

# NC STATE ECONOMIST

COLLEGE OF AGRICULTURE & LIFE SCIENCES

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## 2016 ECONOMIC OUTLOOK: A STRONGER BEAT TO THE ECONOMY?

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### National Economy: A Turning Point in 2015

Gains in the national economy were strong enough in 2015 that the Federal Reserve made a turn in their monetary policy. Late in the year, the Federal Reserve (the “Fed”) announced the first increase in their key interest rate—the federal funds rate—since before the Great Recession of 2008-2009. The Fed cited the strength in the economy, and no signs of an impending new recession, as reasons for their move. Analysts also think the Fed wants to moderate recent strong gains in asset markets—such as the stock market—in order to avert an asset bubble. Asset bubbles are often forerunners to a recession.

A look at key economic data in Table 1 supports the Fed’s assessment of reasonable growth in the economy for 2015. Growth of real GDP (gross domestic product, adjusted for inflation) was stronger than the average over the period since the end of the recession (2010-2014), and approached the twenty year average from 1990-2010. A similar pattern was seen for real GDP growth per capita (per person). Especially bullish were strong gains in both real personal income and real personal consumption per capita; the figures for 2015 were above both the post-recessionary average (2010-2014) and the twenty year average (1990-2010).

The national labor market also posted post-recession improvements. The “headline” unemployment rate—the rate quoted in the

media—fell during the year and approached 5% by year’s end. Gains in the labor force and in both employment counts (household and payroll) equaled or exceeded post-recessionary averages. Inflation continued to be a non-issue. The “core” CPI (Consumer Price Index, excluding food and energy) indicated that inflation was at the Fed’s preferred 2% rate, and that the all-item rate lay well below the Fed’s target. The all-item rate was clearly impacted by the sharp drop in oil and gasoline prices. Also, interest rates were at or near historical lows in 2015, reflecting both the low inflationary environment and the Fed’s continuing accommodative posture.

Key business sector indicators were also upbeat. Although relative business investment was below the recent (1990-2010) historical average, there was a gain from the post-recessionary period (2010-2014). The same trend was seen for labor productivity. The housing market continued to rebound. The stock market’s gains were considerably trimmed down in 2015 compared to the previous few years; but this result was not surprising considering the market has almost tripled since the bottom of the recession. An international “vote of confidence” was registered for the U.S. economy with the strong gain in the dollar’s value. Since a stronger dollar makes U.S. exports more expensive, a downside of this “vote” was a slight reduction in exports. But with continued domestic oil

