

North Carolina's Gross Domestic Product

Introduction

In 2015, the state's Gross Domestic Product (GDP) was just under \$439 billion, making it the 10th largest economy in the country. In relation to North Carolina's comparison states – Alabama, Georgia, South Carolina, Tennessee, Texas, and Virginia – the state has been in the middle of the pack in Real GDP growth following the Great Recession. Comparing annual GDP suggests that the state is not improving as quickly as the country. However, looking at quarterly GDP which provides a more current picture, it appears that over the past year (2Q 2015 to 2Q 2016) the state has been improving, and outpacing the nation in growth. This economic snapshot will provide a view of North Carolina's GDP, and compare it to the United States' GDP and North Carolina's comparison states, as well as provide an explanation of what GDP is, and why analysts use it as a measure of economic activity. In addition, this snapshot will discuss in more detail the following key findings:

- North Carolina's GDP growth has underperformed relative to the average for the Southeast US; however, improvements have been made more recently.
- Over the last 10 years, per capita Real GDP for the state has declined 5.9% while the nation has seen an increase of 2.4%.
- Since 2005, North Carolina's Real GDP has grown slower than the nation.
- Over the past five years, 2010 to 2015, North Carolina's Real GDP grew slower than the United States' (6.4% to 10.0% respectively).
- More recently, the state Real GDP grew 2.0% from 2014 to 2015, which was below the growth experienced by the nation (2.5%).
- The first half of 2016 appeared more positive for NC, with initial Real GDP estimates 2.3% higher than in 2015 – which was greater than the US average of 1.3% and Southeast average of 2.2%.

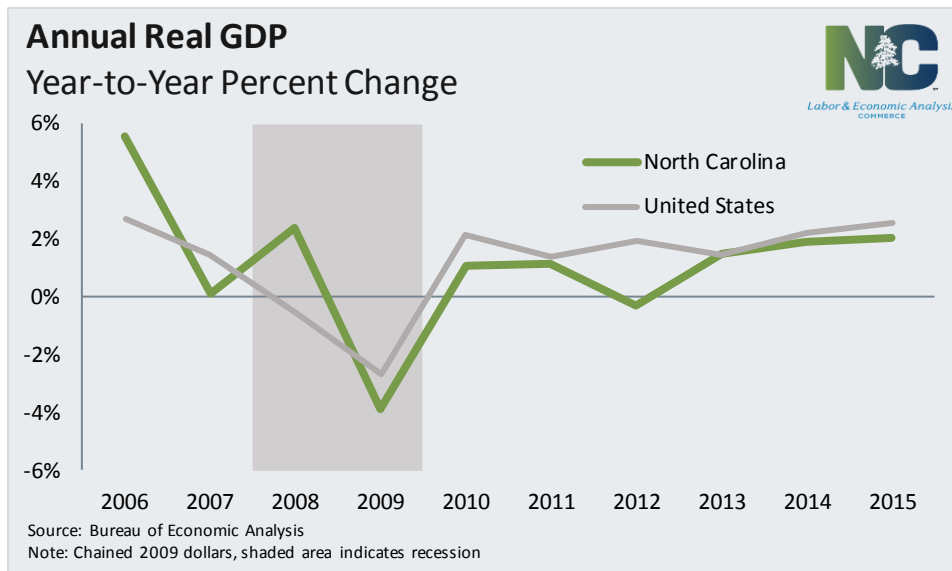
Indicator Overview

GDP is a measure of the size of a region's economy, and GDP growth serves as a broad evaluation of how that region's economy has performed over time.¹ This is measured on a quarterly and annual basis by the Bureau of Economic Analysis (BEA) and can be examined both at the national and state level. Additionally, there are typically three types of analysis that researchers like to use. When measuring over time, analysts use Real GDP as opposed to Nominal GDP. Real GDP takes inflation into account, whereas Nominal GDP is a point in time measure of the current dollar value of those goods and services. Occasionally, analysts will use per capita GDP to examine the differences between regions. Per capita measurement is preferable for comparing geographies as it takes total GDP and divides by the population of an area within a given year, giving a more comparable measure between regions.

