

# National Fiscal Policies to Reduce Cyclical Volatility in U.S. States

**Karen Dynan and Doug Elmendorf**  
**Harvard University**

Preliminary Draft  
December 2019

# Our thesis

States experience cyclical downturns that differ in magnitude and timing from national downturns, and those state-level downturns have significant economic and social costs.

Balanced-budget rules prevent states from undertaking effective countercyclical fiscal policies on their own.

Therefore, the federal government can and should adopt policies that respond to state-specific needs—such as cutting federal payroll taxes on a state-by-state basis.

# The relationship of our work to others' work

Policy responses to national cyclical downturns have been studied and proposed in *many* papers.

Policy responses to persistently weak economic conditions at the state level have been studied and proposed in *some* papers.

Policy responses to cyclical downturns at the state level have been addressed in *a few* papers—and in our paper.

# Recessions in U.S. states

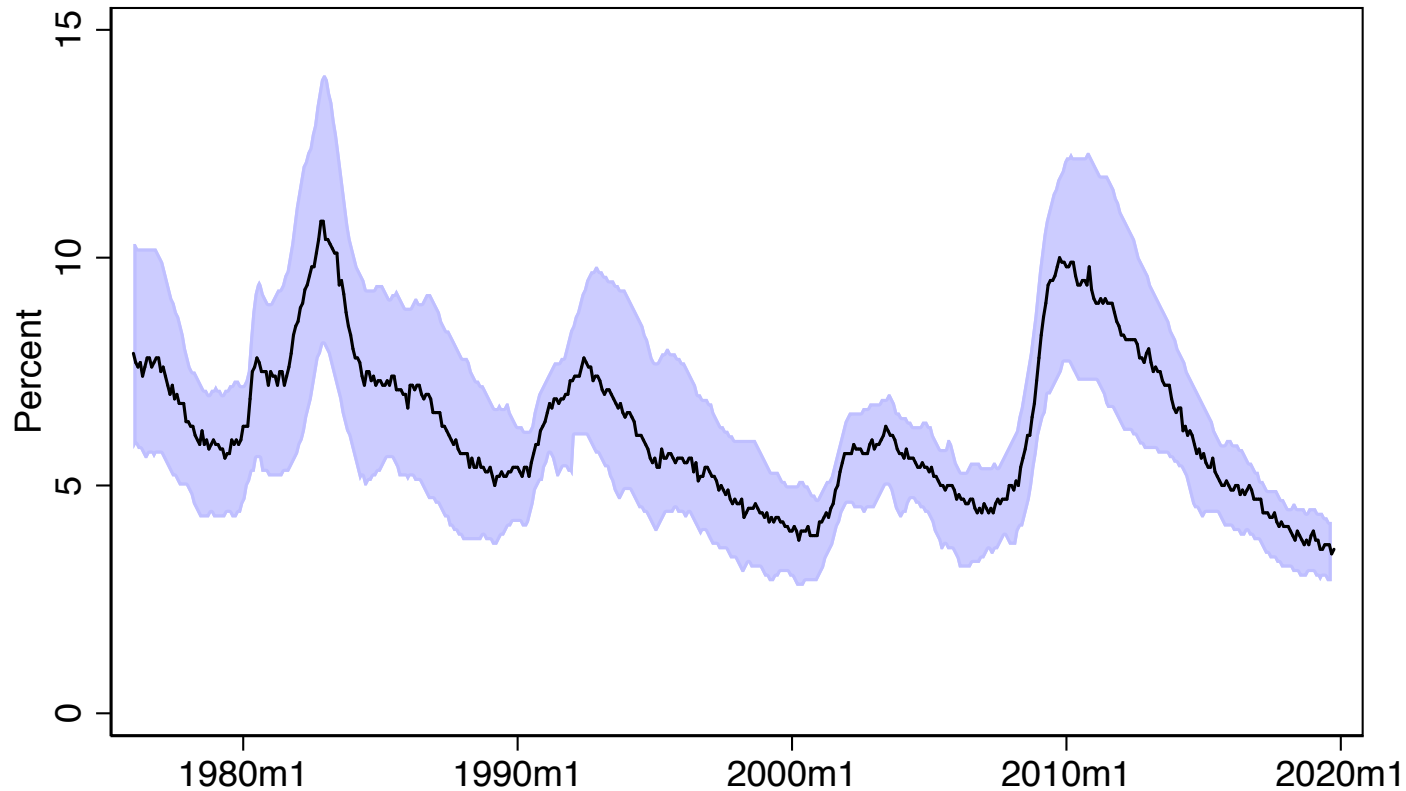
State business cycles differ from national business cycles:

State recessions are sometimes much deeper than national recessions.