Table 1. Performance and Forecasts of the U.S. Economy

	1990-2010 annual average	2010-2014 annual average	2015 <sup>1</sup>	2016 (projected)
<b>GENERAL</b>				
Real GDP growth rate	2.5%	2.0%	2.2%	2.5%
Real GDP per capita growth rate	1.5%	1.2%	1.4%	1.5%
Real personal income per capita growth rate	1.7%	1.0%	3.1%	1.6%
Real consumption per capita growth rate	1.8%	1.3%	2.4%	2.0%
Headline unemployment rate	5.8%	8.0%	5.0% <sup>2</sup>	4.7%
Labor force growth rate	1.0%	0.4%	0.6%	0.7%
Household (HH) employment growth rate	0.8%	1.4%	1.4%	1.3%
Payroll jobs growth rate	0.9%	1.8%	1.9%	1.7%
All- item CPI inflation rate	2.5%	1.7%	0.5%	2.0%
Core CPI inflation rate	2.4%	1.9%	2.0%	2.0%
3-month Treasury-bill rate	3.5%	0.1%	0.2%	1.5%
10-year Treasury-note rate	5.5%	2.5%	2.3%	2.8%
<b>BUSINESS</b>				
Equipment investment, % of GDP	6.3%	5.6%	5.7%	6.0%
Labor productivity growth rate	2.5%	0.3%	1.7%	1.8%
Residential housing price growth rate	3.4%	1.5%	5.6%	4.0%
Residential housing starts growth rate	6.3% <sup>3</sup>	-11.2% <sup>4</sup>	8.7%	11.0%
Dow-Jones Industrial Avg growth rate	7.7%	10.4%	1.1%	3.0%
Trade-weight dollar index	90.6	85.0	106.4	112.0
Net trade balance, % of GDP <sup>5</sup>	-2.9%	-3.4%	-2.9%	-3.1%
<b>HOUSEHOLDS</b>				
Population growth rate	1.2%	1.2%	1.0%	1.3%
Real median HH income growth rate	0.08%	0.07%	5.3%	1.5%
Real hourly earnings growth rate	n/a	0.3%	1.9%	1.5%
Average weekly hours	n/a	34.4	34.6	34.5
HH debt, % of GDP	75.0%	83.9%	80.0%	81.0%
HH debt payment, % of disposable income	11.8%	10.6%	10.1%	10.2%
Savings rate, %	5.4%	5.8%	5.2%	5.0%
<b>FISCAL POLICY</b>				
Federal budget deficit, % of GDP	2.5%	6.1%	2.4%	2.3%
Federal debt, % of GDP	62.8%	97.1%	100.5%	98.5%
Federal interest payments, % of GDP	2.2%	1.4%	1.2%	1.3%
<b>MONETARY POLICY</b>				
Federal funds rate, %	3.82% <sup>6</sup>	0.08% <sup>7</sup>	0.15%	1.00%
Money supply growth rate	3.1% <sup>6</sup>	11.2% <sup>7</sup>	7.5%	5.0%
Excess reserves growth rate	0.4% <sup>6</sup>	181.8% <sup>7</sup>	-0.5%	-1.0%
Money velocity growth rate	0.5% <sup>6</sup>	-3.9 <sup>7</sup>	-2.0%	0.3%

<sup>1</sup> year over year based on the latest data; <sup>2</sup> November; <sup>3</sup>1990-2006; <sup>4</sup> 2006-2014; <sup>5</sup> '-' indicates a trade deficit; <sup>6</sup> 1990-2007; <sup>7</sup> 2007-2014

**Sources:** Federal Reserve Bank of St. Louis; U.S. Dept. of Commerce; author's forecasts

production reducing the need for imported foreign oil, the trade deficit maintained its moderate level.

Households continued to improve their economic position in 2015. Real median household income grew by 5.3%, well above both the twenty year average and the post-recessionary average. Real hourly earnings increased more than in the years since the recession, and work hours also edged up. Household debt relative to GDP, which almost reached 100% prior to the Great Recession, moderated close to the 1990-2010 annual average. Low interest rates also allowed households to post a thirty-year low in their debt service payments as a percent of disposable income. The personal savings rate, which had fallen into negative territory prior to the recession, continued to register above 5%.

With a stronger economy, the fiscal situation of the federal government became less unbalanced. As a percent of GDP, the deficit in 2015 was smaller than the 1990-2010 annual average, and well under the average for 2010-2014 when fiscal policy was used to stimulate economic growth. The relative size of the total federal debt declined slightly in 2015. And again compliments of low interest rates, the carrying cost of the federal debt (federal interest payments as a percent of GDP) in 2015 was under the post-recessionary average and just over half of the annual average posted in the two decades from 1990 to 2010.

After almost a decade of first attempting to stop the economy's decline during the Great Recession and then trying to stimulate the economic recovery, monetary policy operated by the Federal Reserve turned the corner in 2015. Fed policy was enormously accommodative during and immediately after the Great Recession. Table 1 shows the federal funds rate—one of the Fed's key policy tools—averaged 3.8% during 1990-2007, but was virtually zero from 2007 to 2014. Likewise, the annual growth rate in the money supply—another important tool used by Fed

policymakers—almost tripled between the two periods. Besides the weakness of the economy, these actions didn't spark the higher inflation that many feared for two reasons: the unprecedented increase in excess reserves held at the Fed, and the dramatic drop in money velocity. The increase in excess reserves was a way for the Fed to create money as a backstop for the banks, but to keep that money at the Fed so as not to elevate prices. The decline in money velocity reduced the ability of dollars in circulation to generate higher inflation.

