

# Chicago Fed Letter

## Economic Outlook Symposium: Summary of 2012 results and 2013 forecasts

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According to participants in the Chicago Fed's annual Economic Outlook Symposium, the U.S. economy is forecasted to grow at a pace near its historical average in 2013, with inflation remaining largely unchanged and the unemployment rate edging down.

The Federal Reserve Bank of Chicago held its twenty-sixth annual Economic Outlook Symposium (EOS) on November 30, 2012. More than 125 economists and analysts from business, academia,

and government attended the conference. This *Chicago Fed Letter* reviews the forecasts for 2012 from the previous EOS, and then analyzes the forecasts for 2013 (see figure 1) and summarizes the presentations from the most recent EOS.<sup>1</sup>

The U.S. economy continues to recover from the longest and deepest drop in economic activity since the Great Depression. During the 13 quarters following the end of the recession in the second quarter of 2009, the annualized

six quarters beginning with the first quarter of 2008. Generally, the pace of economic recovery is quite sharp following a deep recession. For example, consider what happened after the deep drops in economic output experienced during the mid-1970s and early 1980s; during the first 13 quarters of positive output following these two recessionary periods, the annualized rate of real GDP growth was 5.4% and 5.7%, respectively (significantly higher than that of the current recovery). That said, unlike the deep recessions of the mid-1970s and early 1980s, the Great Recession was accompanied by a major financial crisis. Recoveries both in the United States and in other countries that follow recessions associated with financial crises tend to be rather restrained.

The economy continued to progress slowly in 2012. For the first and second quarters of 2012, the annualized rates of real GDP growth were 2.0% and 1.3%, respectively. These rates were below the U.S. economy's long-term historical rate of growth. Economic activity improved in the third quarter of 2012, with the growth rate of real GDP rising to 3.1%. However, significant uncertainty in both the political and economic spheres may have been restricting economic growth during 2012.

Even with such sluggish growth, the economy continued to add jobs, but

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

	2011 (Actual)	2012 (Forecast)	2013 (Forecast)
Real gross domestic product <sup>a</sup>	2.0	1.7	2.3
Real personal consumption expenditures <sup>a</sup>	1.9	2.0	2.3
Real business fixed investment <sup>a</sup>	10.2	2.5	3.5
Real residential investment <sup>a</sup>	3.9	13.6	9.4
Change in private inventories <sup>b</sup>	70.5	34.5	39.8
Net exports of goods and services <sup>b</sup>	-418.0	-410.0	-417.0
Real government consumption expenditures and gross investment <sup>a</sup>	-3.3	-0.2	-0.4
Industrial production <sup>a</sup>	4.0	2.3	2.7
Car and light truck sales (millions of units)	12.7	14.3	15.0
Housing starts (millions of units)	0.61	0.77	0.95
Unemployment rate <sup>c</sup>	8.7	7.9	7.6
Consumer Price Index <sup>a</sup>	3.3	2.0	2.1
One-year Treasury rate (constant maturity) <sup>c</sup>	0.11	0.18	0.20
Ten-year Treasury rate (constant maturity) <sup>c</sup>	2.05	1.70	2.02
J. P. Morgan Trade-Weighted Dollar Index <sup>a</sup>	0.0	0.5	0.1
Oil price (dollars per barrel of West Texas Intermediate) <sup>c</sup>	94.06	89.83	93.75

<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 2012.

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

rate of real gross domestic product (GDP) growth was 2.2%—roughly in line with what is considered the long-term historical rate of growth for the U.S. economy. But this GDP growth rate is very disappointing given that real GDP fell from its peak by nearly 5% during the “Great Recession,” which lasted for

the number of jobs added from March 2010 through December 2012 was just under 4.8 million—around 55% of the nearly 8.7 million jobs lost from February 2008 through February 2010. In addition to making up for these lost jobs, the U.S. economy needs to generate jobs to accommodate all the new entrants into the labor force. During the past decade, the labor force in the U.S. economy increased by an average of 1.3 million each year, according to the U.S. Bureau of Labor Statistics. Thus, approximately 6 million workers have been added since the start of the recession. All of

increased at an annualized rate of 5.8%—more than double its historical growth rate. However, during most of 2012, industrial output's robust growth rate stalled. Between February 2012 and November 2012, industrial output contracted at an annualized rate of 0.8%

Light vehicle sales (car and light truck sales) bottomed out at 10.4 million units in 2009. Light vehicle sales improved to 11.6 million units and 12.7 million units in 2010 and 2011, respectively. Sales improved further in 2012: They rose to 14.4 million units—up more than 13% from the previous year.