State recessions often occur with somewhat different timing than national recessions.

States occasionally experience recessions when no national recession occurs at all.

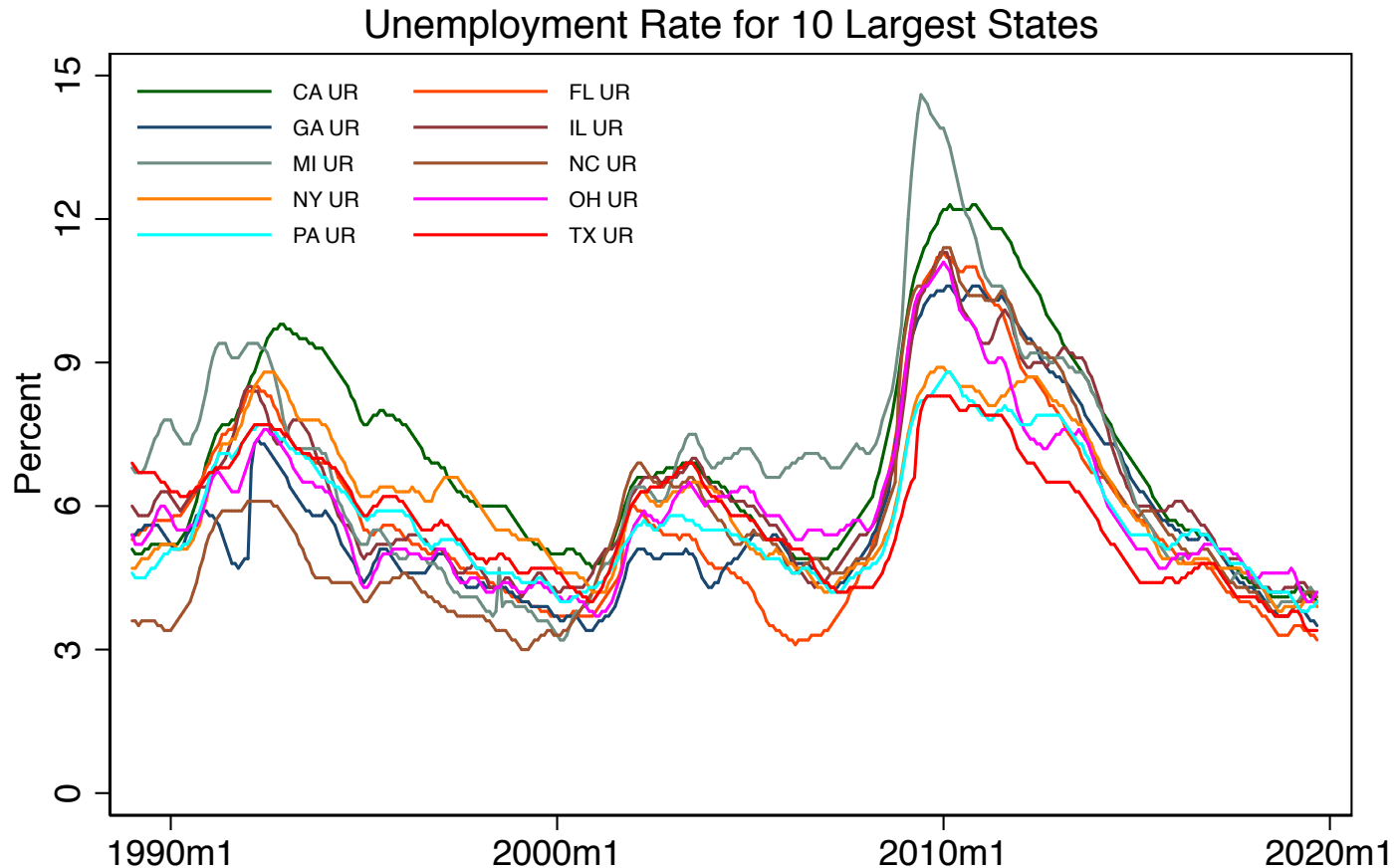
# State unemployment rates vary much more than national rates