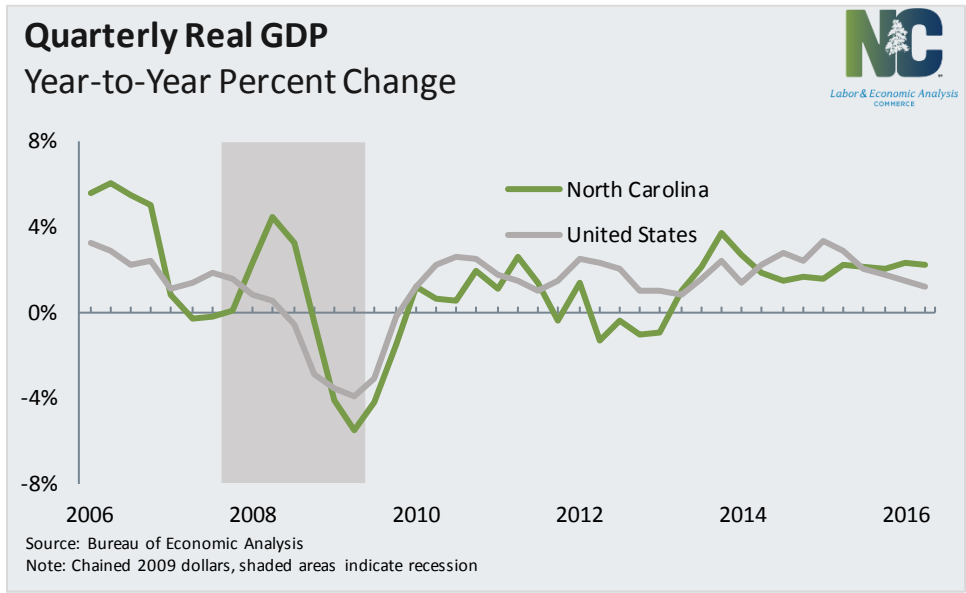
¹ Although GDP is a commonly referred to measure of economic activity, there are some criticism of relying solely on this – GDP does not include measures of economic distribution, harm done by growth such as increased pollution, work performed outside of the market (i.e. watching a friend's child), etc.

North Carolina's GDP

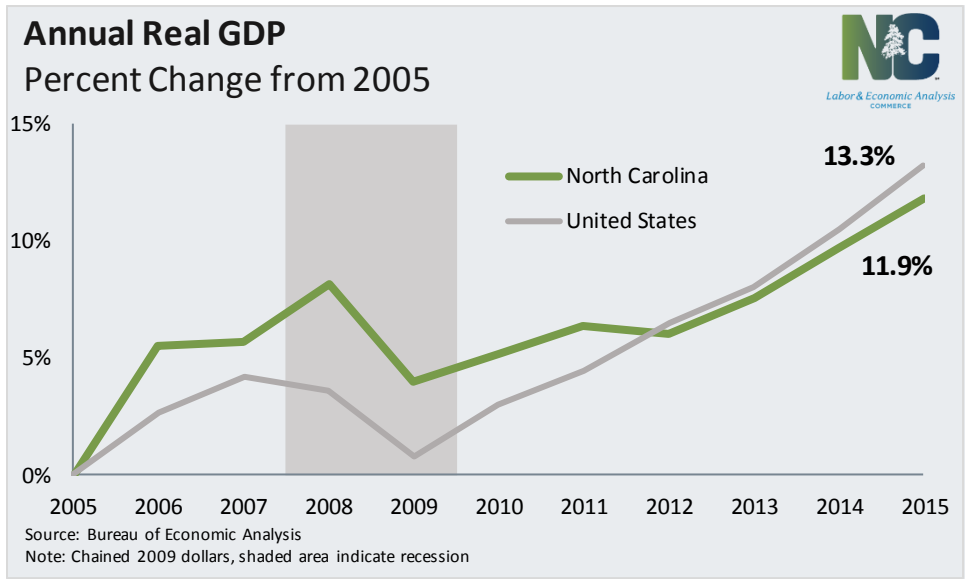
Overall, changes in North Carolina's Real GDP have roughly followed the country. During the Great Recession in 2008 and 2009, the state's GDP fell close to four percent from the previous year while the country's GDP shrank by less than three percent. The state's economy also shows a slight lag when entering recessions. During the beginning of the recession (2007 to 2008), North Carolina's economy continued to grow by 2.4%, while the nation saw a decline (0.5%). Both saw their GDP bottom out in 2009. If we benchmark the state's and nation's performance by looking at their growth since 2005, the United States has grown 13.3%, while the state has grown by 11.9%. In 2012, North Carolina experienced a 0.3% decrease in GDP from the previous year, while the nation continued to see relatively steady growth at around two percent.