**In 2013, the growth rate of real GDP is expected to be 2.3%—an improvement from the projected 1.7% rate for 2012.**

these factors are reflected in the very high unemployment rate, which stood at 7.8% in the fourth quarter of 2012.

Movements in oil prices have contributed to pronounced swings in inflation. Oil prices (of West Texas Intermediate) increased from roughly \$85 per barrel in the fourth quarter of 2010 to about \$94 per barrel in the final quarter of 2011. This increase in part explains the rise in inflation, as measured by the Consumer Price Index (CPI), from 1.2% in 2010 to 3.3% in 2011. Oil prices rose further to over \$106 per barrel in the March 2012 before falling to around \$88 per barrel in December 2012. In part because of the fall in oil prices, the year-over-year rate of inflation eased to 1.7% in the third quarter of 2012. Outside of the energy sector, the slack in production, labor markets, and other parts of the economy has kept inflationary pressures low. Core inflation, which removes more volatile food and energy prices, is more reflective of the underlying slack in the U.S. economy than total inflation. Core inflation, as measured by the CPI, was 2.2% in 2011, and remained stable over the past year, with a year-over-year rate of 2.0% in the third quarter of 2012.

From mid-2009 until early 2012, the industrial sector had been leading the economic recovery. Between June 2009 and February 2012, industrial output

The housing sector contributed little to the economic recovery through the third quarter of 2012. Over the 13 quarters following the end of the Great Recession, residential investment contributed just 0.1 percentage points toward the overall economy's annualized growth rate of 2.2%. Housing starts fell from 0.90 million in 2008 to 0.55 million in 2009—about a third of what annual housing starts averaged during the 1990s. Housing starts edged higher to 0.58 million in 2010 and then to 0.61 million in 2011. That said, the housing sector's recovery finally seems to be gaining traction: The annualized rate of housing starts reached 0.77 million units for the first 11 months of 2012—up nearly 27% relative to the same period of 2011.

#### **Performance versus forecasts**

At the 2011 EOS, participants expected the economy's real GDP growth rate to be 2.0% in 2012. According to the consensus forecast from the most recent EOS, the growth rate of real GDP in the fourth quarter of 2012 relative to the fourth quarter of 2011 is estimated to be 1.7%—slightly lower than the rate predicted previously. (For the remaining comparisons of GDP components, annual values are calculated based on the consensus estimates for the fourth quarter of 2012 from the most recent EOS.) Real personal consumption expenditures

were accurately forecasted, but real business fixed investment came in weaker than expected. Real residential investment experienced a much more significant improvement than anticipated. The unemployment rate was expected to decline to 8.8% in the final quarter of 2012; at 7.8%, the actual fourth quarter rate recorded was a full percentage point lower. Inflation, as measured by the CPI, was predicted to average 2.4% during 2012—higher than the 2.0% rate now expected for the year. This gap is anticipated to occur even though oil's actual annual average of \$94.20 per barrel during 2012 was somewhat higher than its predicted annual average of \$92.25 per barrel. Light vehicle sales were predicted to come in at 13.4 million units in 2012—below the 14.4 million actually sold during the past year. Housing starts were predicted to rise to 0.66 million units in 2012; however, housing starts showed much more improvement, with the annualized rate of housing starts rising to 0.77 million units for the first 11 months of 2012. Similarly, real residential investment was forecasted to rise at a solid rate of 3.4%, but it is expected to have increased at a much stronger pace of 13.6%. One-year and ten-year Treasury rates were predicted to rise to 0.25% and 2.60%, respectively, by the end of 2012, but actually declined to 0.17% and 1.71%, respectively.

