-2006 to Mid-2010



- The weak housing market is also evident for new home sales data. Table 5 below illustrates conditions for new home sales volume, inventory, and prices.

**Table 5. New Home Sales from November 2009 through June 2010**

	Jun 2010	May 2010	Apr 2010	Mar 2010	Feb 2010	Jan 2010	Dec 2009	Nov 2009
Millions of Units *	0.33	0.27	0.42	0.38	0.35	0.35	0.36	0.37
Percentage Change	23.6	-36.7	9.9	10.7	-0.6	-2.0	-3.3	-7.1
Months Supply on Market	7.6	9.6	6.1	7.1	8.0	8.0	7.8	7.7
Median Home price (thousands)	214.5	218.7	195.9	229.2	217.7	218.1	227.0	220.6
Percentage Change	-1.9	11.6	-14.5	5.3	-0.2	-3.9	2.9	2.8

Source: Census Bureau

- For the second quarter as a whole, new-home sales posted their third consecutive decline. New home sales surged 23.6% in June following an exceptionally weak May. The 330,000 annualized new-home sales in June remain at their second slowest pace on record.
- Inventory of new homes adjusted downward declining to 7.6 months, compared with 9.6 months in May. The number of homes available for sale declined to its lowest level since the 1960s.
- The median new-home price is about flat from a year ago, down 0.6%. For the second quarter, the median price is down by an annualized 19% from the first quarter and 3% below its year-ago value.

Inflation – Core inflation remains under control with little demand pressure. Nevertheless, energy and food prices are likely to move up in the second half of 2010. Overall, the economy is too weak with too much unused capacity to drive inflation beyond an annualized 2% rate.

- The overall GDP price index increased 1.8% annualized in the second quarter, after a 1% increase in the first quarter.
- The PCE price index rose just 0.1% annualized in the second quarter, down from a 2.1% increase in the first quarter. The Federal Reserve's preferred inflation measure, the core PCE deflator, which excludes food and energy prices, was up 1.1% annualized in the second quarter, down slightly from 1.2% inflation in the previous quarter. Monthly movements in the PCE appear in Table 6 below.

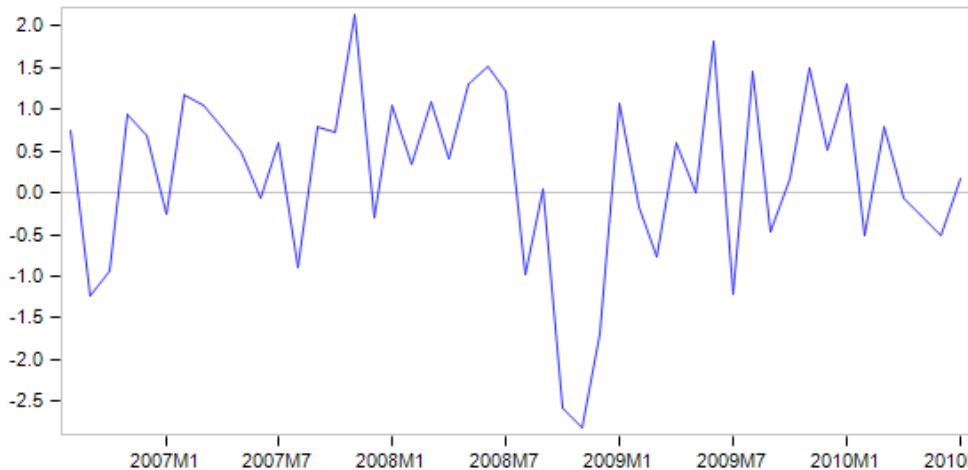
**Table 6. PCE by Month from November 2009 through June 2010**

	June 2010	May 2010	Apr 2010	Mar 2010	Feb 2010	Jan 2010	Dec 2009	Nov 2009
Monthly % Change								
PCE Deflator	-0.1	-0.1	0.0	0.2	0.0	0.3	0.2	0.2
PCE Core	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Year-Ago % Change								
PCE Deflator	1.4	2.1	2.3	2.5	2.3	2.5	2.4	1.7
PCE Core	1.4	1.5	1.6	1.8	1.7	1.8	1.8	1.7

- Consumer prices, as measured by the consumer spending deflator, fell 0.1% in June but were unchanged excluding food and energy. This was the first time core prices failed to grow since March 2009.
- The Consumer Price Index (CPI) rose 0.3% in July after three straight deflationary monthly readings. The rise was mostly due to a jump in the energy index, which broke a long negative streak. The core CPI rose a more modest 0.1%. Both headline and core CPI are still stuck near a historically low 1% year-ago rate of change.
- In the second quarter the producer price index (PPI) for finished goods increased at an annualized run rate of 2%. Core finished goods PPI increased .3% in July. Finished goods prices have been soft as producers have not been able to push high input prices onto buyers of finished goods as capacity underutilization persists.

Chart I. Producer Price Index from Mid-2006 through July 2010

PPI: Stage of processing - Finished goods, (Index 1982=100, SA)
United States





- Producer prices for finished goods rose 0.2% in July, in line with consensus. The month's gain reverses consecutive declines in the prior three months and resulted from higher prices for food and energy goods. Excluding food and energy, core prices for finished goods were up 0.3% in July. Falling core prices for intermediate and crude goods from their elevated levels earlier this year indicate weakening growth in the U.S. and globally. Yet pass-through from earlier stages to finished goods is constrained by high and rising unemployment, keeping inflation pressures tame.