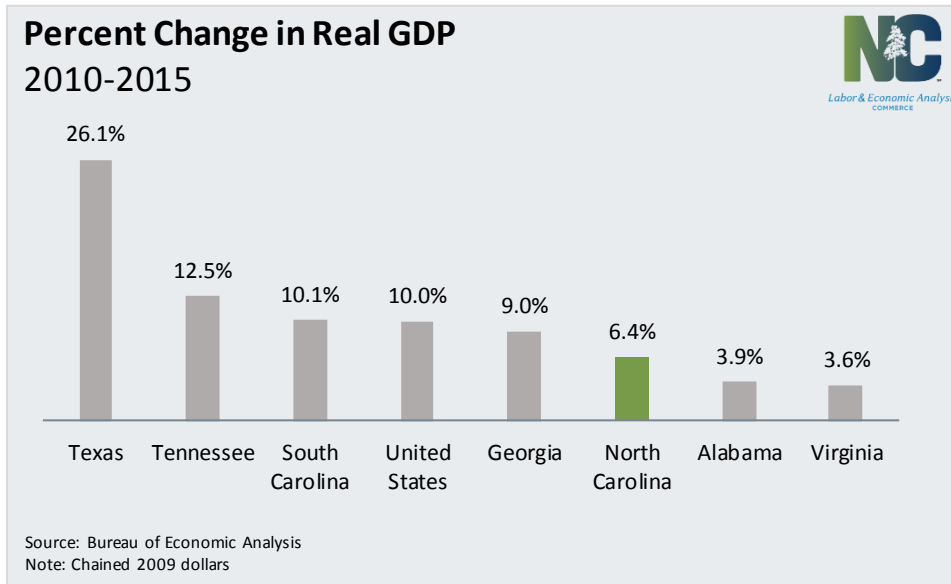
Another way to examine the long run changes in Real GDP is to look at year-to-year changes on a quarterly basis. This allows a better comparison of how the selected area is performing during the same time period from the prior year, and provides a more up-to-date comparison. Because this data is reported on a quarterly basis, it can be a bit “noisier” and display more fluctuation compared to annual data, and is subject to revision on a quarterly basis by the BEA. When comparing the nation and North Carolina using this data, North Carolina appears to be out-performing the country over the past year. From 2015 Q2 to 2016 Q2, North Carolina's GDP increased by 2.3%, while the United States saw a modest increase of 1.2%.



It is also beneficial to examine changes in GDP benchmarked from a point in time. By looking at the percentage change from 2005 for each year up to 2015, we are able to decipher the overall growth in the economy, and how they compare to other regions. When benchmarking to a specific year, interpretations of how regions are doing compared to larger, or smaller, economies are easier to make. Since 2005, North Carolina’s economy has grown by \$46.6 billion (11.9%) but has underperformed compared to the nation (13.3%).