■ 10th to 90th percentile for states      — US overall

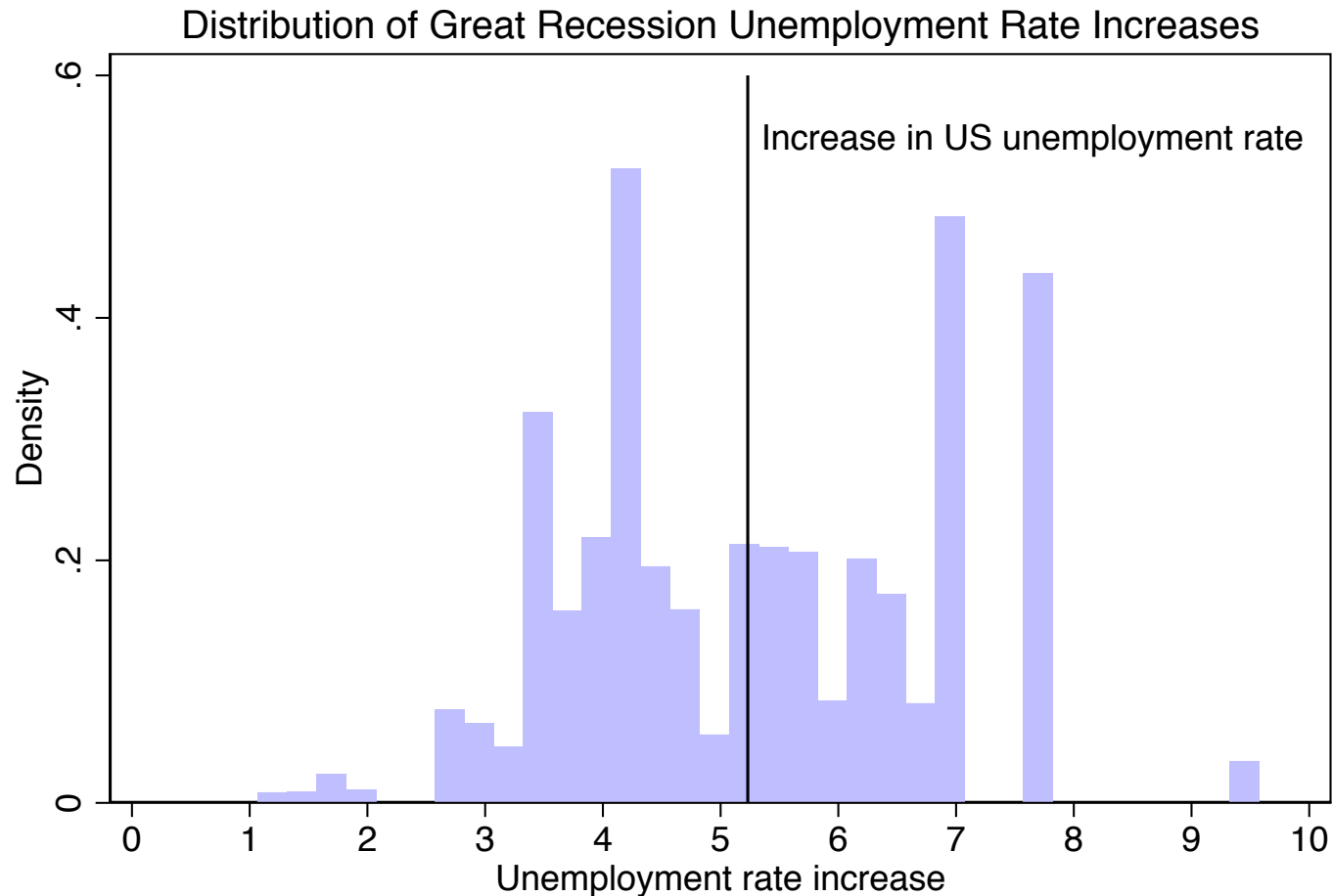
Percentiles identified on population-weighted basis.

