

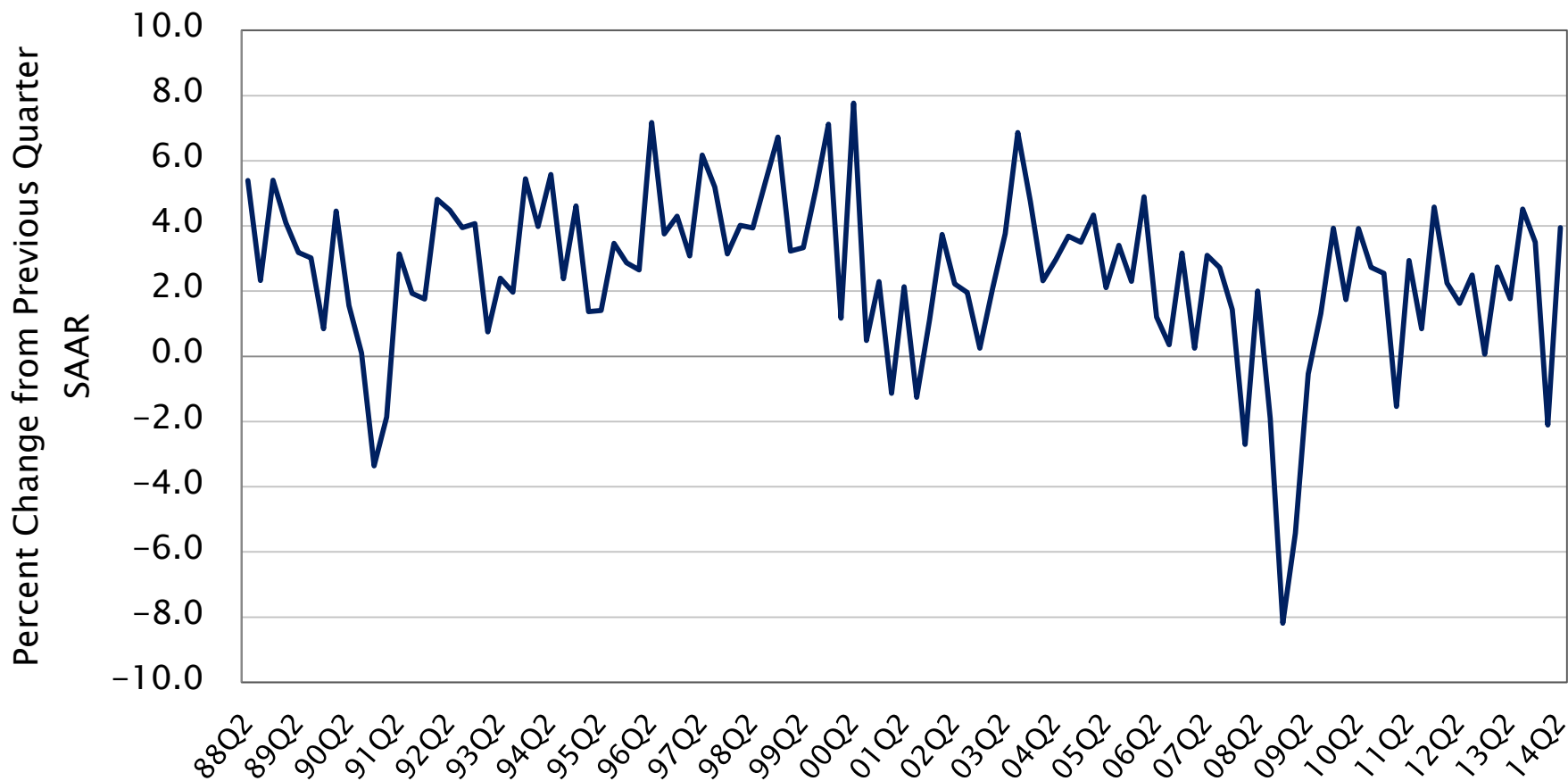
# **As Optimistic as an Economist Can Be On GDP**

## **Not so Positive On Tax Revenues**

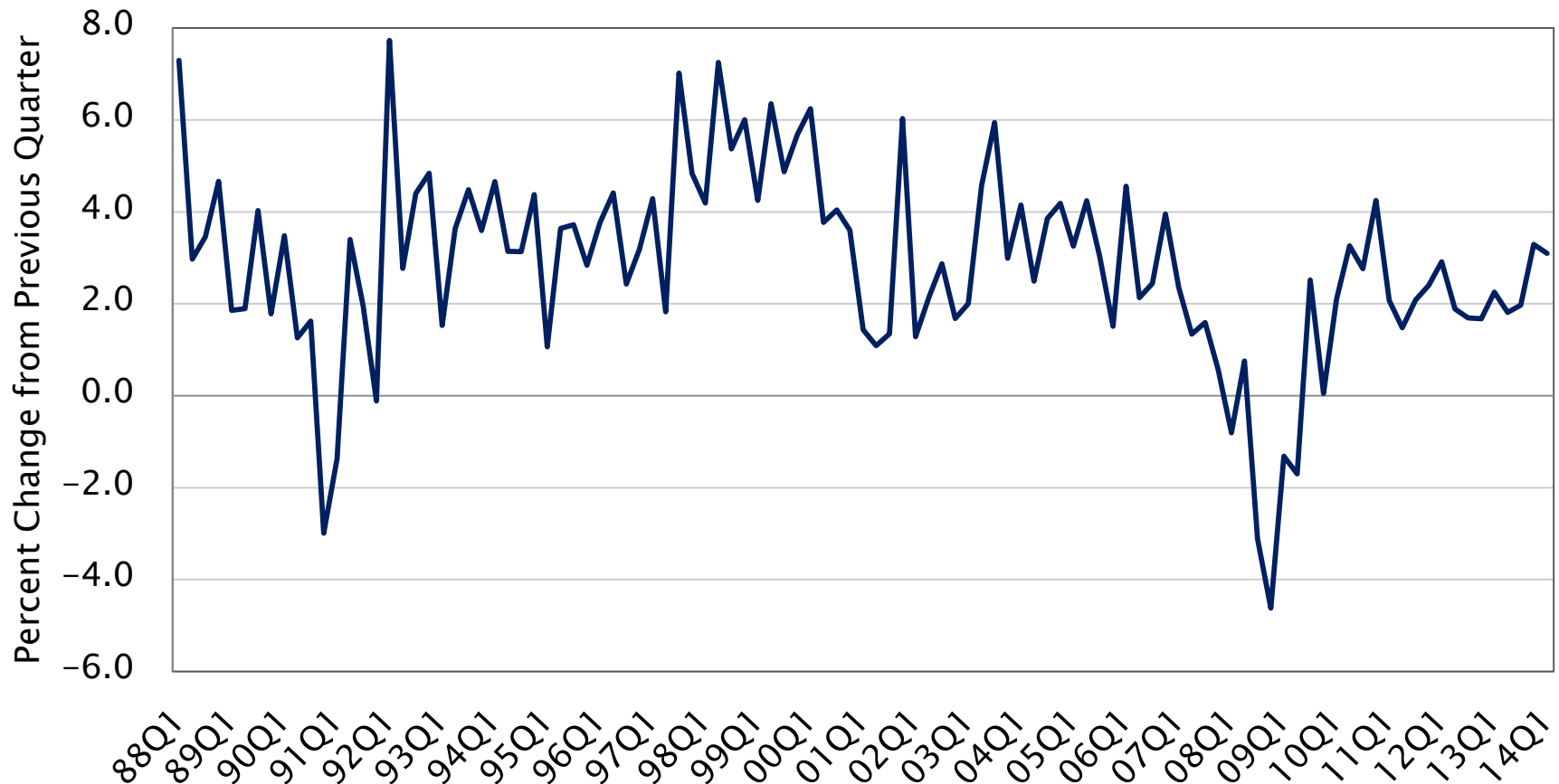
Presented to the  
University of Tennessee Faculty Senate  
September 15, 2014

William F. Fox, Director  
Center for Business and Economic Research  
The University of Tennessee, Knoxville

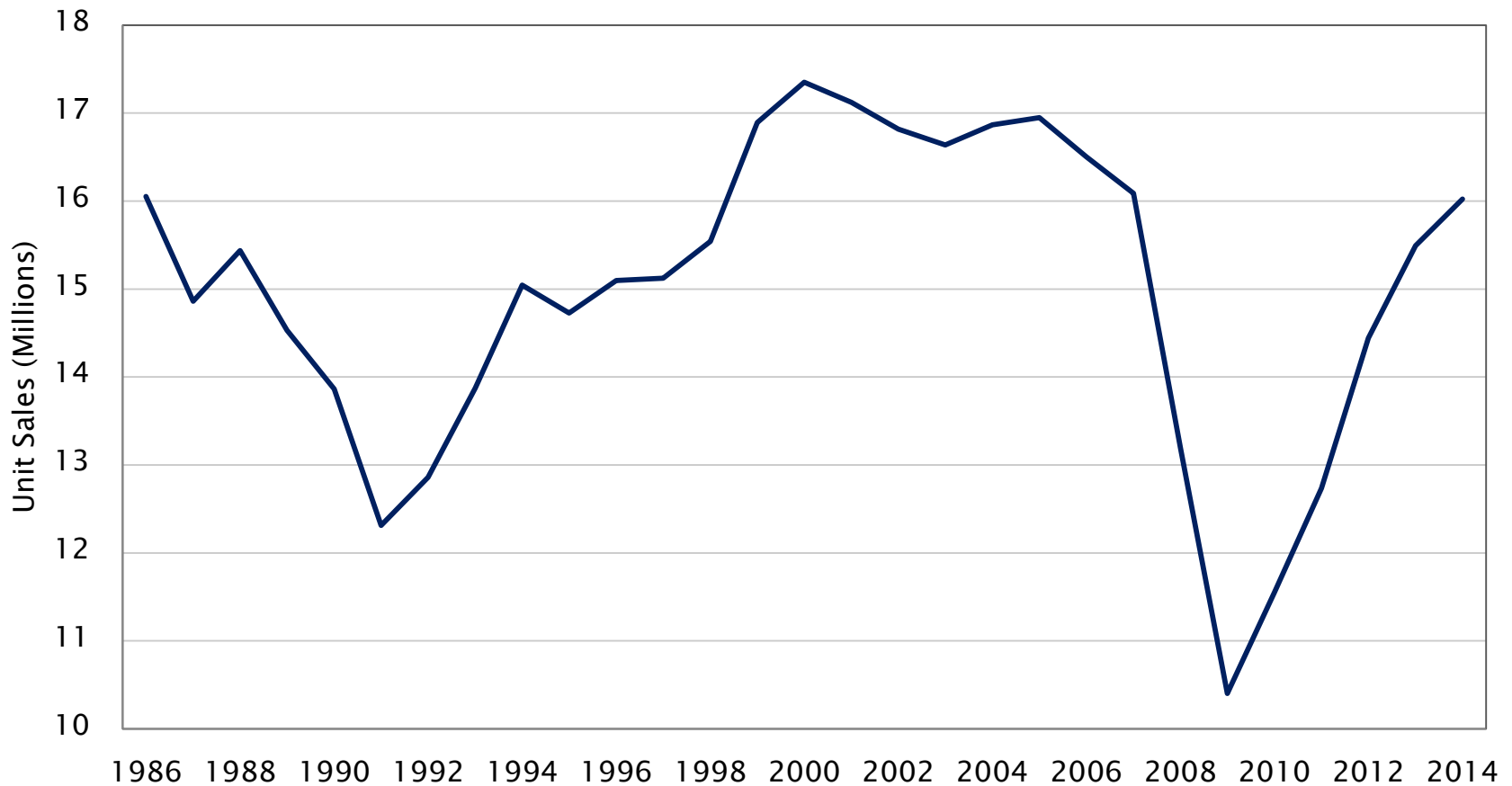
# Growth in Quarterly Real Gross Domestic Product (Chained 2009 Dollars)