#### **Economic outlook for 2013**

The forecast for 2013 is for the pace of economic growth to be slightly above the historical average. In 2013, the growth rate of real GDP is expected to be 2.3%—an improvement from the projected 1.7% rate for 2012. The quarterly pattern reveals strengthening growth during the year. The forecasted growth rate of real GDP rises from an annualized rate of 2.0% in the first quarter of 2013 to 2.7% in the final quarter of the year. With the economic growth rate predicted to be only a bit above its long-term historical average, the unemployment rate is expected to remain quite high, edging down to 7.6% in the final quarter of 2013. Inflation, as measured by the CPI, is predicted to tick higher from an estimated 2.0% in 2012 to 2.1% in 2013. Oil prices are anticipated to rise somewhat,

averaging about \$94 per barrel in the final quarter of 2013. Real personal consumption expenditures are forecasted to expand at a rate of 2.3% in 2013. Light vehicle sales are expected to rise to 15.0 million units this year. Real business fixed investment is anticipated to record a solid growth rate of 3.5% in 2013. Industrial production is forecasted to see its growth improve to a rate of 2.7% this year.

The housing sector is predicted to continue to improve in 2013. Real residential investment is forecasted to increase at a rate of 9.4% in 2013. Housing starts are anticipated to rise—from a predicted 0.77 million units in 2012 to 0.95 million units in 2013. While better than the previous year, the anticipated 2013 level for housing starts would be just over two-thirds of the 20-year annual average of 1.39 million units.

The one-year Treasury rate is expected to tick up 2 basis points to 0.20% in 2013, and the ten-year Treasury rate is forecasted to increase 32 basis points to 2.02%. Both the trade-weighted U.S. dollar and the trade deficit (net exports of goods and services) are predicted to remain unchanged for the most part.

### Financial and consumer outlook

Carl Tannenbaum, Northern Trust, explained that following the Great Recession, many consumers have been repairing their household balance sheets—which has dampened spending growth and, in turn, limited the pace of the recovery. Although total household net worth in the United States has improved recently, it has been primarily on account of a rebound in the value of stocks, which are owned disproportionately by high-income households. For the vast majority of households, the greatest share of their wealth resides in their home equity, which has remained largely depressed.

Tannenbaum also highlighted other headwinds still facing the U.S. economy. While the unemployment rate has been decreasing, new hiring has lagged well behind the precedents set during previous recoveries. The average duration of unemployment currently stands at

40 weeks—more than two times its long-term historical average. Housing market conditions also remain mixed. Despite low mortgage rates and home prices, strict lending standards and high levels of student loan debt are still preventing some potential new home buyers from entering the market.

According to Tannenbaum, U.S. banks—in contrast with their European counterparts—are well capitalized and stable. However, banks' new loan volumes have been fairly low because of the uncertainty surrounding the regulatory and economic outlook. In closing, Tannenbaum said that despite risks to the U.S. economy—such as the federal fiscal issues and European financial situation—slow but steady economic progress is forecasted for 2013.

### Automotive outlook

Mary D'Ascoli, Toyota Motor North America Inc., stated that the auto sector has recovered significantly from the recession. New auto sales have rebounded from 10.4 million units in 2009 to a projected 14.3 million units in 2012; and they are expected to remain robust, primarily because of the record average age of vehicles on the road, the historically high prices of used vehicles, and continued U.S. population growth. In addition, she noted that the recent downsizing of the auto industry has helped increase its profitability. Although North America's auto industry once struggled with having excess capacity to produce vehicles with respect to consumer demand, it now manufactures them using 80% of its productive capacity—a rate higher than any other global region's.

D'Ascoli also said that automakers are being challenged to meet shifting consumer preferences. For instance, consumers are increasingly demanding higher fuel economy—which was the number one factor for them when choosing a vehicle in 2012, up from 22nd place in 2001. Reaching the next generation of car buyers has proven difficult. The share of new cars bought by 18–34 year olds has dropped sharply—from 17% in 2007 to 11% in 2012; in fact, 26% of 16–34 year olds did not even have a driver's license in 2010 (up from 21% in 2000). D'Ascoli

contended that to appeal to the younger demographic, automakers must produce cheaper, more fuel-efficient cars featuring in-vehicle Internet connectivity.