# Among largest states over past three decades, unemployment has ranged from 3% to 14%



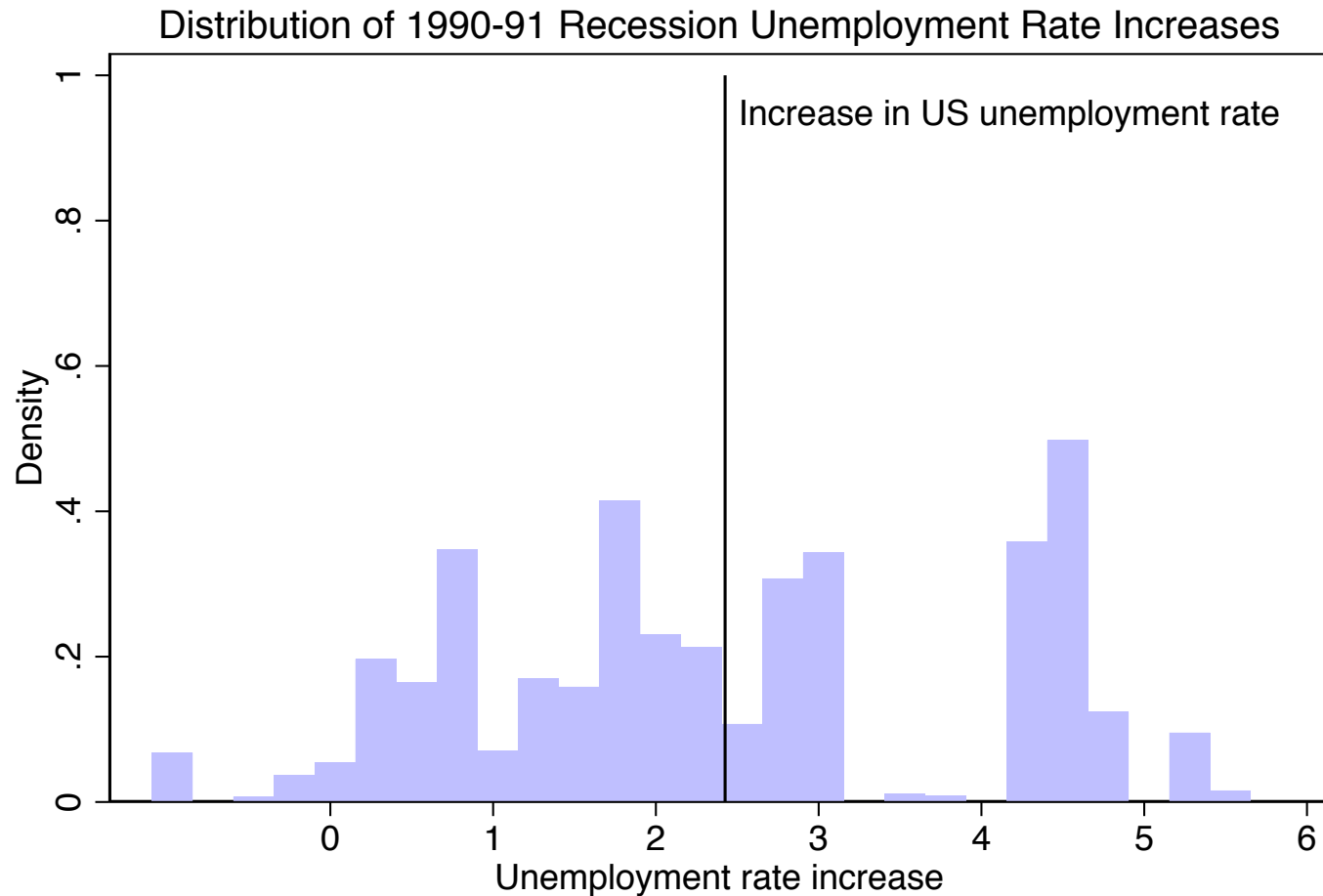
States selected based on 2018 population.

# In Great Recession, some states experienced much larger increases in unemployment



Notes: Population-weighted. Hurricane Katrina observations dropped for LA, MS.