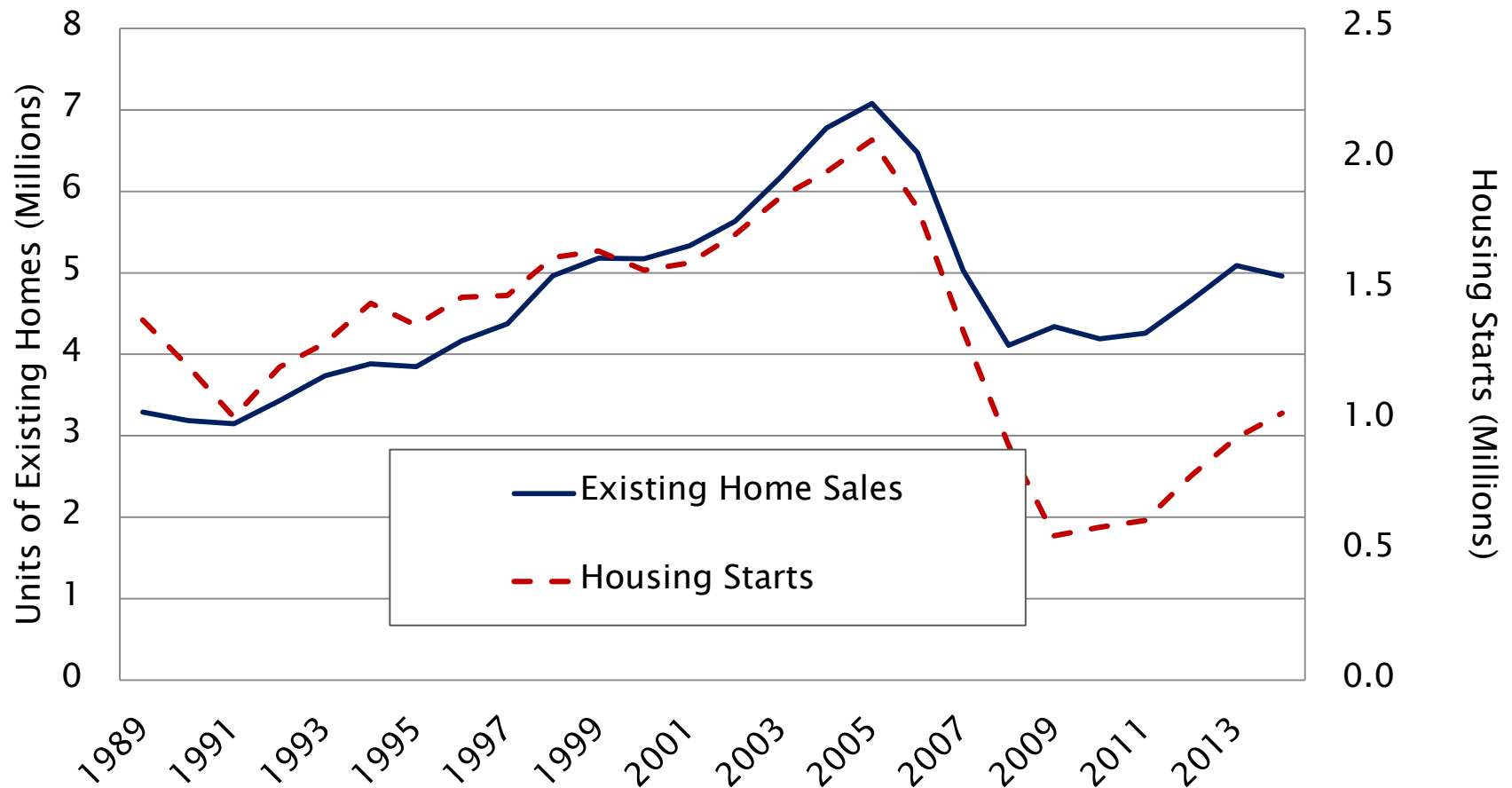
# Growth in Quarterly Real Personal Consumption Expenditures (Chained 2009 Dollars)



