

# Chicago Fed Letter

## Economic Outlook Symposium: Summary of 2010 results and forecasts for 2011

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According to participants in the Chicago Fed's annual Economic Outlook Symposium, solid economic growth is forecasted for the nation in 2011, following a year with moderate growth; inflation is expected to edge higher in 2011; and the unemployment rate is predicted to remain elevated this year.

The Federal Reserve Bank of Chicago held its twenty-fourth annual Economic Outlook Symposium (EOS) on December 3, 2010. More than 100 econ-

omists and analysts from business, academia, and government attended the conference. This *Chicago Fed Letter* reviews the forecasts from the previous EOS for 2010, and then analyzes the forecasts for 2011 (see figure 1) and summarizes the presentations from the most recent EOS.<sup>1</sup>

The U.S. economy had experienced the longest and deepest drop in economic activity since the Great Depression. According to the National Bureau of Economic

Research, the "Great Recession" lasted 18 months, starting in January 2008 and bottoming out in June 2009; over this span, real gross domestic product (GDP) fell 4.1% from its peak. The losses throughout the economy were extreme over the past few years. Nearly 8.4 million workers lost their jobs during

2008–09, representing a decline of over 6% in total employment. The unemployment rate rose sharply—from 5.0% at the beginning of the recession to 10.1% in October 2009. However, beginning in the third quarter of 2009, output, as measured by real GDP, began to rise—at an annualized rate of 2.9% over the five quarters following the recession's trough in June 2009. This growth typically would be considered solid; however, it is disappointing given the previous large drop in economic activity. For more context, consider two earlier deep drops in economic output, in the mid-1970s and the early 1980s; during the first five quarters of positive output following these two recessions, real GDP increased at an annualized rate of 5.5% and 7.8%, respectively. In addition, the recovery period (the number of quarters it takes real GDP to recover its losses) was quite short for both: three quarters for the mid-1970s recession and only two quarters for the early 1980s recession. Even after five quarters of growth (2009:Q3–2010:Q3), the U.S. economy is currently still 0.6% away from recovering all of its losses from the Great Recession.

Over the past 20 years, the change in real private inventories has contributed 2.8%, on average, to annual real GDP growth.

### 1. Median forecast of GDP and related items

	2009 (Actual)	2010 (Forecast)	2011 (Forecast)
Real gross domestic product <sup>a</sup>	0.2	2.4	3.0
Real personal consumption expenditures <sup>a</sup>	0.2	2.3	2.5
Real business fixed investment <sup>a</sup>	-12.7	10.6	7.4
Real residential investment <sup>a</sup>	-13.4	-4.7	9.6
Change in private inventories <sup>b</sup>	-36.7	97.2	60.3
Net exports of goods and services <sup>b</sup>	-330.1	-518.2	-500.1
Real government consumption expenditures and gross investment <sup>a</sup>	0.8	1.5	0.5
Industrial production <sup>a</sup>	-3.8	5.4	4.3
Car and light truck sales (millions of units)	10.4	11.5	12.7
Housing starts (millions of units)	0.55	0.60	0.69
Unemployment rate <sup>c</sup>	10.0	9.6	9.2
Consumer Price Index <sup>a</sup>	1.5	0.9	1.6
One-year Treasury rate (constant maturity) <sup>c</sup>	0.35	0.27	0.62
Ten-year Treasury rate (constant maturity) <sup>c</sup>	3.46	2.61	3.07
J. P. Morgan Trade-Weighted Dollar Index <sup>a</sup>	-7.5	1.1	0.0
Oil price (dollars per barrel of West Texas Intermediate) <sup>c</sup>	76.07	82.67	85.30

<sup>a</sup>Percent change, fourth quarter over fourth quarter.

<sup>b</sup>Billions of chained (2005) dollars in the fourth quarter at a seasonally adjusted annual rate.

<sup>c</sup>Fourth quarter average.

NOTE: These values reflect forecasts made in November 2010.

SOURCES: Actual data from authors' calculations and Haver Analytics; median forecast from Economic Outlook Symposium participants.