### Steel outlook

Robert DiCianni, ArcelorMittal USA, said that the manufacturing sector—particularly the steel-intensive industries—has recovered strongly from the recession. In 2012, the nonresidential construction sector, which consumes the most steel, outperformed expectations and registered a slight uptick in activity; however, significant improvements in this sector are not anticipated until at least 2014. In 2013, steel demand from most other sectors is expected to grow moderately, with the auto, residential construction, agriculture, and energy sectors leading the way. DiCianni stated that U.S. steel consumption is therefore forecasted to reach 110.0 million tons in 2013—slightly below the pre-recessionary level of 115.0 million tons.

Global steel consumption is expected to set another record in 2013 (1.46 billion metric tons) after reaching highs in 2010–12, according to DiCianni. Despite the optimistic global steel outlook, Europe's recession and China's slower

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growth in 2012 remain concerning. In Europe, auto and construction demand has declined, and companies are scaling back capital investments (e.g., purchases of machinery and buildings). The possibility of a European Union breakup still looms as well. DiCianni said the Chinese economy is expected to grow at a stronger pace in 2013, but questions remain on how much stronger relative to 2012.

### **Heavy machinery outlook**

Don Johnson, Caterpillar Inc., said that the heavy machinery industry, whose fortunes are closely tied to those of construction and mining, is expected to continue growing slowly in developed countries. Construction activity in the United States has declined in nine of the past 12 years, and construction activity in Europe has been similarly disappointing. According to Johnson, U.S. construction activity is expected to improve moderately in 2013. He cited several positive trends in important economic indicators, such as housing starts, freight shipments, and light vehicle sales, as evidence of a growing economy, which bodes well for increased construction activity. With Europe in recession, little improvement in construction activity is expected there. In contrast, he noted that construction activity is expected to grow strongly in developing countries, particularly China and Argentina, as it has in recent years.

Johnson also explained that declining commodity prices have hurt global mining activity. Although most metal commodities (e.g., copper, gold, and iron ore) still have favorable prices for miners, they have begun delaying investment plans as their profits decrease. As in the rest of the world, mining production in the United States has been sluggish, although production of both metals and nonmetals is expected to increase moderately in 2013.

### **Energy outlook**

Loren Scott, of Loren C. Scott & Associates Inc., argued that hydraulic fracturing, which releases oil and natural gas from deep shale formations, has led to enormous economic benefits for the United States. Domestic oil production has increased 25% between 2008 and 2012 (the highest growth rate in the world over that period), which reduced U.S. oil imports by \$75 billion, according to Scott. Additionally, Scott said that natural gas production in the United States has skyrocketed and will continue to grow. For one, natural gas is a major input for many manufacturing products, such as chemicals, fertilizers, and tires. For another, natural gas is expected to become increasingly important in electric power generation as a lower-cost, lower-emission alternative to coal.

Demand for natural gas from overseas is predicted to boost U.S. production as well, said Scott. The favorable spread

between the U.S. market price (\$2–\$3 per MMBtu) and the export price (\$18 per MMBtu) should be a sufficient incentive to overcome the significant infrastructure investment required to export natural gas. Scott also predicted this price differential to persist. Although shale formations exist all across the globe, the United States has a sizable production advantage over other countries because of its technological know-how and existing infrastructure. Additionally, opposition from environmental groups is far stronger in other nations; e.g., several European nations with large shale deposits have banned hydraulic fracturing because of environmental and public health concerns.

### **Conclusion**

In 2012, the U.S. economy expanded at a slow pace. The economy in 2013 is forecasted to grow at a slightly faster rate than it did in 2012, but this pace is not expected to be strong enough to substantially reduce the economic slack built up during the Great Recession. The housing sector is predicted to continue to improve in 2013, as are light vehicle sales. The unemployment rate is expected to edge lower by the end of 2013, but remain extremely high by historical standards; and inflation is predicted to remain largely unchanged.

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<sup>1</sup> Also see [www.chicagofed.org/webpages/events/2012/economic\\_outlook\\_symposium.cfm](http://www.chicagofed.org/webpages/events/2012/economic_outlook_symposium.cfm).