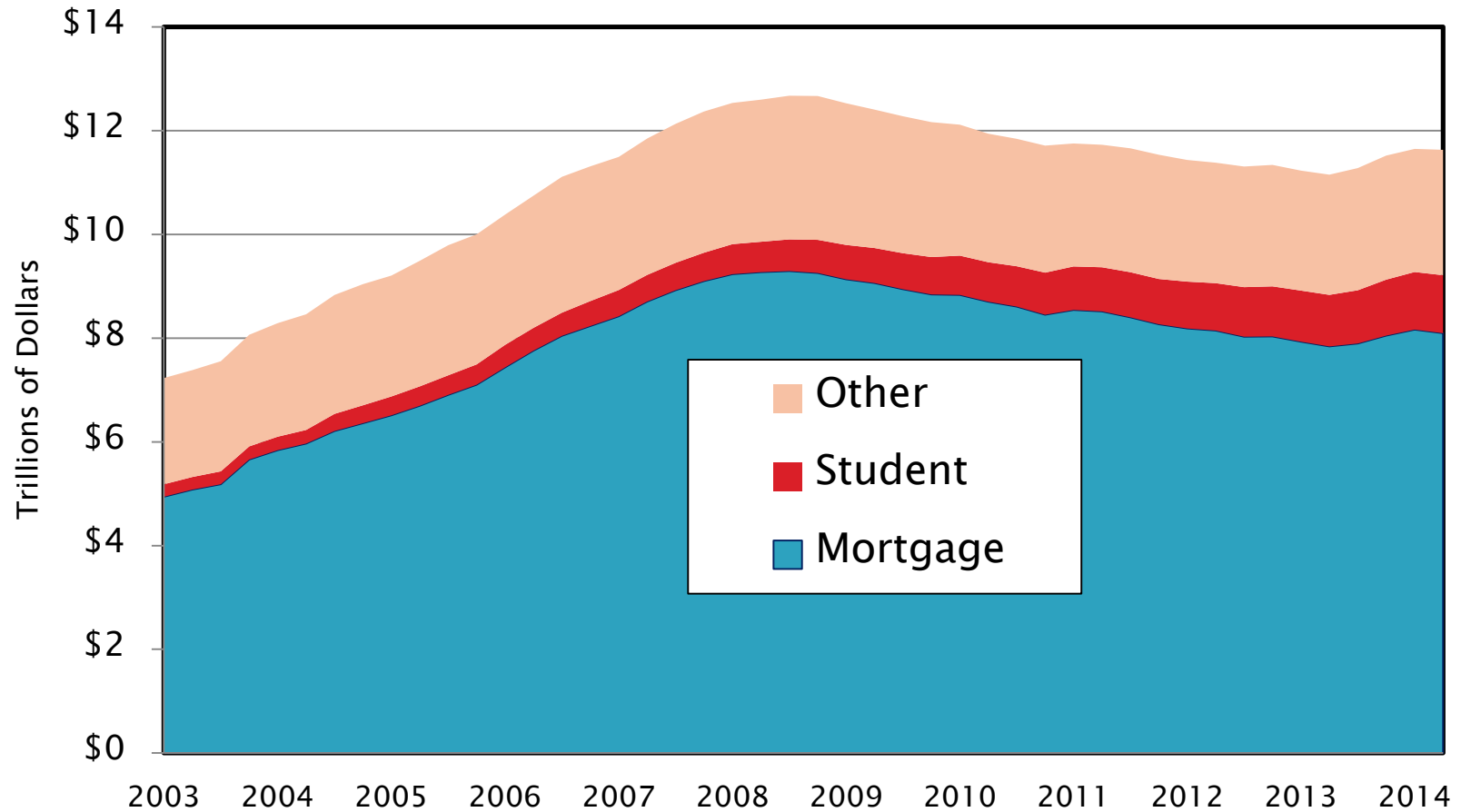
# Unit Sales of New Light Vehicles



# Unit Sales of Existing Homes and Housing Starts

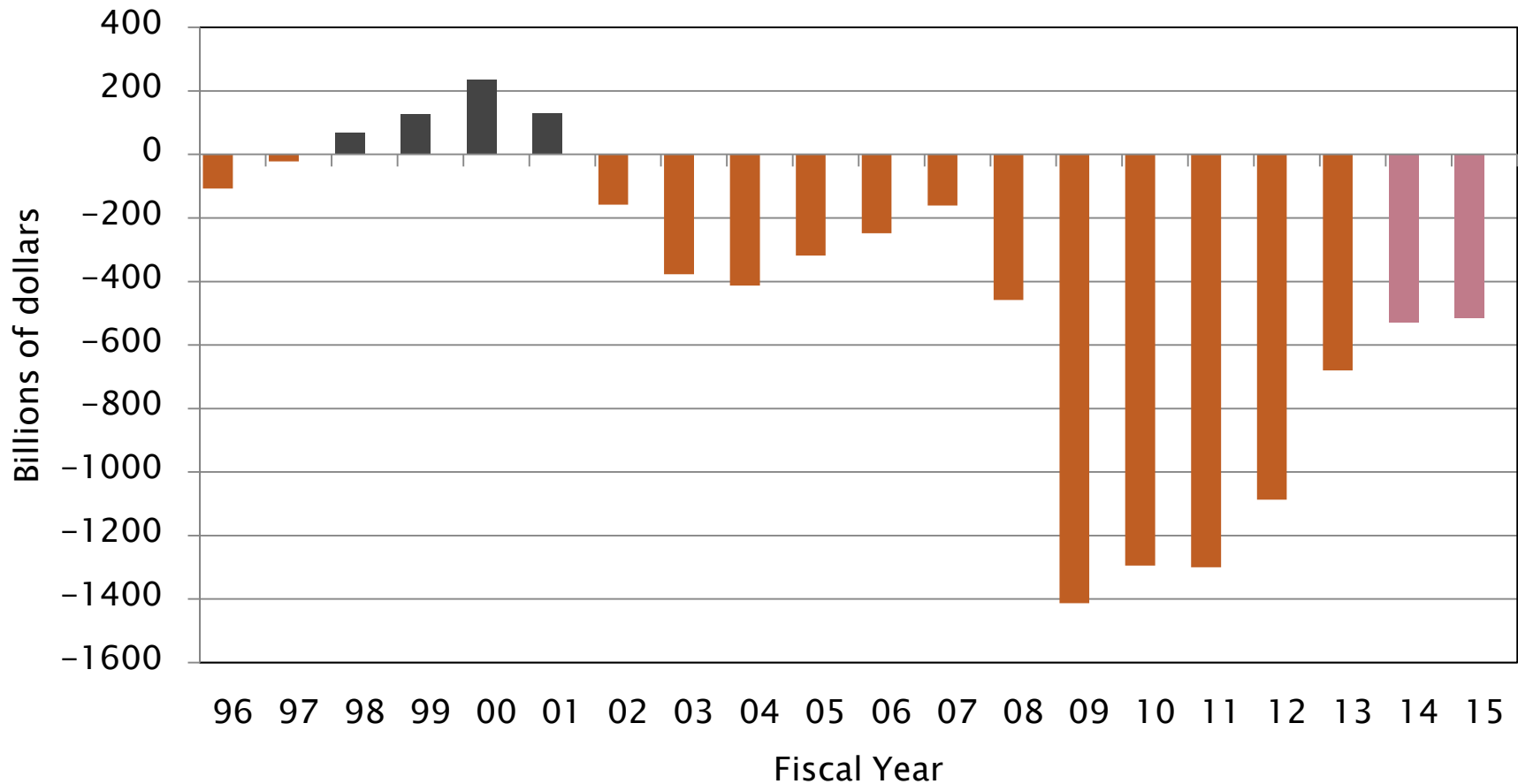


# Total Consumer Debt Balance

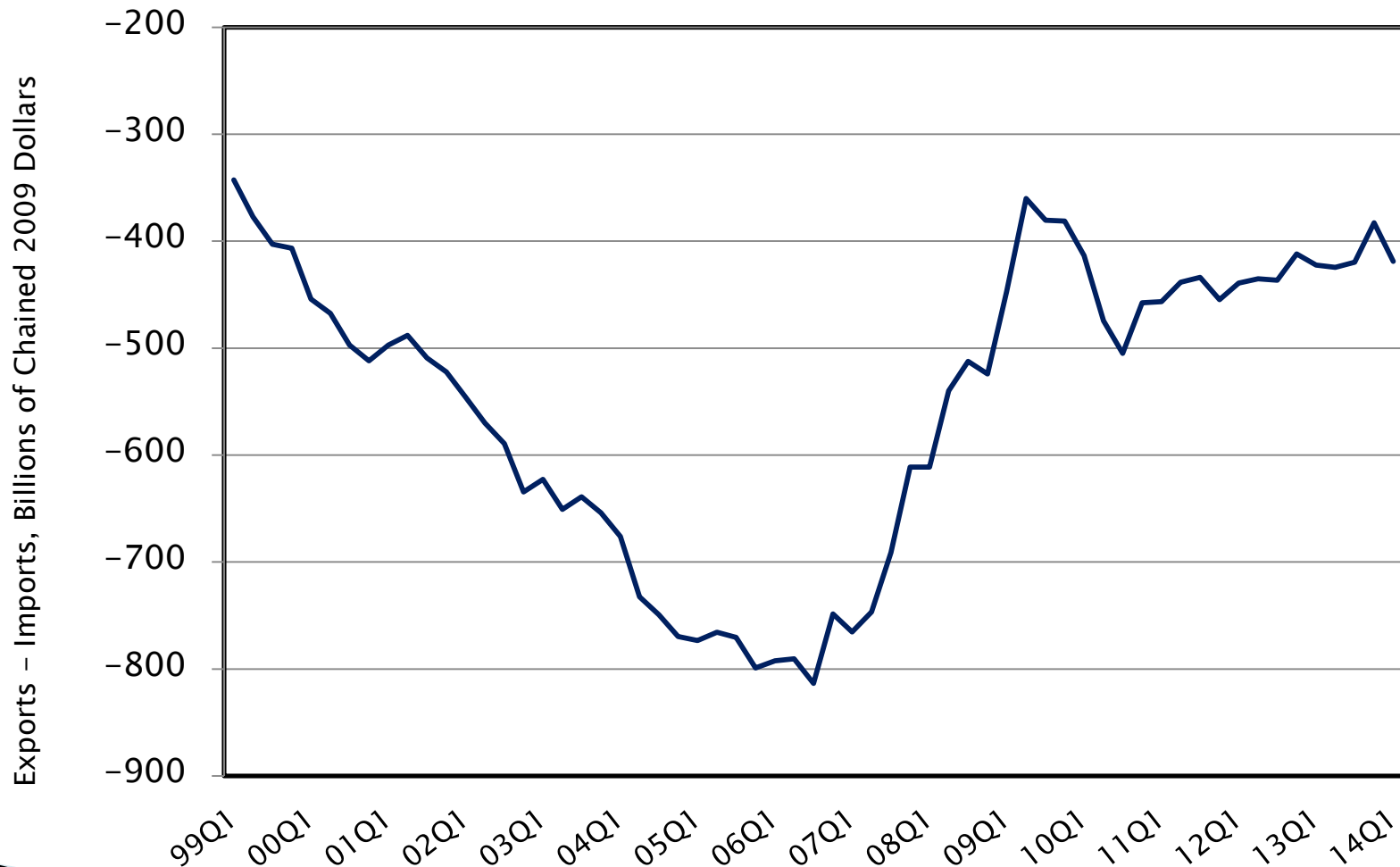


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# Unified Federal Budget Surplus

