As Optimistic as an Economist Can Be On GDP

Not so Positive On Tax Revenues

Presented to the University of Tennessee Faculty Senate September 15, 2014
Growth in Quarterly Real Gross Domestic Product (Chained 2009 Dollars)
Growth in Quarterly Real Personal Consumption Expenditures (Chained 2009 Dollars)
Unit Sales of New Light Vehicles
Unit Sales of Existing Homes and Housing Starts

![Graph showing the units of existing homes (Millions) and housing starts (Millions) from 1989 to 2013. The graph indicates a peak in 2005 for existing home sales and a peak in 2007 for housing starts.](http://cber.bus.utk.edu)
Unified Federal Budget Surplus

Billions of dollars

Fiscal Year

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Real Exports Less Imports

Exports - Imports, Billions of Chained 2009 Dollars

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Tennessee and U.S. Nonfarm Job Growth
(3-month moving average, year-over-year)
Tennessee and U.S. Unemployment Rates (Seasonally Adjusted)
Tennessee Job Growth by Sector
(July 2013 to July 2014)
Total State Budget, FY2014–15

Where Your State Tax Dollar Goes

- Education 41¢
- Health & Social Services 30¢
- Business & Economic Development 2¢
- General Government 2¢
- Law, Safety & Correction 10¢
- Transportation 6¢
- Cities & Counties 6¢
- Resources & Regulation 3¢
Tennessee Fiscal Pressures

- Normal government cost growth
  - BEP
  - Higher Ed
  - Debt Service
  - Health Insurance
  - Pension – biannual adjustment
  - Salary Increase
- TennCare
  - Medicaid expansion
  - Woodwork effect
- Total $580 million
Higher Education Allocation, University of Tennessee

State and Tuition/Fees Allocations, $millions

Total Allocations, $millions

State  Tuition/…  Total

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State & Local Tax Revenue as a Percent of Personal Income, 2011

U.S. = 10.9%
TN = 8.5% (Rank 49th)

Less than 10.1%  --15--
10.1% to 10.9%  --19--
Greater than 10.9%  --16--

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Tennessee Tax Collections by Source, 2013

- Sales: 53.6%
- Selective Sales: 20.2%
- Corporate: 16.3%
- Individual Income: 2.1%
- Other: 8.8%
Change in Total Taxes, July–March, FYTD 2013 to FYTD 2014

U.S. = 2.8%
TN = 1.4%

Less than 0.0%  --7--
Low: AK = -41.7%

0.0% to 1.4%  --10--

1.4% to 2.8%  --7--

Greater than 2.8%  --26--
High: ND = 18.6%
# Elasticities by Tax

<table>
<thead>
<tr>
<th>Tax Type</th>
<th>Elasticity</th>
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<tbody>
<tr>
<td>Sales Tax</td>
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<tr>
<td>Gasoline</td>
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<tr>
<td>Franchise &amp; Excise</td>
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<td>Mixed Drink</td>
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<td>Total</td>
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Tax Cuts

- Gift tax
- Inheritance tax
- Lower rate for food
- Larger exemption for the Hall Income Tax
Tennessee Tax Revenues, Total and Share of Personal Income

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Growth in Sales Tax Revenue (Adjusted for Tax Increases)
3-Month Moving Average, Year Over Year Increase
Sales Tax Collections by Category of Sales (FY13 to FY14)

Percent Growth

- Auto Dealers & Service Stations
- Total Services
- Building Materials
- Miscellaneous Retail Stores
- Eating & Drinking Places
- Grand Total
- Furniture And Home Furnishings
- Food Stores
- General Merchandise
- Apparel & Accessory Stores
Tennessee State Sales Tax Breadth of Base

Source: State Tax Notes, Mikesell.

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Tennessee Sales Tax Collections as a Percent of Personal Income, 1997–2013
<table>
<thead>
<tr>
<th>Year</th>
<th>Sales Tax Growth</th>
<th>Personal Income Growth</th>
<th>Elasticity</th>
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Corporate Profits as a Percent of GDP

Corporate profits with inventory valuation and capital consumption adjustments.
Analysis of Knox Achieves

- 5 percentage points more likely to graduate high school than matched control students
- 20 percentage points more likely to enroll at any college
- 29 percentage points more likely to enroll in a community college
- 9.5 percentage points less likely to enroll in a four-year institution
- Two-thirds of effect on community college enrollment came from students who would not have gone to college