

# “The Growing Instability of Revenues over the Business Cycle: Putting the New England States in Perspective”

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Economic Perspectives on State and Local Taxes

January 23, 2015

The views expressed in this presentation are those of the speaker and do not necessarily represent positions of the Federal Reserve Bank of Boston or the Federal Reserve System.

# Motivation

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- State governments experienced unusually high fiscal stress in the 2001 and 2007-09 recessions
- Some analysts have recommended structural tax reforms to decrease the cyclical sensitivity of state revenue streams
- Questions addressed:
  - How much more unstable have state tax revenues become across the U.S.? In New England?
  - How much is this growing instability the result of the economy? Of state tax laws?
  - How much would tax reform help in stabilizing tax revenues? What would be the side effects? Are there better solutions?

# The problem of revenue instability

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- Tax revenues are cyclical (move up and down with the economy)
- Tax revenues became more cyclical (less stable over the business cycle) during the 2000s than in the 1980s and 1990s
  - Caused unexpectedly large drops in tax revenues in 2001 and 2007-09 recessions
  - Occurred in 39 out of 50 states, including CT, MA, RI, and VT
- Estimated % change in tax revenues for a 1% change in state personal income:
  - 1980s-1990s: 0.8%
  - 2000s: 1.8%

# The causes of increased revenue instability

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- Changing relationship between financial markets and the economy
  - 2001 recession coincided with bursting of dot-com bubble
  - Great Recession of 2007-09 brought on by the financial crisis
  - 1980s-90s: economic fluctuations less closely correlated with financial market fluctuations
- Within New England, MA and CT heavily affected
  - Much higher-than-average dependence on revenues from personal income tax
  - Residents derive much higher-than-average share of income from stock market
- Also, growing resistance to using tax increases to plug cyclically induced budget shortfalls in many states

# Widespread increases in total and income tax revenue cyclicalities in 2000s

	Change in Tax Elasticity, 2000–2012 vs. 1980–1999	
	Total Tax	Income Tax
<b>Increased Elasticity in the 2000s</b>	AK, AL, AZ, CA, CO, <b>CT</b> , DE, GA, HI, IA, ID, IL, KS, KY, LA, <b>MA</b> , MD, MI, MN, MS, MT***, NC, ND**, NE***, NJ, NM, NV, NY*, OH**, OK**, OR***, PA, <b>RI</b> *, SC, SD***, VA, <b>VT</b> , WA, WY	AL, AR*, AZ***, CA, CO, <b>CT</b> , DE, GA, IA, ID, IL, KS, KY, LA, <b>MA</b> , MD, MI*, MN, MO, MT, NC, ND**, NE, NJ, NM, NY, OH**, OR*, PA, <b>RI</b> , SC***, VA, <b>VT</b> , WV**
<b>Decreased Elasticity in the 2000s</b>	AR***, FL***, IN**, <b>ME</b> ***, MO, <b>NH</b> *, TN***, TX**, UT, WI***, WV***	HI, IN*, <b>ME</b> ***, MS**, OK***, UT***, WI*

# Income tax revenues more cyclical than sales tax revenues in many states in 2000s

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**Income Tax Revenues More Cyclical Than General Sales Tax Revenues**

**33 states**

AL, AR, AZ, CA, CO, **CT**, GA, IA, ID, IL, IN, KS, **MA**, MD, **ME**, MI, MN, MO, MS, NC, NJ, NM, NY, OH, OK, PA, **RI**, SC, UT, VA, **VT**, WI, WV

**General Sales Tax Revenues More Cyclical Than Income Tax Revenues**

**5 states**

HI, KY, LA<sup>1</sup>, ND, NE

# Should states consider eliminating their personal income tax in order to stabilize tax revenues?

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- Within New England, New Hampshire (no broad-based PIT or sales tax) has the most stable revenues
- Estimated % change in NH tax revenues for a 1% change in NH personal income: 0.8% in 1980s-1990s, 0.7% in 2000s
- Drawback: NH-style tax structure unlikely to raise enough revenue
  - NH's low poverty rate reduces need for government services (ME, RI, and VT have higher poverty rates than NH)
  - NH has chosen to limit the size or scope of public services provided
  - See NEPPC 2011 report on “How Does New Hampshire Do It?” by Jennifer Weiner
  - Some of the other states without PIT have severance taxes – not an option for New England

# Should states consider increasing their use of consumption taxes in order to stabilize tax revenues?

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- Consumption tax revenues more stable than income tax revenues, especially in the 2000s
  - Estimated % change in total U.S. state **general sales tax** revenues for a 1% change in total personal income: 1.0% in 1980s-1990s, 1.4% in 2000s
  - Estimated % change in total U.S. state **excise tax** revenues for a 1% change in total personal income: 0.5% in 1980s-1990s, 0.5% in 2000s
- Drawbacks in increasing sales taxes while reducing income taxes :
  - Tradeoff between stability and progressivity
  - Tradeoff between stability and revenue adequacy as consumption tax bases erode
  - Even greater encouragement to shop in NH and over the Internet!



# Should states consider reforming their personal income tax structures in order to stabilize revenues?

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- Federal AGI was by far the most important driver of state patterns in the 2000s
  - For the most part, state-level exemptions and deductions did not add to or subtract from revenue instability
- Progressivity of state tax rates unimportant, after controlling for AGI
  - States with progressive rates were more inclined to raise tax raises for high-income taxpayers than states with flat-rate structures
- Sharp trade-off between stability and progressivity of PIT

## Policy conclusions

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- State tax revenues were much more volatile than their economies during 2000-12 mostly because PIT revenues became much more cyclically sensitive than in earlier decades.
- Differences in cyclical sensitivity in PIT revenues across states were closely tied to the variability of their residents' federal AGI over the business cycle—not closely tied to differences in state PIT codes.
- Tax reforms could potentially stabilize tax revenues, but at the cost of achieving other goals.