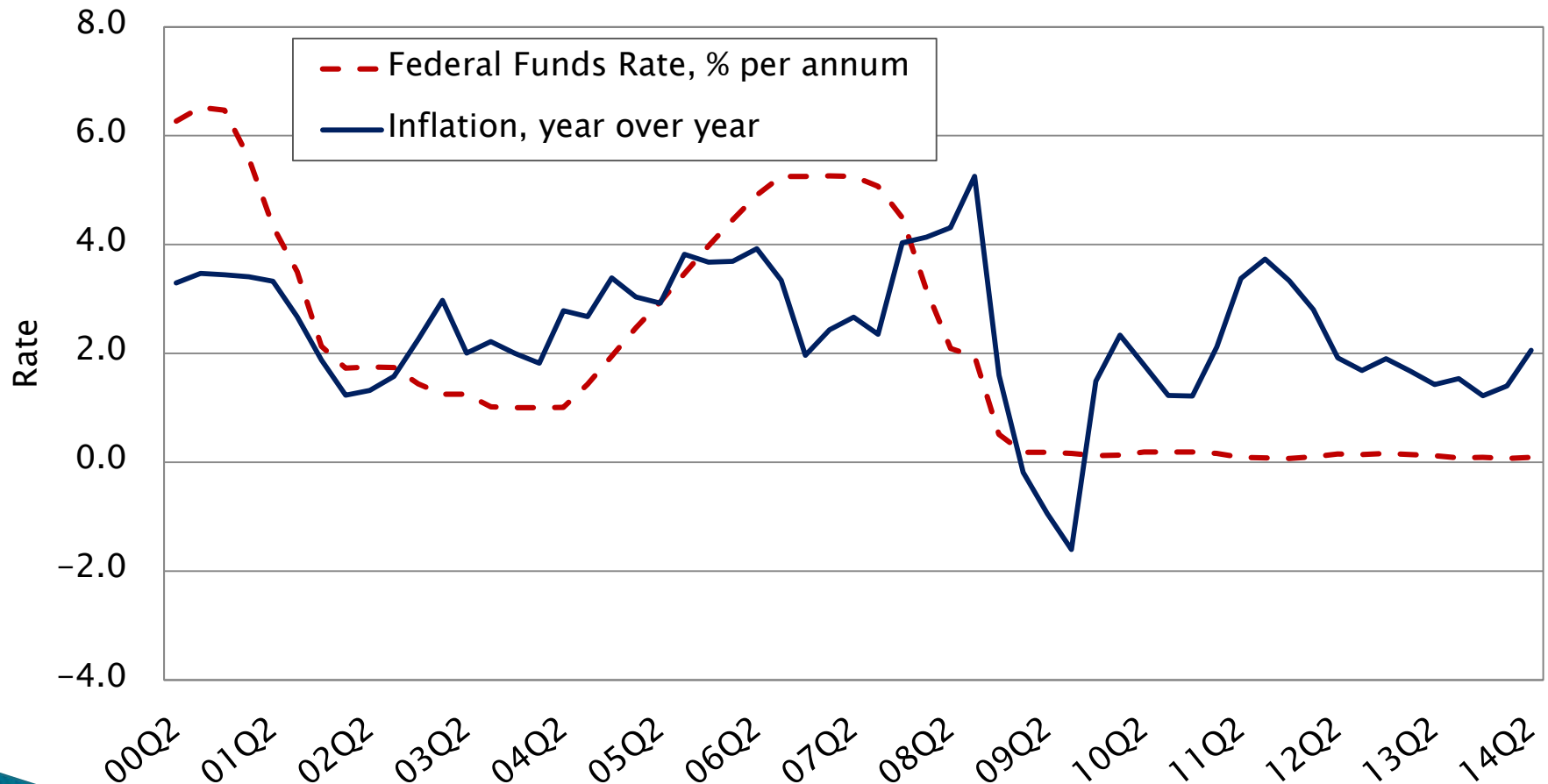


# Real Exports Less Imports

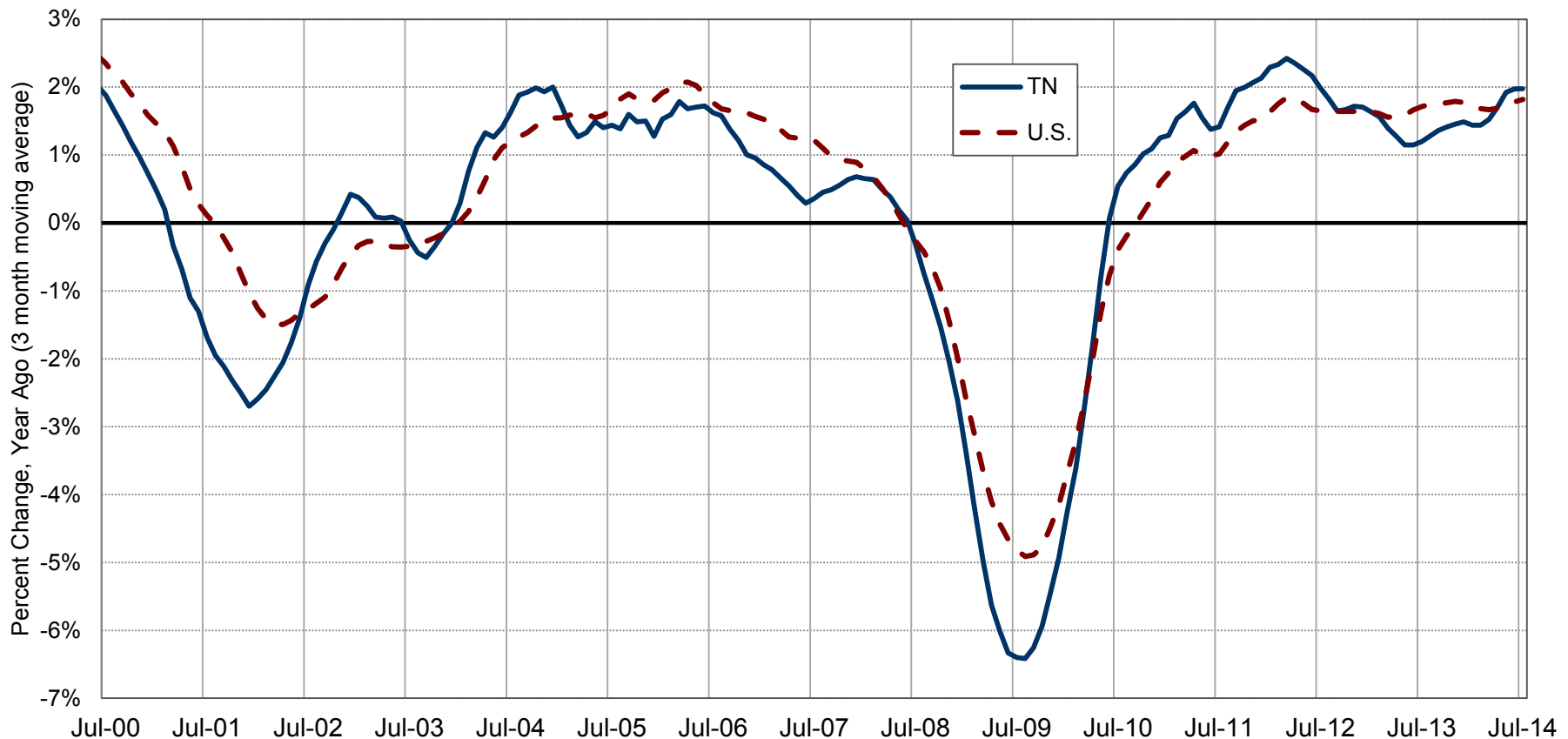




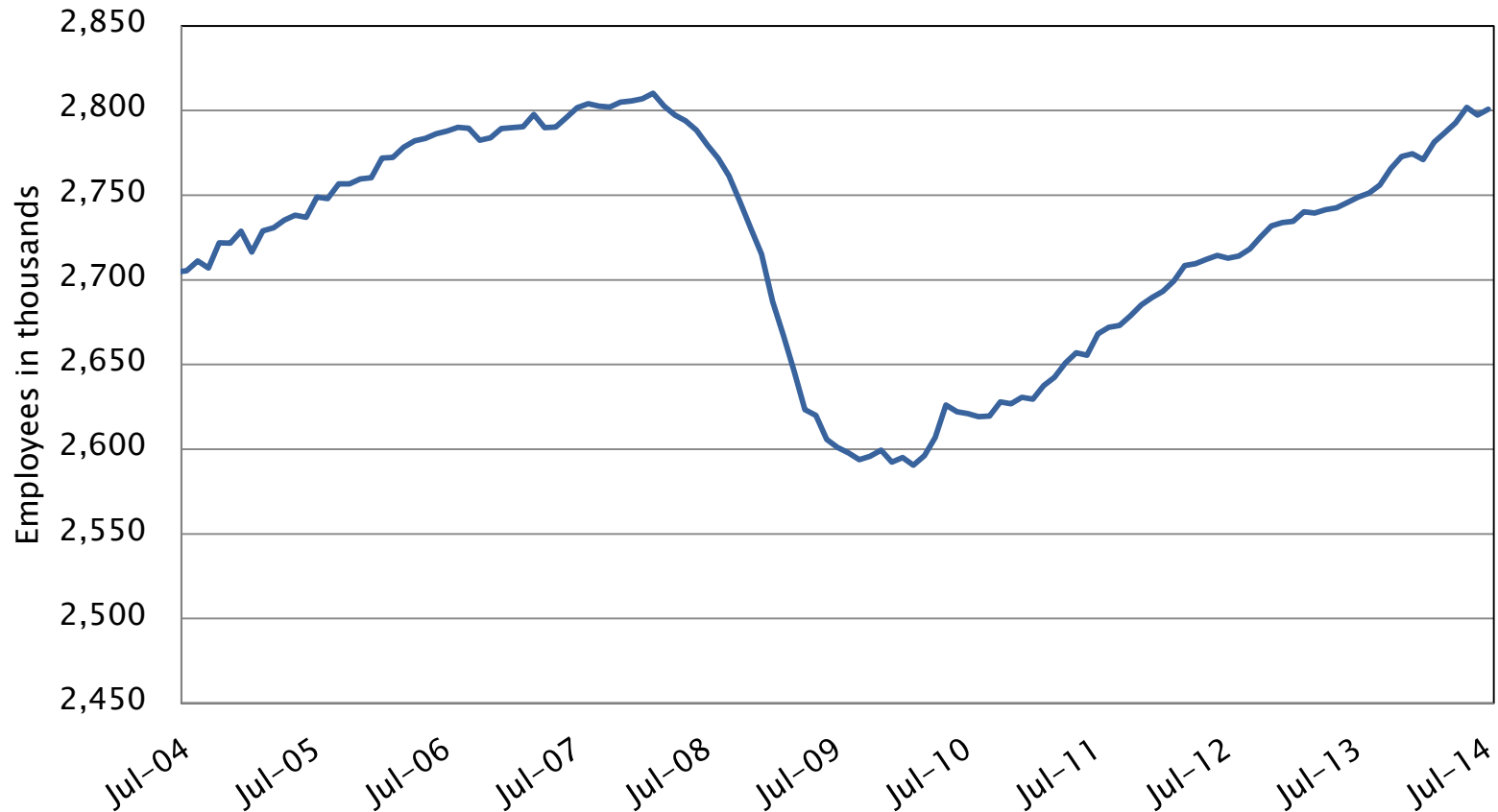
# Interest Rates and Inflation



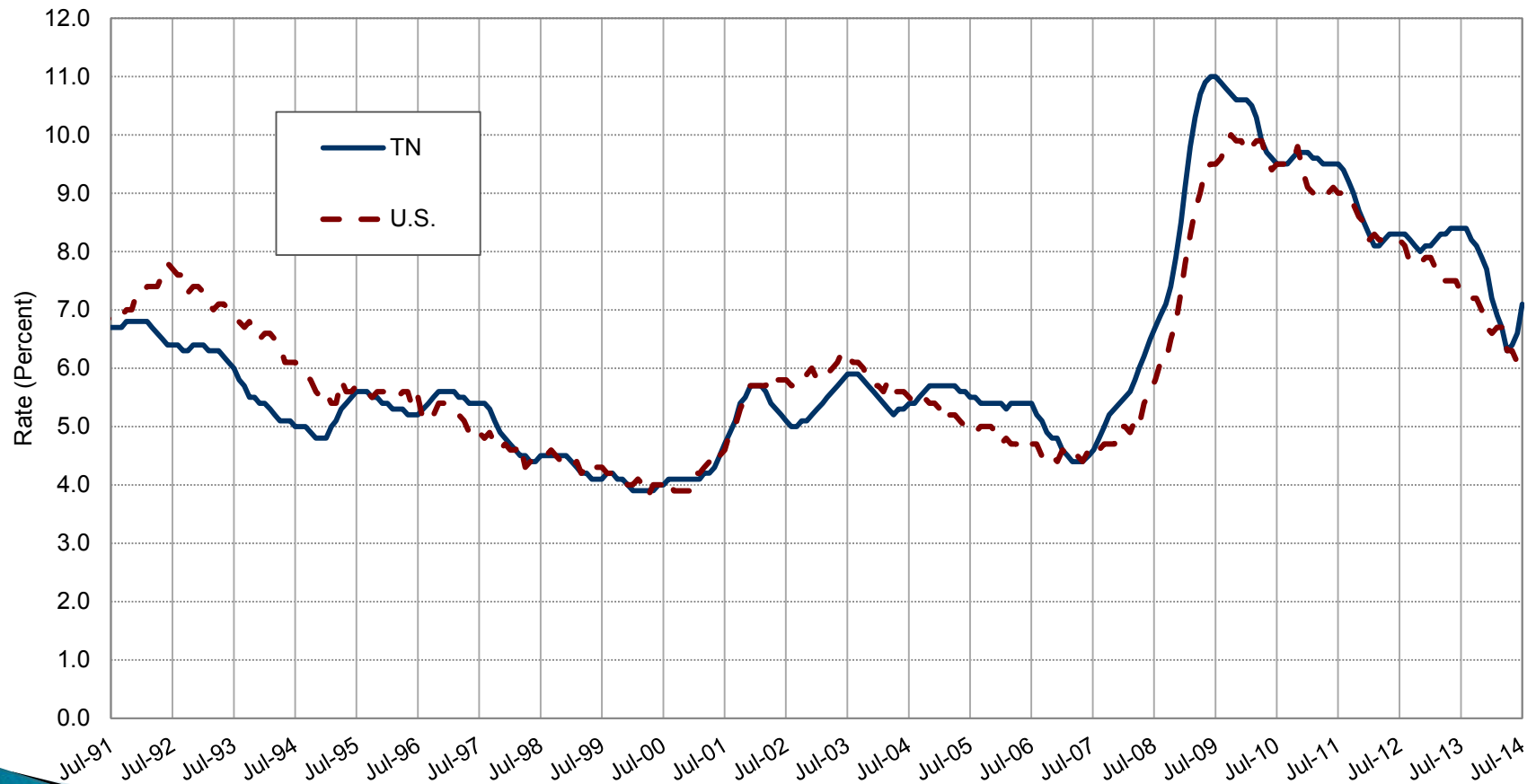
# Tennessee and U.S. Nonfarm Job Growth (3-month moving average, year-over-year)