At the end of 2015 the Fed announced a modest increase (0.25 percentage points) in the federal funds rate, the first of many expected rate hikes. Growth rates in both the money supply and excess reserves moderated in 2015, and the reduction in money velocity was likewise more modest. All these moves signaled a shift away from stimulative policies introduced by the Fed over the past few years.

### The National Economy in 2016

The last column in Table 1 presents forecasts for the national economic indicators in 2016. In general, the forecasts are upbeat and suggest a national economy growing at a slightly faster pace than in 2015. Among the 'General' measures, the biggest changes will be in inflation and interest rates. Oil prices will stop falling—and may even rise modestly—in 2016, which will cause the all-item CPI rate to be closer to 2%, as compared to the 0.5% rate in 2015. Higher measured inflation will reduce some of the real per capita gains in personal income and consumption. As a result of the Fed's tightening of interest rates, short-term rates will undoubtedly move higher. Long-term rates will also move up due to higher expected future inflation rates, along with expectations that the Fed will push interest rates higher over a multi-year period.

The biggest change in the 'Business' environment will be an increase in the rate of housing

starts and a moderation in the rate of housing price increases. The stock market will gain—but only slightly—and the dollar will continue strengthening. The latter will present challenges for the manufacturing sector and keep the GDP growth rate from being even higher than 2.4%.

With the Fed's interest rate moves, 'Households' will see higher borrowing costs in 2016. This will cause the relative size of household debt payments to increase and the savings rate to fall. But more limited household borrowing will mean only a small increase in the relative size of household debt. An acceleration in household formation will boost GDP growth.

With regard to 'Fiscal Policy', faster economic growth will produce larger federal tax revenues, which in turn will keep lids on the relative sizes of both the budget deficit and national debt. However, higher interest rates will mean a rise in the relative size of federal interest payments. If the Fed continues raising interest rates beyond 2016, the impacts on financing the national debt will become a prominent issue.

The Fed is now on an announced track to be less stimulative in its monetary policy. The federal funds rate is forecast to jump to 1.0% by the end of 2016. Money supply growth will moderate and excess reserves will slightly contract. A faster paced economy with higher interest rates will accelerate money velocity.

### The "R" Word

The current economic expansion, which began in mid-2009, is already longer than all but three of the eleven post-World War II expansions. Hence, there is understandable concern about the imminent possibility of a new recession.

Although no economic forecast is absolutely certain, all signs point to no recession in 2016. However, historical precedent suggests a likely

recession before the end of the decade. While the next recession will not be as severe as the Great Recession of 2008-2009, it will require retrenchment by households and businesses for at least half a year. The best guarantee of a moderate recession is modest debt loads by households and businesses going into the downturn.

### The North Carolina Economy: Ahead of the Pack, But Not Everywhere Nor for Everyone

Table 2 shows the recent performance of the key indicators of the North Carolina economy. Compared to both the longer (1997-2010) period and the more recent post-recessionary period (2010-2014), North Carolina performed much better on all measures (1997 is the beginning year of the longer period due to the unavailability of state GDP data prior to that year). In particular, both real GDP and real GDP per capita in North Carolina grew by 50% more than the national average. Labor force growth in North Carolina was an astonishing five times faster than the national rate, and job growth from both the household survey and the payroll survey were stronger than the comparable national growth rates. The state's rapid labor force growth was likely due to immigration of new households from other states as well as a return of "discouraged workers" (unemployed individuals who had stopped looking for work and therefore were not counted as officially unemployed) to the active labor force. The fact that the labor force grew faster than employment in North Carolina explains the rise in the state jobless rate during some months in 2015.

