The Economy is Slowing to Trend Growth Rates

William F. Fox, Director
August 27, 2019
The Current Expansion is the Longest in History

Where We are Today: Mar 1991-March 2001

- Mar 1991-Dec 1969
- Nov 1982-Jul 1990
- Nov 2001-Dec 2007
- Mar 1975-Jan 1980
- Oct 1949-Jul 1953
- May 1954-Aug 1957
- Oct 1945-Nov 1948
- Nov 1970-Nov 1973
- Apr 1958-Apr 1960

9/3/2019

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BOYD CENTER FOR BUSINESS AND ECONOMIC RESEARCH
GDP Continues to Rise, though More Slowly than in 2018

Percentage Change, Previous Quarter SAAR

02q2 03q2 04q2 05q2 06q2 07q2 08q2 09q2 10q2 11q2 12q2 13q2 14q2 15q2 16q2 17q2 18q2 19q2

-10.0 -8.0 -6.0 -4.0 -2.0 0.0 2.0 4.0 6.0 8.0

9/3/2019
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Deficits Increased Dramatically and will Rise Rapidly in the Future (billions)

Source: IHS
The Stock Market has been Volatile
(Daily Percent Change in Dow Jones Closing Price)
The Yield Curve has Flattened and Occasionally Inverted

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August, 201
The Trade Deficit Continues to Worsen Despite the Tariffs – How Much is this Harming Economic Growth?
Consumers are Driving the Expansion

[Graph showing percentage change from the same quarter previous year from 1994 to 2019]
Household Formation has Slowed Dramatically
Housing are Low for an Expansion with Low Interest Rates
Light Vehicles Sales at Expansion Levels, but are Slowly Falling
E-Commerce Sales are Rising Very Rapidly
Sales Tax Collections Generally Strong
(Quarter Ending June 2018 to June 2019)

- TOTAL SERVICES: 17.5%
- Eating and Drinking Places: 12.1%
- Building Materials: 6.2%
- Grand Total: 5.8%
- Auto Dealers and Service Stations: 5.7%
- Misc Retail Stores: 4.2%
- Apparel and Accessory Stores: 3.5%
- Furniture and Home Furnishings: 3.4%
Business Investment has not Responded Strongly to the Tax Cuts
Interest Rates are Low; Inflation is Near 2 Percent
Employment Growth is also Slowing

Percentage Change, Same Month Last Year

Tennessee

U.S.

TN
July-19
1.69%

U.S.
July-19
1.53%

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Percentage of total U.S. population, by age group

First projection year is 2016, at which point lines are dotted.
Tennessee Unemployment Rate much Lower than the US Rate

U.S. July-19
3.7

TN July-19
3.5

Tennessee

U.S.
Full Recovery from the Great Recession in Most Sectors
(Tennessee, July 2019 as a Share of December 2007)

- Leisure & Hospitality: 128.0%
- Professional & Business Services: 127.8%
- Education & Health Services: 123.3%
- Financial Activities: 115.2%
- Other Services: 113.6%
- Total Nonfarm: 111.0%
- Government: 104.5%
- Trade, Transportation, Utilities: 104.0%
- Manufacturing: 97.1%
- Mining, Logging, Construction: 95.1%
- Information: 90.1%

Growth Rates Differ Widely Across Tennessee (Quarter Ending July 2018 to July 2019)

- Clarksville: 2.4%
- Jackson: 2.3%
- Nashville-Davidson--Murfreesboro--Franklin: 2.1%
- Knoxville: 1.9%
- TENNESSEE: 1.7%
- Kingsport-Bristol-Bristol, TN-VA: 1.7%
- Chattanooga: 1.6%
- Cleveland: 1.6%
- Memphis, TN-MS-AR: 1.4%
- Morristown: 1.0%
- Johnson City: 0.8%
Tennessee Population Growth Fastest around Nashville, 1990–2018

Tennessee: 1.17%
United States: 0.97%

*compound annual growth rate
TN Per Capita Income is Falling as a Percent of the U.S.
Per Capita Personal Income Falling in Most Parts of the State, but not Nashville

![Graph showing the share of U.S. per capita personal income from 1971 to 2017. The graph compares the performance of Chattanooga MSA, Knoxville MSA, Memphis MSA, and Nashville MSA. The Nashville MSA shows a consistent increase above 100% of the share of U.S. per capita personal income.]
Tennesseans Have Lower Educational Attainment Levels, but We are Making Gains

High school graduates or higher

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<th>US</th>
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<td>2012</td>
<td>83.9</td>
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<td>2017</td>
<td>86.5</td>
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Bachelor’s degree or higher

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<td>2017</td>
<td>26.1</td>
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Tennessee 9th Grade Pipeline

For every 100 ninth-graders in Tennessee:

- 86 graduate high school in four years
- 56 enroll in a postsecondary institution
- 23 graduate college within six years of high school
TN S & L Tax Revenue as a Share of the Economy is one of the Lowest in the Nation

U.S. = 10.3%
Tennessee = 8.0%

8.0% or less (4)
8.0% to 10.0% (21)
10.0% to 12.9% (23)
13.0% and greater (3)
Tennessee Tax Revenues have Fallen Relative to the Economy

![Graph showing Tennessee Tax Revenues and Tax Revenues as Share of PI over years from 1988 to 2022. The graph illustrates a trend where tax revenues and their share of personal income have increased over time.]
Tennessee Tax Revenues Performed Well During the Expansion that lasted through the Haslam Adm.

- Personal Income Growth 4.1 %
- Total Tax Revenue Growth 4.7 %
- General Fund Growth 5.3 %
TN Tax Revenues Reduced by Tax Cuts

- **Tax Reductions**
  - Inheritance and gift taxes eliminated - $110 million
  - Hall Income Tax eliminated - $300 million
  - Sales tax on food lowered - $220 million
- **Transfer from general to highway fund**
  - Corporate taxes - $115 million
- **Wayfair legislation is the exception, potentially raising $100 million**
- **State looking at further changes in corporate taxes**
Tennessee Tax Revenues if Recession is Mild

Tax Revenues (in millions)

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<th>Year</th>
<th>Tax Revenues</th>
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Tennessee Tax Revenues if Recession is Severe

Tax Revenues (in millions)
Tennessee Future Tax Revenues Assuming Various Recession Intensities

- Regular Forecast
- Mild Recession
- Severe Recession

Tax Revenues (in millions)

- 2019: $14,000 million
- 2020: $15,000 million
- 2021: $16,000 million
- 2022: $17,000 million
University of Tennessee Allocation Above Previous Peak
Board of Regents Allocation Above Previous Peak