Research, the "Great Recession" lasted 18 months, starting in January 2008 and bottoming out in June 2009; over this span, real gross domestic product (GDP) fell 4.1% from its peak. The losses throughout the economy were extreme over the past few years. Nearly 8.4 million workers lost their jobs during

During the period 2009:Q3–2010:Q3, the change in real private inventories accounted for 61.6% of the growth in real GDP over these five quarters. Compared with the aftermaths of the previous two deep recessions mentioned before, the change in real private inventories has nearly doubled its contribution to

this is roughly the same amount as in the third quarter of 2009.

Between 1999 and 2007, light vehicle sales (car and light truck sales) averaged 16.8 million units each year. Sales fell to 13.1 million units in 2008, and then they declined to 10.4 million

## The forecast for 2011 is for economic growth to be solid: The growth rate of real GDP is expected to be 3.0%.

growth in the current period. The real final sales measure removes the change in real private inventories from real GDP and highlights the goods that are transacted in the market. The growth rate of real final sales over the period 2009:Q3–2010:Q3 averaged 1.1%, well below its 20-year average of 2.5%. This clearly illustrates that underlying demand in the U.S. economy has remained very weak since the start of the recovery.

Given this sluggish growth, there has been little improvement in employment since the recovery's beginning. Employment actually fell by over a million workers during the first six months of the recovery. Employment began to rise in January 2010; but during this past year, the number of new jobs totaled only 1,124,000—not much higher than the growth of the labor force. So, very little progress has been made in creating jobs for the almost 8.4 million workers who lost their jobs during 2008–09. This is why, even though the unemployment rate peaked at 10.0% in the fourth quarter of 2009, it only edged lower in 2010.

The housing sector, which declined by a substantial amount over the past several years, has shown no signs of rebounding. At best, it appears that the housing sector has bottomed out. Since the start of the recovery, real residential investment has continued to decline, at an annualized rate of –2.5% over the period 2009:Q3–2010:Q3. However, housing starts—which plunged from over 2.1 million annualized units in the first quarter of 2006 to 0.53 million annualized units in the first quarter of 2009—have since risen to 0.58 million annualized units by the third quarter of 2010; and yet,

units in 2009. Sales experienced a moderate improvement in 2010, rising to 11.5 million units.

Supported by these improved sales, manufacturing has been the only sector that has experienced a V-shaped recovery. Manufacturing output in the U.S. was at an all-time high in December 2007, but over the following 18 months, it suffered a massive drop of 17.6%. However, beginning in July 2009, manufacturing production has risen strongly, averaging an annualized growth rate of 7.4% over the past 17 months and recovering half of the lost output. While this has been an impressive improvement, the sector still retains tremendous resource slack. That is, capacity utilization<sup>2</sup> was at 79.2% in December 2007 (just below the 79.7% rate at which it averaged over the preceding 20 years); but then it fell to 65.4% in June 2009—the lowest reading since the start of the series in 1948. Capacity utilization has since risen to 72.8% in November 2010, but remains well below its long-run average.

With such tremendous slack in production, real estate, and labor markets, the economy has experienced disinflation over the past year. Inflation, as measured by the Consumer Price Index (CPI), has fallen from 2.8% in 2009 (December 2009 compared with December 2008) to 1.1% in November 2010. What is even more striking is the “core” inflation measure (which excludes food and energy): Core inflation fell from 1.8% in December 2009 to 0.7% in November 2010 (the prior month's reading of 0.6% had been the lowest reading since the start of the data series in 1959).

## Performance versus forecasts

At the 2009 EOS, participants expected the economy's real GDP growth rate to be 2.5% in 2010. According to the consensus forecast from the most recent EOS, the growth rate of real GDP in the fourth quarter of 2010 relative to the fourth quarter of 2009 is estimated to be 2.4%. (The remaining comparisons for GDP components use the consensus estimate from the most recent EOS for the fourth quarter of 2010 to calculate the annual values.) Consumption was accurately forecasted, and business fixed investment came in a lot stronger than expected. However, residential investment's anticipated turnaround did not materialize. The unemployment rate was expected to edge down to 9.8% in the final quarter of 2010, close to the 9.6% recorded for the fourth quarter. Inflation, as measured by the CPI, was predicted to average 2.2% during 2010—much higher than the 0.9% rate now expected for the year. Light vehicle sales were predicted to come in at 11.4 million units in 2010—very close to the 11.5 million actually sold during the past year. Housing starts were predicted to rise to 0.74 million units in 2010; however, housing starts improved much less, to just 0.59 million annualized units for the first 11 months of 2010. Similarly, real residential investment was forecasted to rise, at a rate of 11.4%, but it is expected to have declined, at a rate of –4.7%. One-year and ten-year Treasury rates were predicted to rise to 1.20% and 4.00%, respectively, by the end of 2010; however, they actually declined to 0.26% and 2.86%, respectively.