The state is expected to out-perform the nation again in 2016. The forecasted 2.1% growth in payroll jobs will boost non-farm job numbers by close to 90,000. The state's "headline" unemployment rate will drop to near 5% by year's end. Yet job growth will not be evenly spread among sectors and salaries.

**Table 2. Relative Performance of the North Carolina Economy**

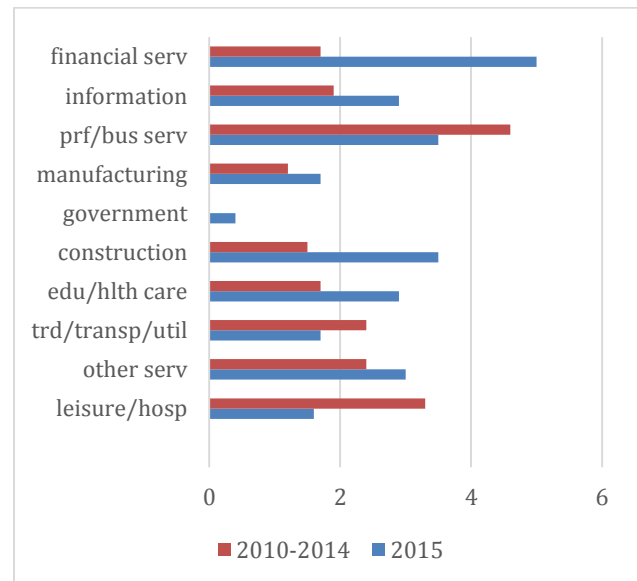
	1997-2010 avg		2010-2014 avg		2015		2016 Forecast	
	NC	U.S.	NC	U.S.	NC	U.S.	NC	U.S.
Real GDP growth rate	2.5%	2.1%	1.3%	2.0%	3.4%	2.2%	3.5%	2.4%
Real GDP growth rate per capita	0.8%	1.1%	0.2%	1.2%	2.7%	1.4%	2.7%	1.5%
Headline unemployment rate	6.0%	5.8%	8.2%	8.0%	5.5%	5.0%	5.1%	4.7%
Labor force growth rate	1.1%	0.9%	0.06%	0.04%	3.2%	0.6%	3.0%	0.7%
Household employment growth rate	0.6%	0.5%	1.4%	1.4%	3.1%	1.4%	2.9%	1.3%
Payroll jobs growth rate	0.4%	0.4%	1.9%	1.8%	2.2%	1.9%	2.1%	1.7%

**Sources:** U.S. Dept. of Commerce; author’s forecasts

Figure 1 shows the annual percentage increase in employment in major economic sectors for the 2010-2014 and 2015 time periods. The economic sectors are arranged in declining order by average salary. Financial services, the top paying sector, lies at the top of the chart while the sector with the lowest average salary (leisure/hospitality) is at the bottom. During both periods the fastest growth generally has been in the top and lowest paying sectors, while the slowest growth has been in the middle paying sectors. This pattern—one that has been observed at the national level, and is one contributor to widening income inequality among households—is projected to continue in 2016.

For decades, a geographic divide in economic performance has prevailed in North Carolina. Figure 2 shows annual average payroll job growth for the 2010-14 and 2015 periods in the state’s regions. In 2010-2014, the metro areas of Asheville, Charlotte, Durham, Raleigh, and Wilmington clearly outpaced other regions in growth. In 2015, the leaders were Charlotte, Durham, Greensboro, Winston-Salem, and—perhaps surprisingly—rural North Carolina.

**Figure 1. Annual Percentage Change in NC Payroll Employment by Sector**



However, even with the relatively positive performance of rural regions of the state in 2015, broad economic forces still point to further urbanization and faster population and job growth in metropolitan regions of North Carolina in the years ahead.