# TN Nonfarm Jobs, Seasonally Adjusted, 2004–2014



# Tennessee and U.S. Unemployment Rates (Seasonally Adjusted)

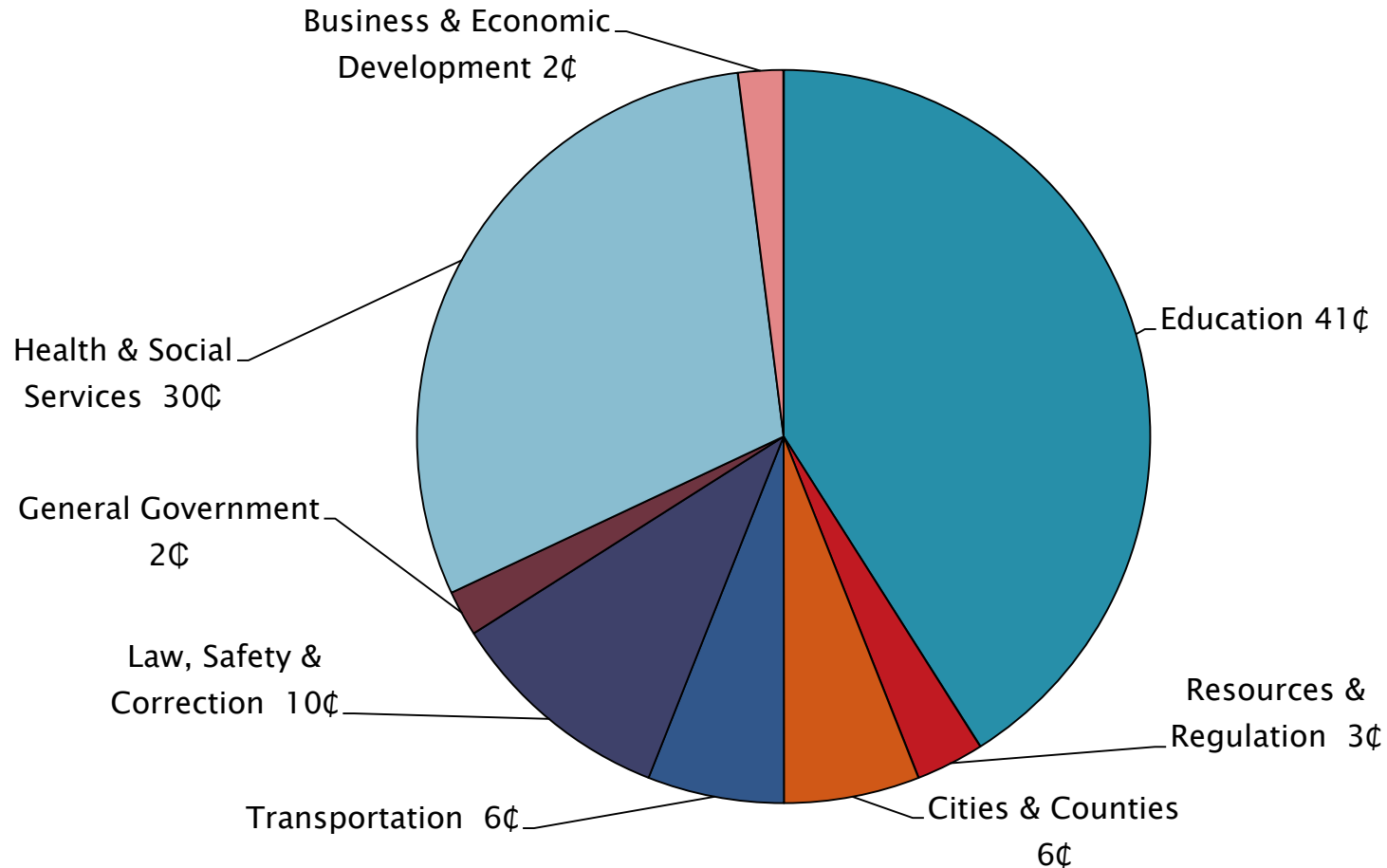


# Tennessee Job Growth by Sector (July 2013 to July 2014)



# Total State Budget, FY2014-15

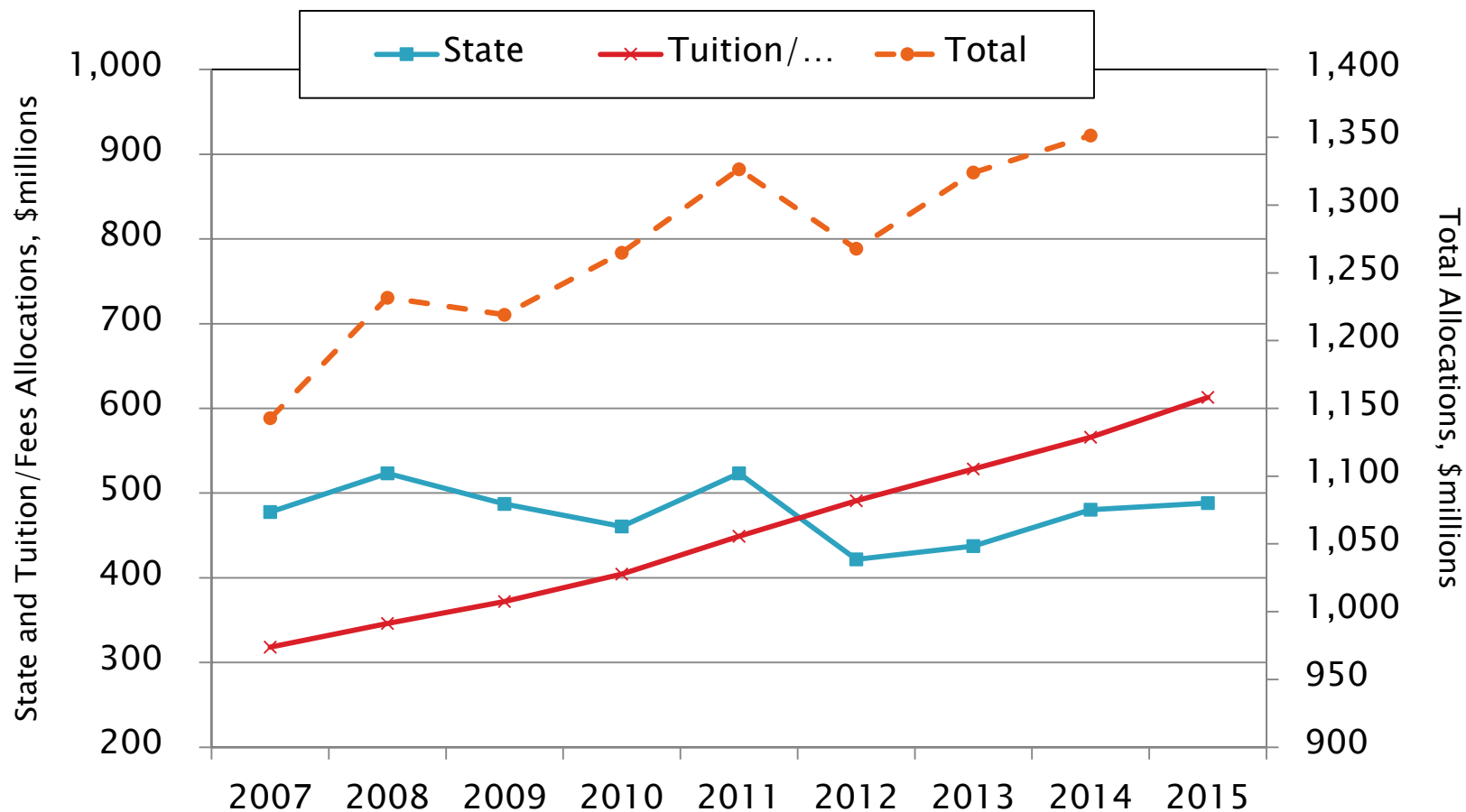
Where Your State Tax Dollar Goes



# Tennessee Fiscal Pressures

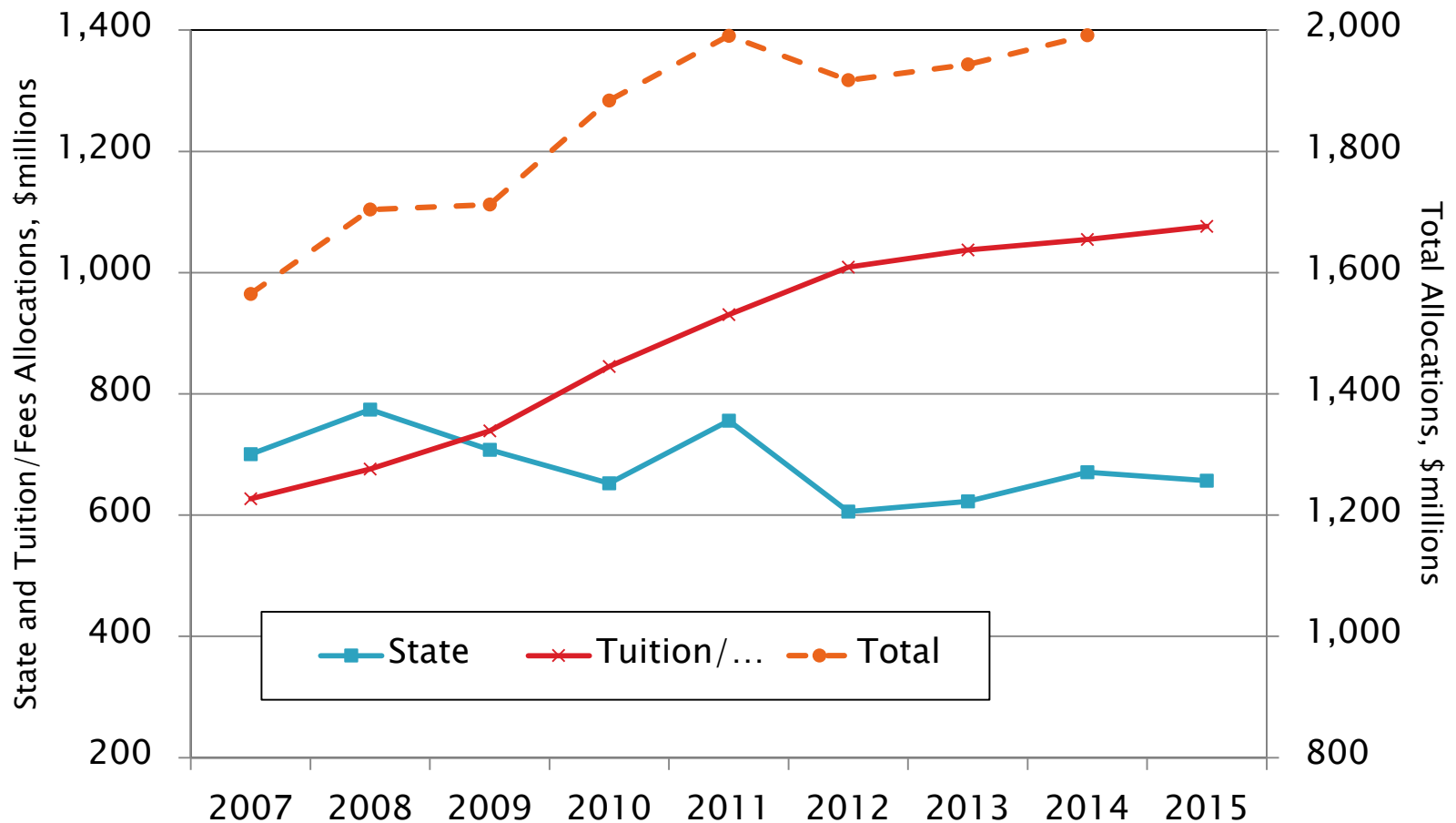
- ▶ Normal government cost growth
  - BEP
  - Higher Ed
  - Debt Service
  - Health Insurance
  - Pension – biannual adjustment
  - Salary Increase
- ▶ TennCare
  - Medicaid expansion
  - Woodwork effect
- ▶ Total \$580 million