## Economic outlook for 2011

The forecast for 2011 is for economic growth to be solid. In 2011, the growth rate of real GDP is expected to be 3.0%, an improvement from the projected 2.4% rate for 2010. The quarterly pattern reveals a strengthening of the economy as the year unfolds. The forecasted growth rate of real GDP rises from an annualized rate of 2.5% in the first quarter of 2011 to 3.3% in the fourth quarter of 2011. With the economic growth rate predicted to be just above its long-term historical trend, the unemployment rate is expected to edge down to 9.2% in the final quarter

of 2011. Because economic growth is expected to improve, inflation, as measured by the CPI, is predicted to rise from an estimated 0.9% in 2010 to 1.6% in 2011. Oil prices are anticipated to rise somewhat, averaging around \$85 per barrel in the final quarter of 2011. Real personal consumption expenditures are forecasted in 2011 to expand, at a rate of 2.5%. Light vehicle sales are expected to rise to 12.7 million units this year. Real business fixed investment is expected to record a solid growth rate of 7.4% in 2011. Industrial production is forecasted to grow at a rate of 4.3% this year. The change in private inventories will play a much smaller role as a driver of growth in 2011.

Once again, the long-struggling housing sector is predicted to have strong growth. Real residential investment is forecasted to increase in 2011, at a rate of 9.6%—which would be its best performance since 2003. Housing starts are also anticipated to improve—from a predicted 0.60 million starts in 2010 to 0.69 million starts in 2011. While improved, the anticipated 2011 level would be less than half of the 20-year annual average of 1.43 million starts.

The ten-year Treasury rate is forecasted to increase to 3.07% in 2011, and the one-year Treasury rate is expected rise to 0.62%. The trade-weighted U.S. dollar is predicted to remain unchanged in 2011; and the trade deficit (net exports of goods and services) is predicted to decrease somewhat.

### Labor market outlook

Daniel Aaronson, Federal Reserve Bank of Chicago, stated that the historically high U.S. unemployment rate is unlikely to return to its pre-recessionary levels in the near future given the modest recovery expected by most forecasters. The critical question, noted Aaronson, is whether high unemployment is due to the business cycle (i.e., demand deficiencies for goods and services) or structural change (i.e., a mismatch in skills or location between workers and firms). If the problem is structural, said Aaronson, high unemployment is likely to persist as long as impediments to firm-worker matches remain in place. More accommodative monetary policy

can have little impact in clearing up these frictions. He argued, however, that most, albeit not all, of today's high unemployment can be explained by cyclical rather than structural factors.

As evidence, Aaronson noted the broad-based nature of the recession and modest recovery. For example, unemployment has gone up proportionately for highly skilled workers relative to all workers, suggesting that a skills mismatch is not occurring. Similarly, employment growth has fallen in all industries, and there is no evidence of unusual inter-industry reallocation of jobs or demand for workers in any sectors. Aaronson also discounted a geographical mismatch, since the difference between migration rates for renters and homeowners (even those in states with large home price declines) has not increased.

### Financial and consumer outlook

Adolfo Laurenti, Mesirow Financial, explained that in the years leading up to the financial crisis, U.S. economic growth had been driven largely by credit-based consumption. However, he expressed concerns about the sustainability of such growth in the U.S. going forward. Higher savings rates and debt reduction by both the private and public sectors will be required to counterbalance this excess consumption, he said.

Following a financial crisis, a lackluster recovery is not surprising, Laurenti noted. Even so, economic growth during this recovery has been disappointing thus far. Employment and housing—two key drivers in consumer spending—have remained weak. In the face of uncertainty surrounding economic conditions, businesses are still reluctant to expand their work forces. Laurenti pointed out that high-income households have recovered faster than their low-income counterparts, in part because homes make up a larger share of the latter's total financial assets.

According to Laurenti, banks are facing several competing pressures, such as those to rebuild capital, strengthen reserves, comply with new financial regulation, avoid past lending mistakes, and increase lending. He said he expects a slow recovery for banking.