# This was true in previous recessions as well

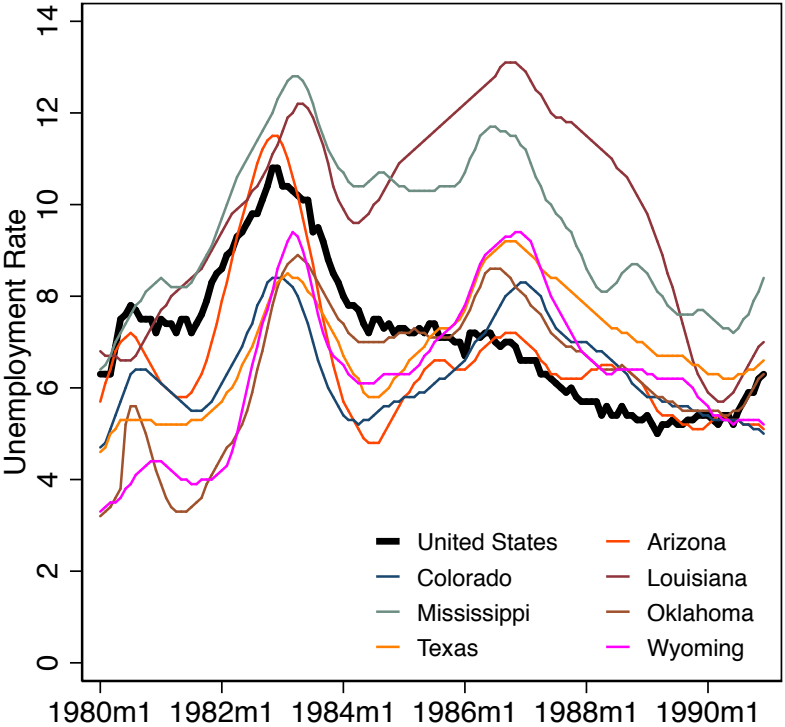


Notes: Population-weighted.

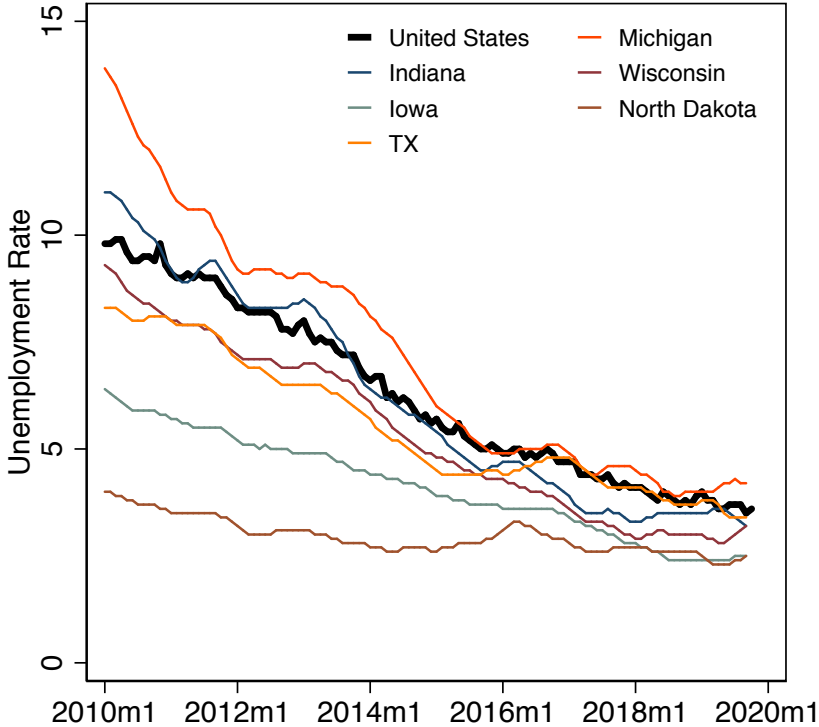


# States occasionally experience recessions that are not related to national recessions

Oil Bust, mid-1980s



Mini-Recession, 2016



# Higher unemployment has disproportionately large effects on long-term unemployment, labor force participation, and well-being