# Higher Education Allocation, University of Tennessee

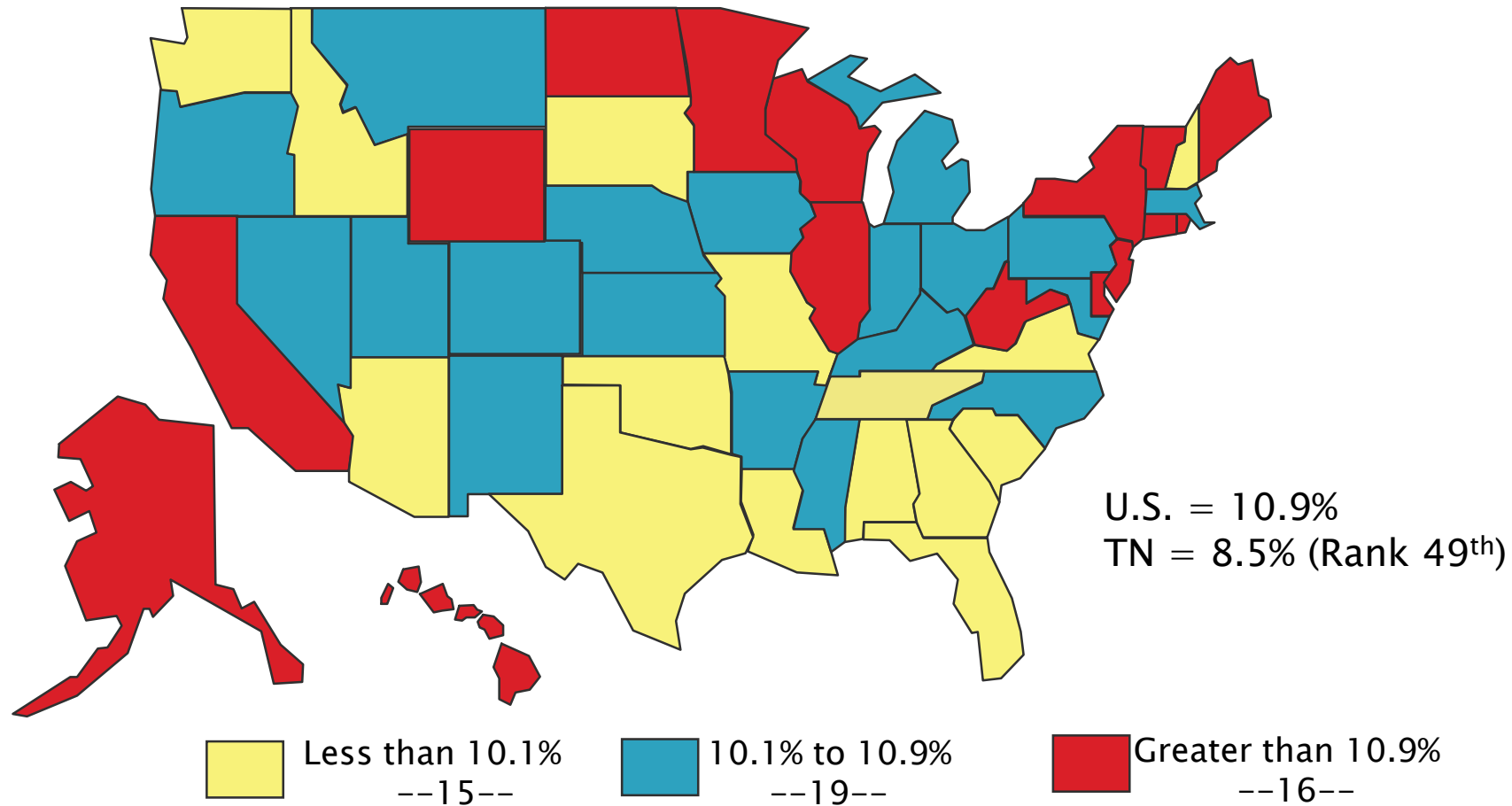




# Higher Education Allocation, Board of Regents

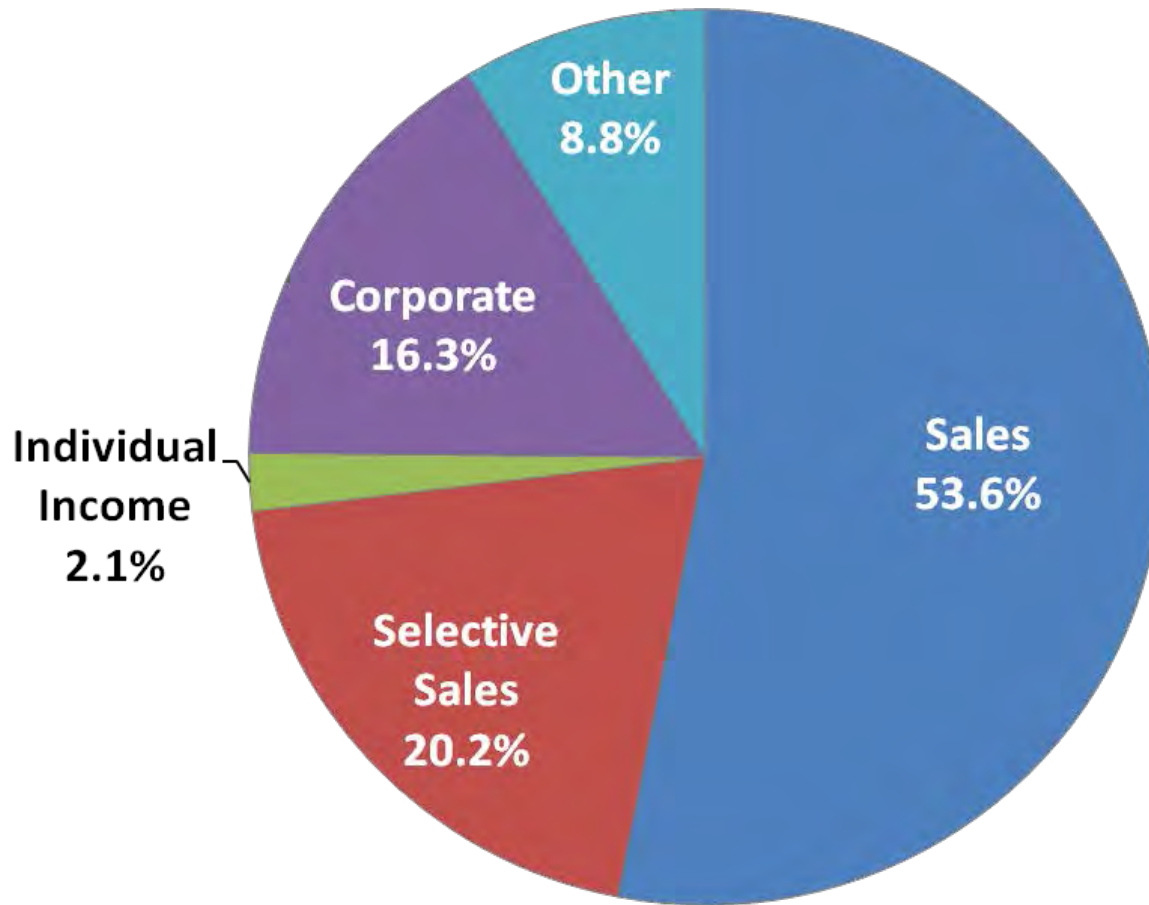


# State & Local Tax Revenue as a Percent of Personal Income, 2011

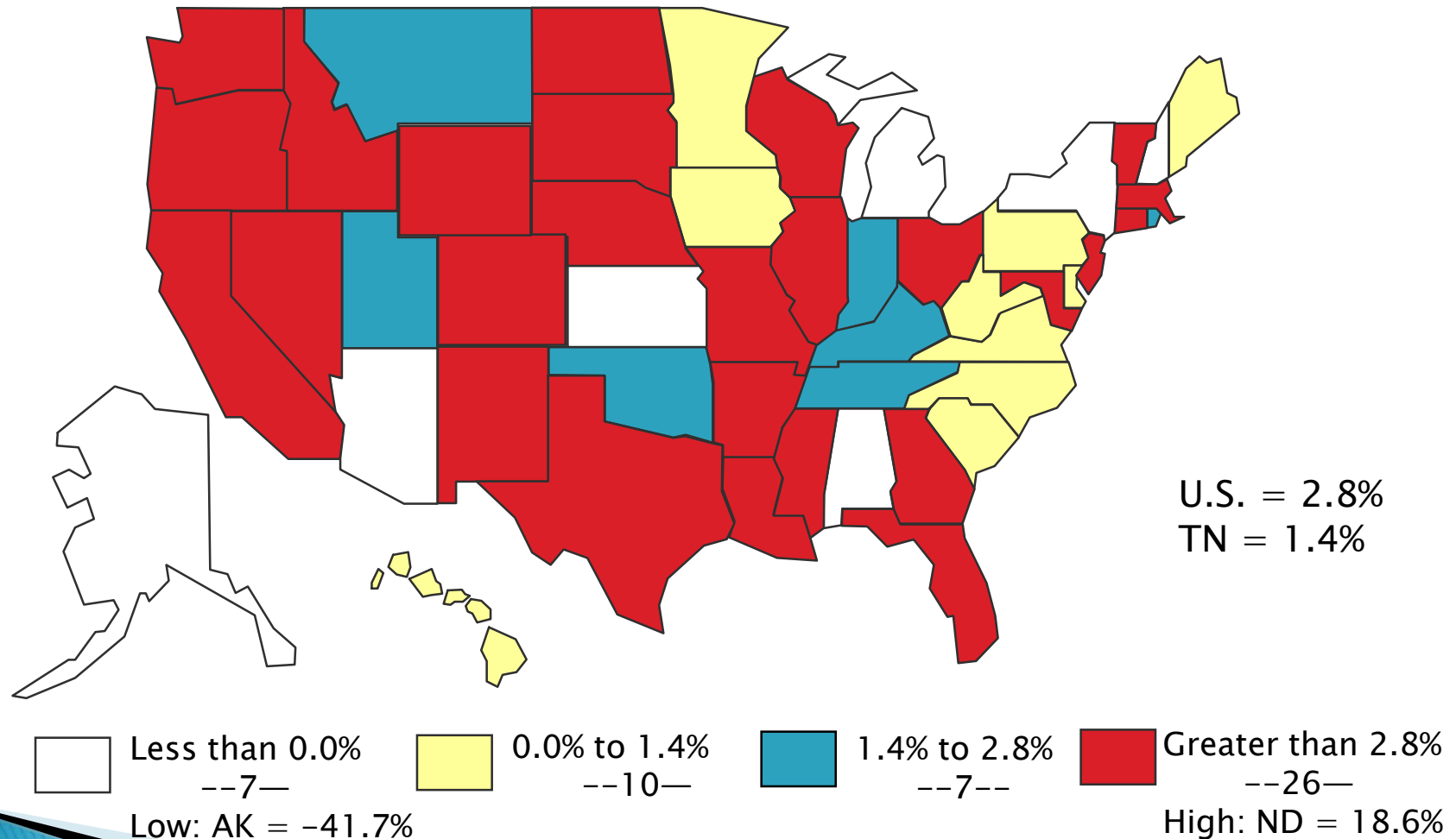


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# Tennessee Tax Collections by Source, 2013