### Automotive outlook

Sue Yingzi Su, General Motors, observed that the pace of new-vehicle sales growth in emerging markets, such as China, has been much faster than in mature markets, such as the U.S. This trend mirrors the faster GDP growth rates of emerging economies relative to those of mature ones.

The U.S. auto industry was hit hard by the recession—during the downturn, total vehicle sales fell by about 40%. Spending on new vehicles has remained at record lows over the past year, though there are signs of slight improvements. According to Su, key drivers for vehicle sales include employment, consumer credit, and housing. Su expressed optimism about jobs growth in the coming months, noting that the private employment numbers have recently lined up with what occurred during the recovery of the early 1990s. Credit markets are also beginning to mend, said Su, though the large overhang of houses still on the market has kept the housing market weak.

Su pointed out other encouraging trends in the U.S. relevant for the automotive industry's prospects. The average vehicle

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age has increased, since U.S. consumers have delayed purchasing new vehicles, raising pent-up demand. Also, the share of licensed drivers in the population has remained stable for decades while the U.S. population has continued to grow; so, more licensed drivers are expected. Historically, a larger number of drivers have led to more vehicle sales, said Su.

### **Steel outlook**

Robert DiCianni, ArcelorMittal USA, stated that U.S. raw steel production capacity utilization experienced an unprecedented drop in the latter half of 2008—from 90% to almost 30%—but it has since recovered—to about 70% in November 2010. DiCianni said he anticipates growth in U.S. steel production to remain moderate going forward. The automotive, residential construction, machinery, agriculture, electric motors, energy, and pipe and tube markets are expected to strengthen in 2011; however, nonresidential construction—which consumes the most steel—will remain weak in 2011 and is not expected to turn around until 2012. According to DiCianni, U.S. steel consumption is expected to reach 95.7 million tons in 2011, up from 65.1 million in 2009, but still well below the long-term historical trend.

Despite the weakness in U.S. demand for steel, global steel consumption is predicted to reach an all-time high in 2011—over 1.3 billion tons. Emerging

markets have been chiefly responsible for the rise in global demand for steel, DiCianni noted; China alone is expected to consume 45% of all steel consumed worldwide in 2011. This trend should become even more pronounced in the coming years because emerging markets still have so much room to grow. DiCianni said he expects higher prices for steel and its raw materials as the growth in global demand for steel outstrips the growth in global supply.

### **Heavy machinery outlook**

Betty Kouo, Caterpillar Inc., said the outlook for heavy machinery is very positive because sectors that rely on heavy machinery are doing well or are on the upswing. Construction and mining, which account for a large share of heavy machinery sales, should continue to perform well in 2011. More specifically, the American Institute of Architects' Architecture Billing Index, a leading indicator for nonresidential construction, suggests that this sector should begin recovering by late 2011. Also, inadequate past investment by governments has created a "large backlog of needed infrastructure construction" throughout the U.S. Both nonresidential and government structures, on average, are getting quite old—e.g., many aging commercial buildings, hospitals, schools, roads, airports, dams, and water systems will need to be upgraded soon.

Kouo noted that construction activity has been robust in developing countries, many of whose infrastructure is also in need of improvement. The global mining recovery has also been led by their high commodity demand. Therefore, developing countries are expected to account for a greater share of heavy machinery sales in the future.

### **Conclusion**

In 2010, the U.S. economy expanded at a solid pace, although well below the recovery path that followed previous large contractions in the economy. The economy in 2011 is forecasted to grow at a faster rate than it did in 2010, with an acceleration of growth on a quarterly basis. The housing sector is predicted to improve markedly in 2011, and light vehicle sales are expected to continue their moderate improvement from the extremely low levels reached in 2009. The unemployment rate is expected to edge lower, but remain extremely high by the end of 2011; and inflation is predicted to increase, but remain well below 2%.

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<sup>1</sup> Also see [www.chicagofed.org/webpages/events/2010/economic\\_outlook\\_symposium/index.cfm](http://www.chicagofed.org/webpages/events/2010/economic_outlook_symposium/index.cfm).

<sup>2</sup> Capacity utilization is calculated as the actual output produced with installed equipment divided by the potential output that could be produced with it if used to its full capacity.