Figure 2. Annual Percentage Change in Payroll Employment in NC Regions

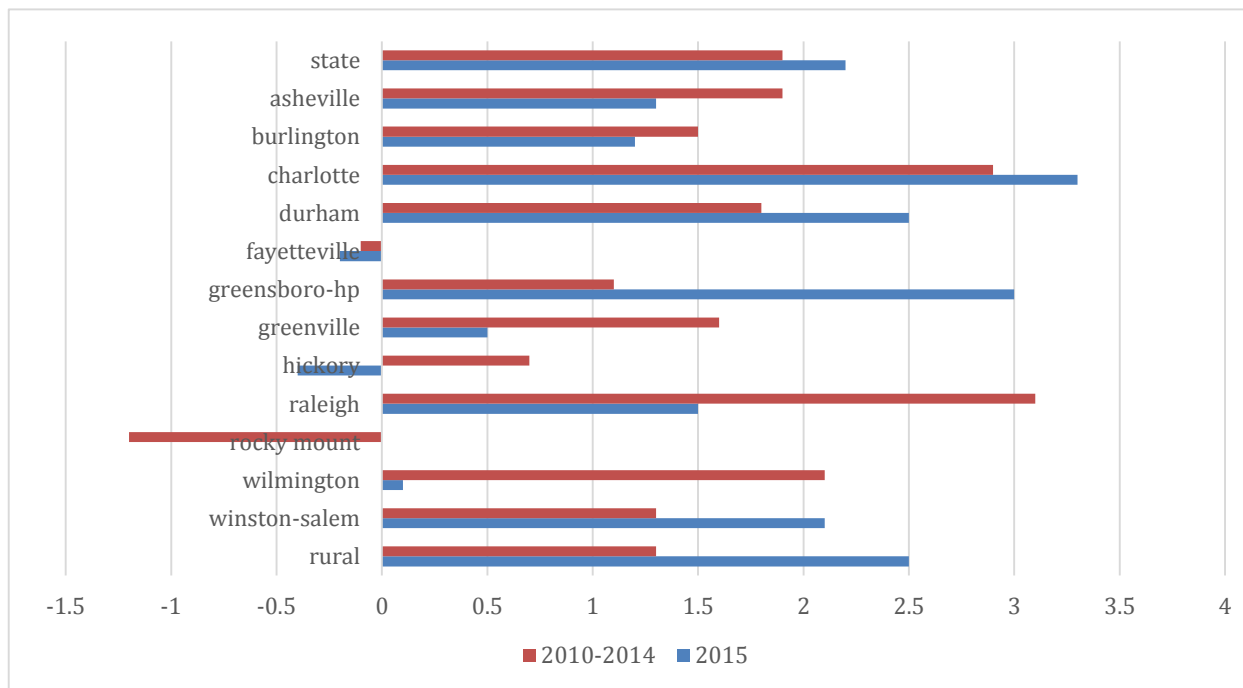


Table 3. Regional Unemployment Rate Forecasts, % (not seasonally-adjusted)

Region	October 2015 (Actual)	December 2016 (Forecast)
Asheville	4.4	4.1
Burlington	5.1	4.9
Charlotte	5.3	4.2
Durham	4.8	4.5
Fayetteville	7.3	6.9
Greensboro-High Point	5.7	5.3
Greenville	5.9	5.4
Hickory	5.5	5.3
Raleigh	4.7	4.3
Rocky Mount	7.7	7.4
Wilmington	5.3	4.8
Winston-Salem	5.2	4.8
Rural areas	6.2	5.8

Regional unemployment rate forecasts for the state are given in Table 3. All regions are expected to register lower jobless rates at the end of 2016 as compared to late 2015. The metro regions of Asheville, Burlington, Charlotte, Durham, Raleigh, Wilmington, and Winston-Salem will have year-end 2016 jobless rates under 5%. This rate has traditionally been considered “full-employment.” Due to military downsizing, Fayetteville is forecast to end 2016 with an unemployment rate near 7%. Issues related to restructuring their economies for the 21st century will keep Rocky Mount’s jobless rate above 7% and rural North Carolina’s rate near 6% in 2016.