# Change in Total Taxes, July–March, FYTD 2013 to FYTD 2014



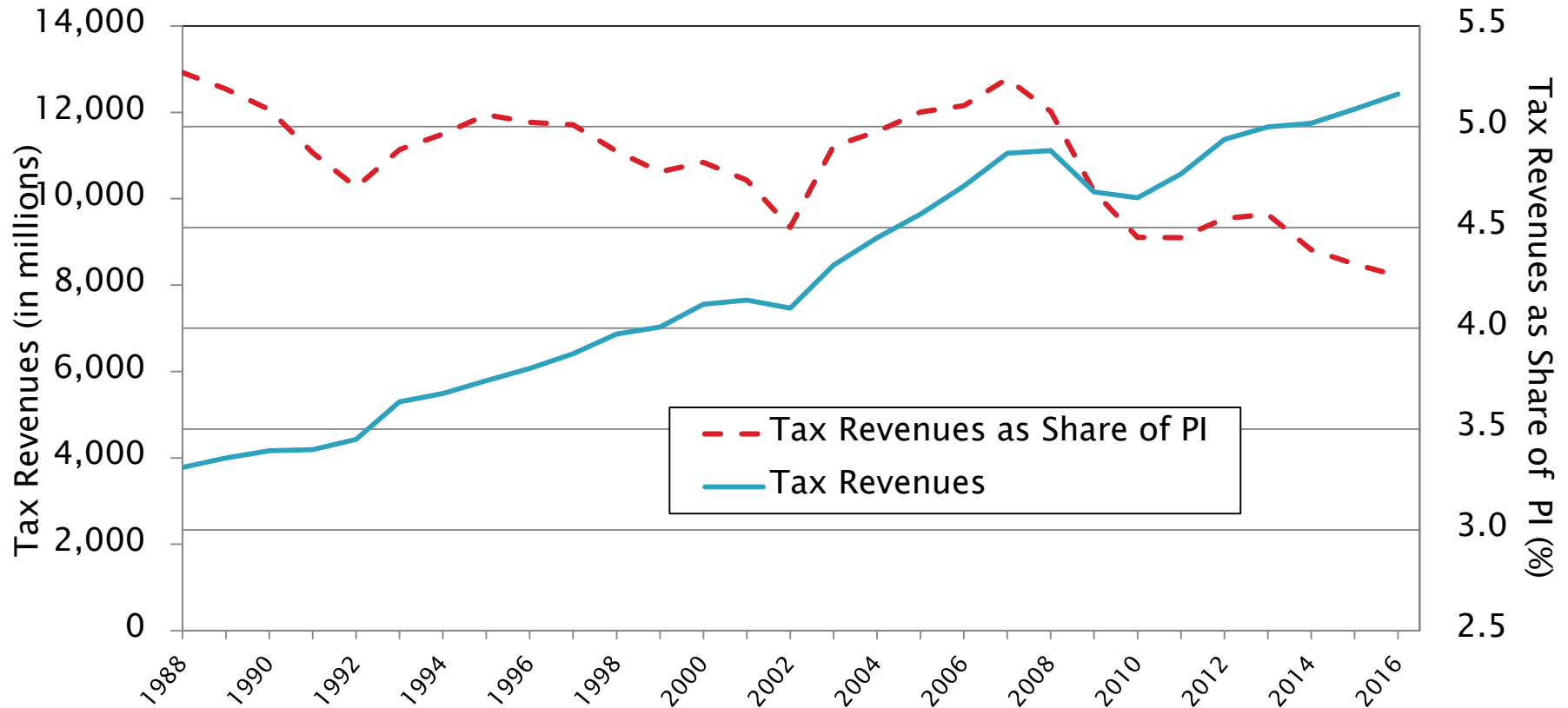
# Elasticities by Tax

Sales Tax	0.60
Gasoline	0.03
Franchise & Excise	1.04
Mixed Drink	1.35
Total	0.67

# Tax Cuts

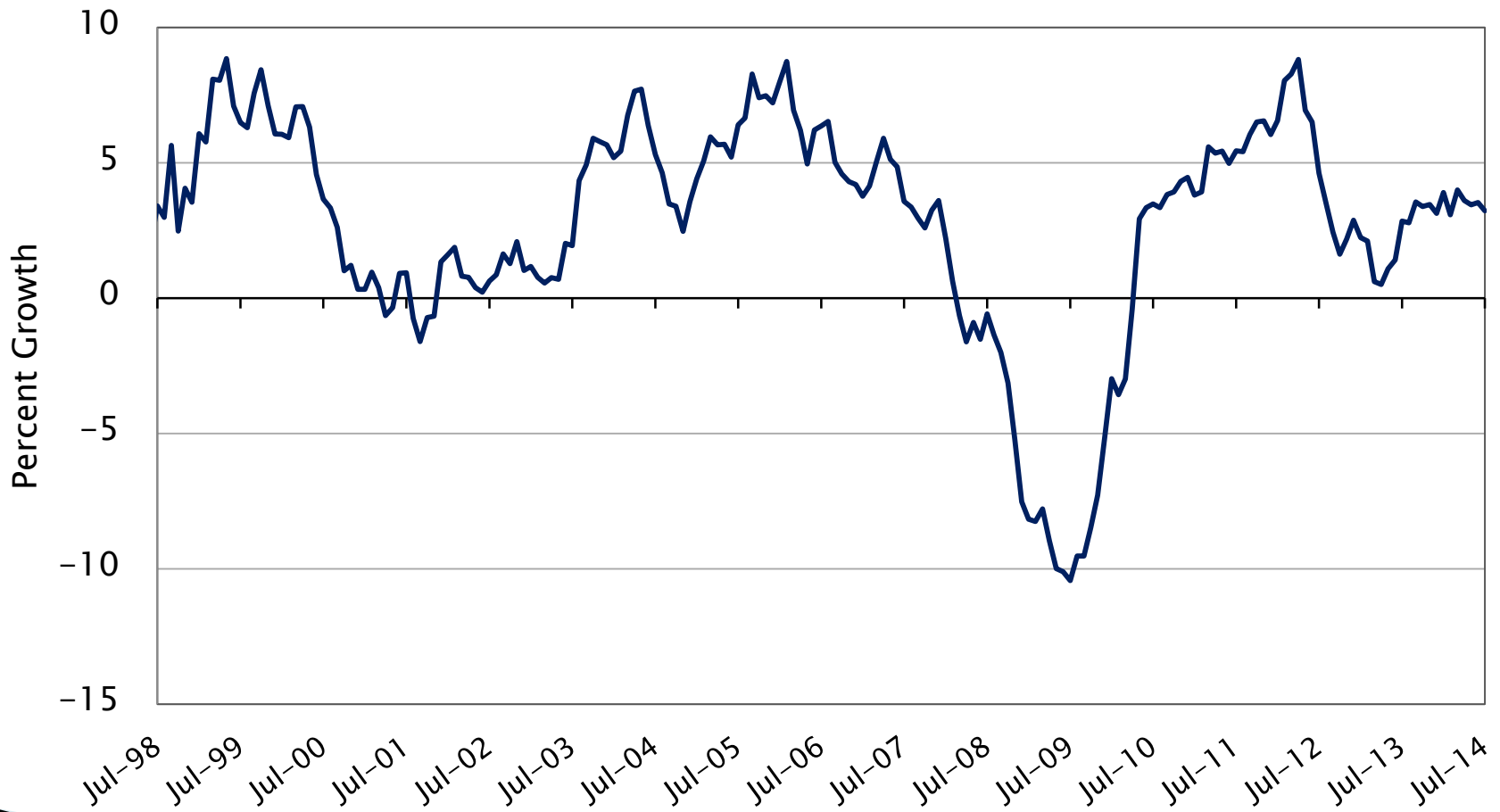
- ▶ Gift tax
- ▶ Inheritance tax
- ▶ Lower rate for food
- ▶ Larger exemption for the Hall  
Income Tax

# Tennessee Tax Revenues, Total and Share of Personal Income



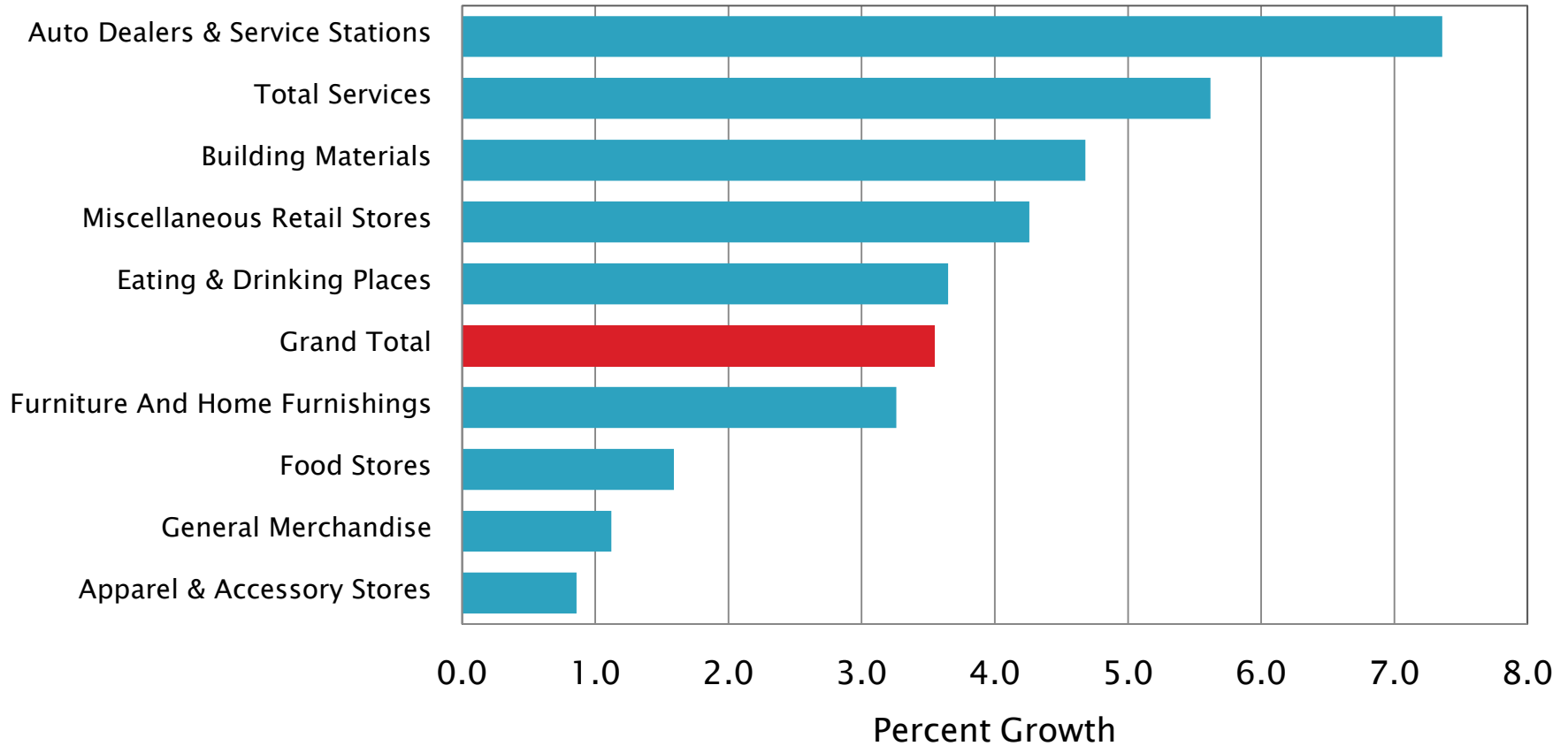
# Growth in Sales Tax Revenue (Adjusted for Tax Increases)