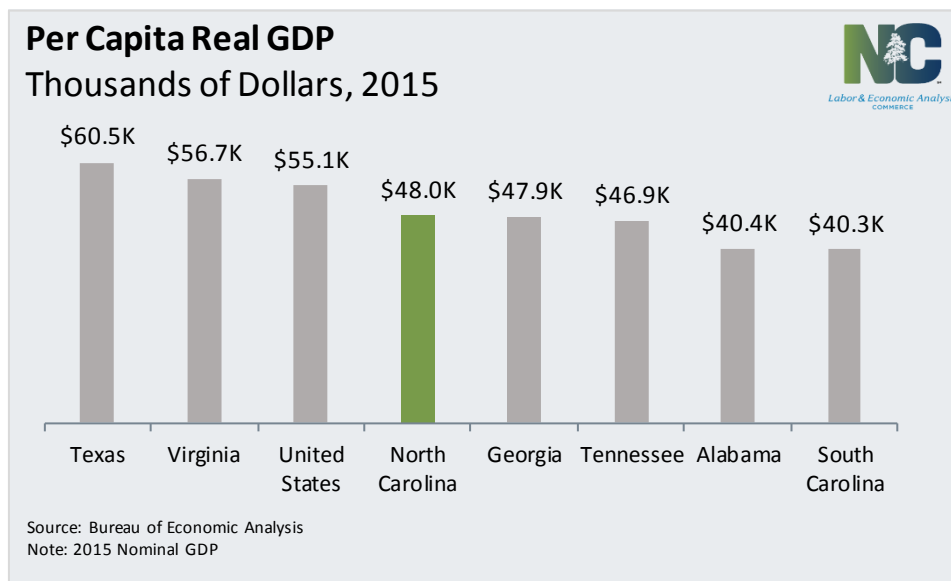


Over the past year, North Carolina’s GDP growth ranked 19th in the country (tied with Maryland, Virginia, New Jersey, and Montana) out of all states. From 2010 to 2015, the state has been near the middle of the pack in terms of Real GDP growth. North Carolina’s 6.4% growth rate in Real GDP is significantly lower than the United States’ (10.0%) as well as several southern competitor states (Texas, Tennessee, South Carolina, and Georgia).



However, when looking at per capita GDP – typically a better comparative measure across states – North Carolina’s \$43,680 ranked 33rd (including the District of Columbia). This places North Carolina higher than some of its nearby states such as Georgia, South Carolina, and Tennessee.

The chart below displays per capita GDP in 2015 for North Carolina in relation to its comparison states. North Carolina outpaces most of these states, but notably has a smaller per capita GDP than the nation. Texas and Virginia are the only comparison states to have a higher per capita GDP than the nation.



Manufacturing contributed the most (19.5%) to North Carolina’s GDP in 2015. This has been true historically, but its impact on GDP has been shrinking. Manufacturing has seen its share of total GDP shrink from 21.6% in 2010. Meanwhile, industries such as Professional and Business Services, as well as Finance, Insurance, and Real Estate have seen their share of total GDP increase.

While Manufacturing was the largest contributor to overall GDP in 2015, three other industries – Finance, Insurance, and Real Estate (18.2%), Government (13.3%), Professional and Business Services (12.1%) – also contributed significantly to the state.

Nondurable Goods manufacturing has been the main contributor to Manufacturing’s declining share of GDP. Over the last five years, Nondurable Goods – such as food, chemical products, tobacco – have seen their share decline by 2.5 percentage points, while Durable Goods – furniture, electronics, transportation equipment – has actually increased by 0.5 percentage points. Additionally, Professional and Business Services’ share grew by 1.8 percentage points while Government saw its contribution to total GDP decline by 1.7 percentage points. During recessionary periods, Manufacturing can be hard hit. In 2008, Manufacturing GDP declined 4.5% from the previous year. This was largely due to a 12.1% drop in Durable Goods manufacturing (Nondurable Goods increased 4.9% during this period).

Share of Total GDP in North Carolina, 2015

| Industry | 2010 % of GDP | 2015 % of GDP | Change in Share |
|---|------------------|------------------|--------------------|
| Manufacturing | 21.6% | 19.5% | -2.1 |
| Finance, insurance, real estate, rental, and leasing | 18.0% | 18.2% | 0.2 |
| Professional and business services | 10.4% | 12.1% | 1.7 |
| Educational services, health care, and social assistance | 7.8% | 8.0% | 0.2 |
| Retail trade | 5.4% | 5.6% | 0.2 |
| Wholesale trade | 5.3% | 5.9% | 0.6 |

Source: Bureau of Economic Analysis

North Carolina’s industrial composition in GDP terms is fairly similar to that of the US with a few notable exceptions - Banking (Federal Reserve Banks, Credit Intermediation, and Related Services) and Manufacturing. The Manufacturing sector (nearly 20% of NC’s GDP), is significantly more valuable to the state’s economy than the nation’s (where it comprises only 11.9% of GDP).

Conclusion

North Carolina’s GDP has not grown at the same rate as the nation’s and has been middle-of-the-road compared to its comparison states. Since 1997, the state has experienced moderate growth, with the majority of its GDP growth coming in the first few years from 2001 to 2008 leading up to the recession. While North Carolina’s GDP underperformed the nation and several competitor states during and the immediately following the recession, the state has seen a marked improvement over the last year. It is unclear if this will be a continuing trend, as the state’s quarterly GDP growth has jockeyed positions with the nation’s. North Carolina also has a large Manufacturing economy which has seen its share of GDP decline over time. Largely, this has been due to declines in Nondurable Goods manufacturing, while at the same time Professional and Business Services have begun to contribute more to GDP. Overall, there are areas for improvement in North Carolina’s GDP, but the majority of growth difficulties have come since the 2008 recession, which will hopefully dissipate over the next several years as economic conditions continue to improve.