## 3-Month Moving Average, Year Over Year Increase



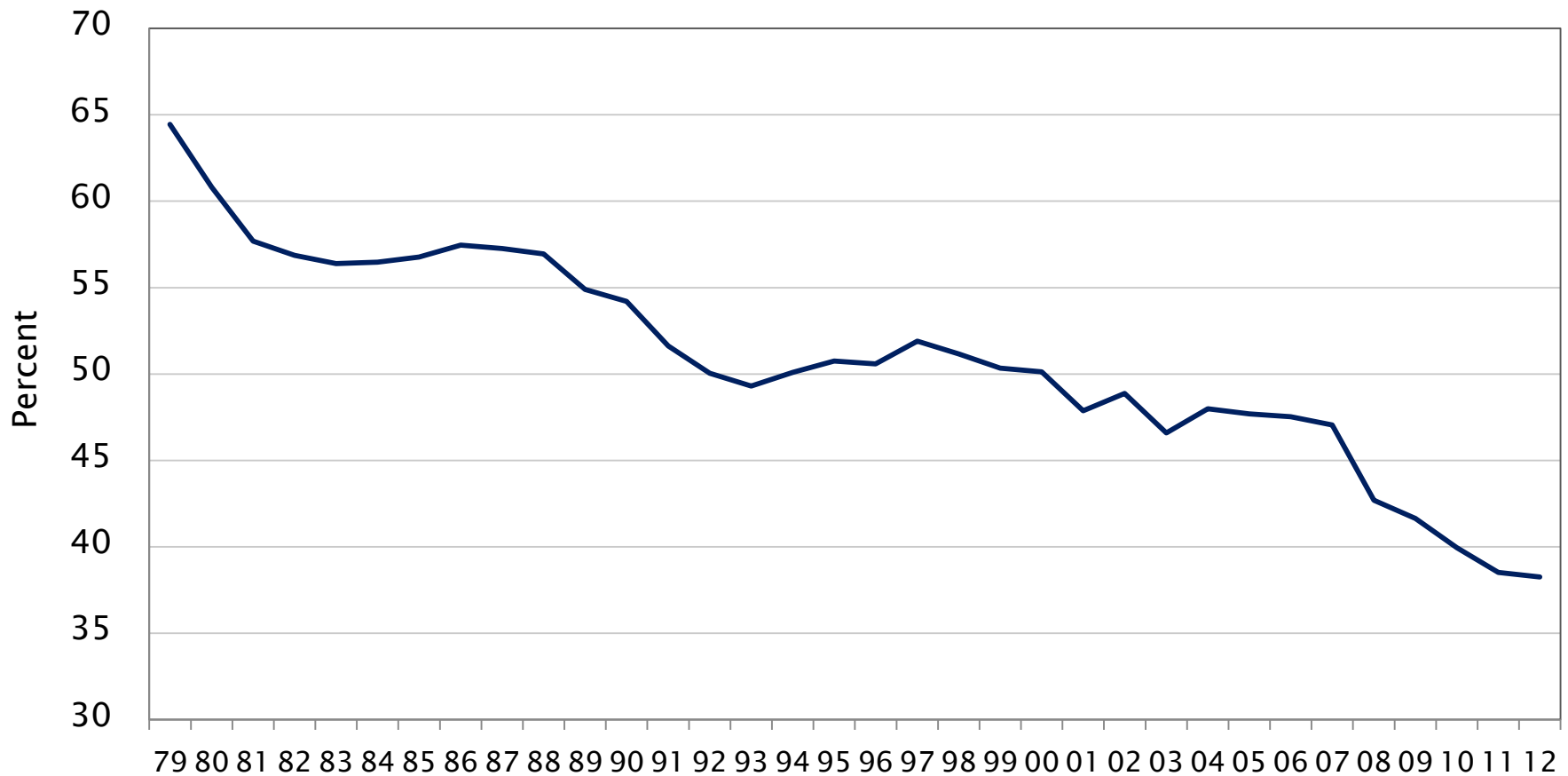


# Sales Tax Collections by Category of Sales (FY13 to FY14)



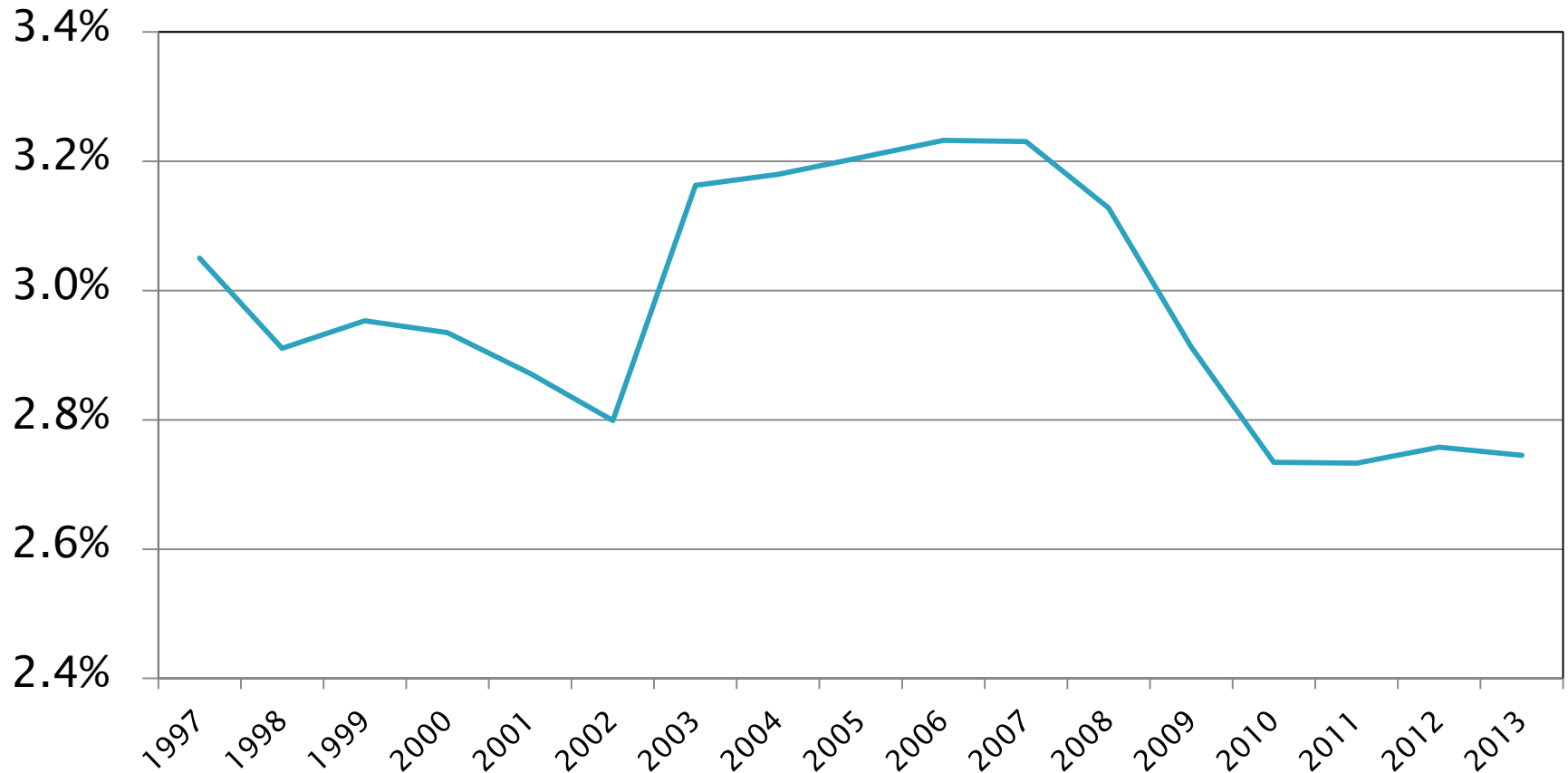
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# Tennessee State Sales Tax Breadth of Base



Source: State Tax Notes, Mikesell.

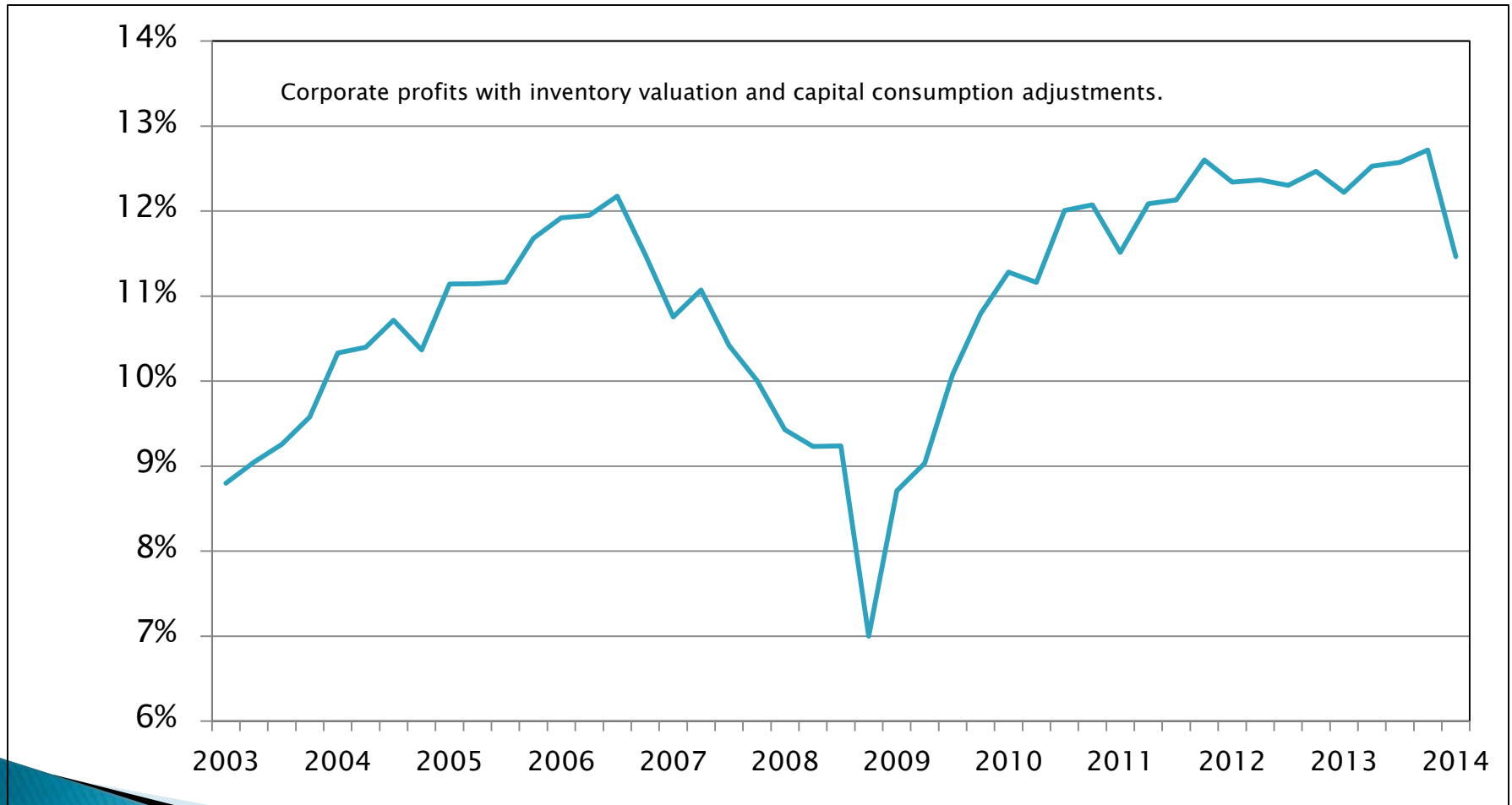
# Tennessee Sales Tax Collections as a Percent of Personal Income, 1997–2013



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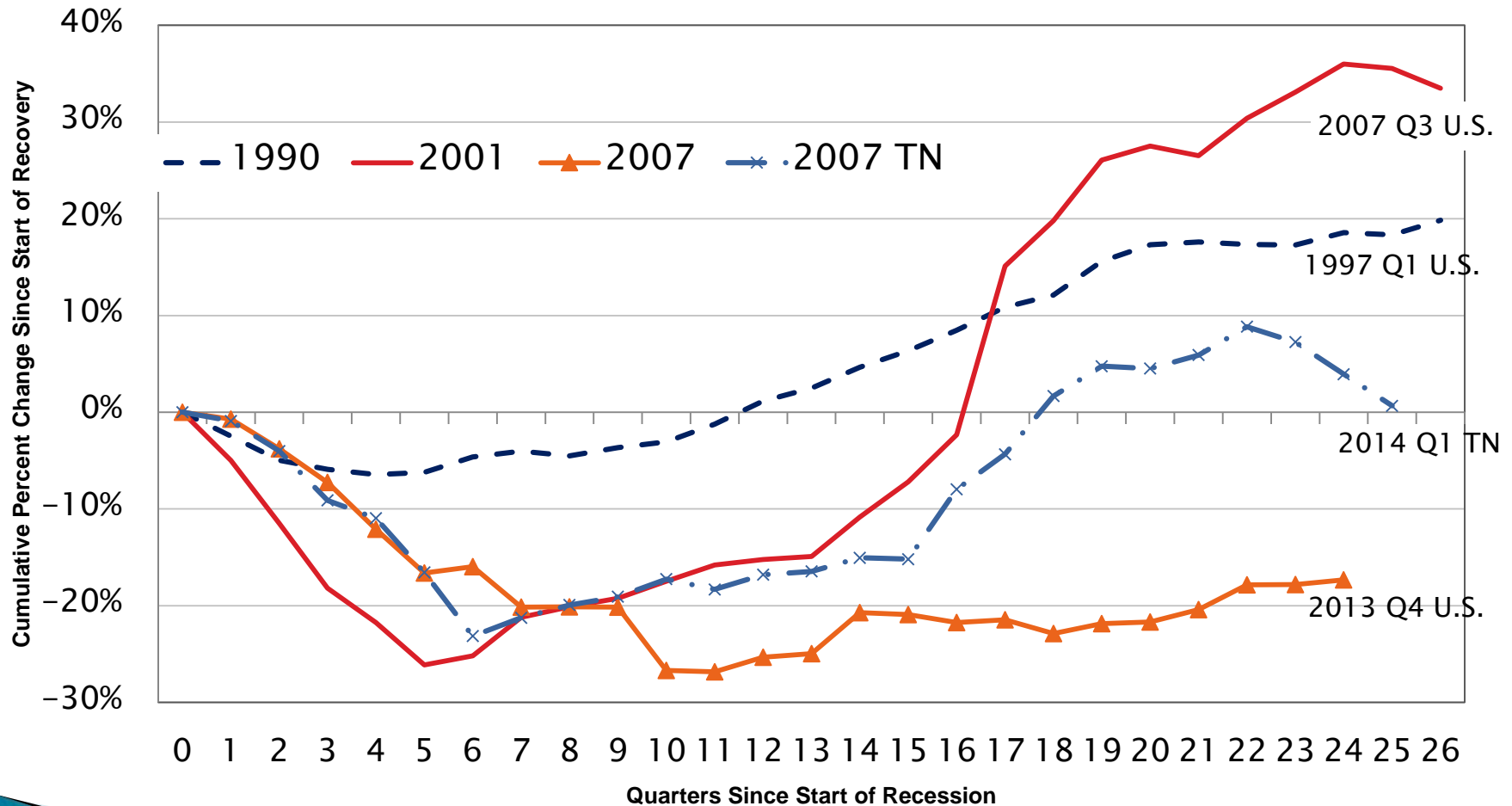
	Sales Tax Growth	Personal Income Growth	Elasticity
1994	9.3	6.3	1.47
1995	9.7	7.3	1.32
1996	5.9	5.6	1.05
1997	6.1	5.9	1.02
1998	5.0	10.0	0.50
1999	6.0	4.5	1.34
2000	5.9	6.5	0.90
2001	0.9	3.2	0.29
2002	0.1	2.6	0.02
2003	1.3	4.0	0.33
2004	6.5	5.9	1.10
2005	4.8	4.0	1.21
2006	7.0	6.1	1.14
2007	4.6	4.7	0.99
2008	0.5	3.8	0.14
2009	-7.7	-0.9	8.31
2010	-2.6	3.8	-0.68
2011	5.5	5.5	0.99
2012	6.3	5.3	1.18
2013	1.6	2.1	0.77
2014	3.5		

# Corporate Profits as a Percent of GDP



# State Corporate Income Tax Revenue Since the Start of the Recession

Four-Quarter Moving Average, Adjusted for Inflation



# 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