Figure 6  
Unemployment Rate and Long-term Unemployment Rate  
2007-2019

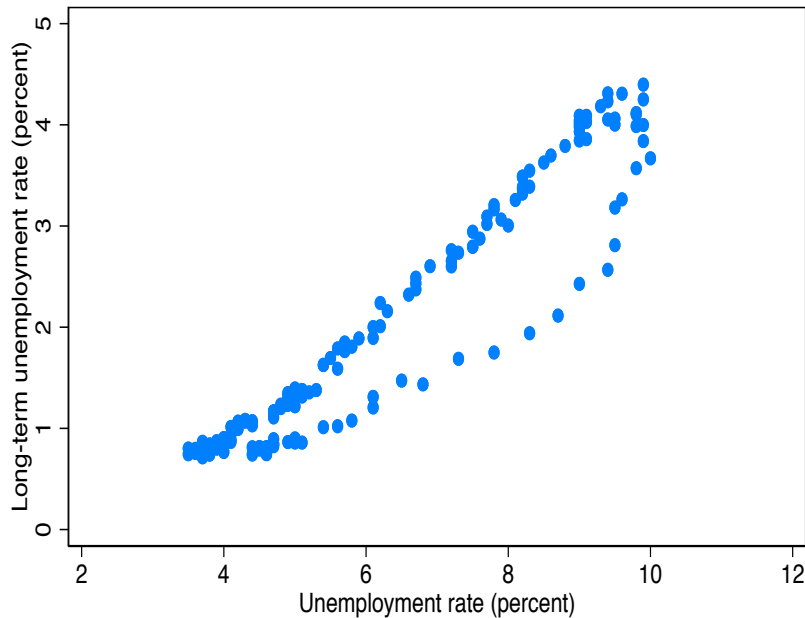
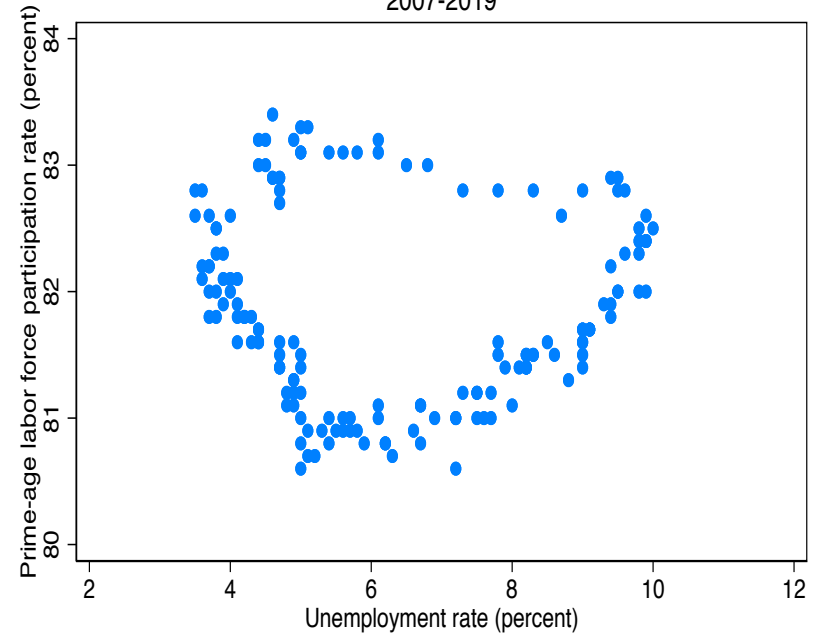


Figure 7  
Unemployment Rate and Prime-Age Labor Force Participation Rate  
2007-2019



# Large increases in state unemployment can be addressed by boosting aggregate demand

Some portion of the large increases reflect structural forces that require new education and training for workers.

However, a significant portion of the increases reflects weak demand for goods and services:

- UR and LFPR show significant reversion.

- Much employment loss occurs outside sectors with shocks.

- Wage growth slows during recessions.

# **Current fiscal policies provide greater support to states with higher unemployment**

Uniform federal tax rules and benefit programs provide greater support to states in weaker economic positions, but the amount of such support is an accident of other considerations.

Because of balanced-budget rules, states cannot mount effective countercyclical policies on their own.

# National fiscal policies can be tailored to address states' recessions more effectively

Providing additional fiscal stimulus in states with larger increases in unemployment would:

- Address the higher economic and social costs of especially large increases in unemployment.

- Increase the national impact of stimulus because each dollar of stimulus would spur more economic activity in places with more temporarily unused resources.

# National fiscal policies can be tailored to address states' recessions (cont.)

To make a meaningful difference in cyclical downturns, national fiscal policies calibrated by state would need to:

Be feasible at a scale that is noticeable in states' economies.

Scale up and down gradually, as states' economies deteriorate and improve.

Be broadly perceived as fair in order to be politically sustainable.

# There are multiple options for calibrating national countercyclical fiscal policies by state

Strengthen state-based aspects of existing federal programs:

In particular, “Increasing Federal Support for State Medicaid and CHIP Programs in Response to Economic Downturns” by Fiedler, Furman, and Powell (2019). Most other programs are too small to matter much for stabilization, although they are important to the recipients of benefits.

Vary payroll taxes based on employees’ states of residence.

# Varying payroll taxes based on employees' states of residence meets the key criteria

Feasible at scale: Payroll tax revenue exceeds \$1 trillion per year, and firms report employees' compensation to the tax authorities of states where they are residents.

Can be scaled up and down gradually.

Might well be viewed as fair: It would represent insurance for states (some would benefit at some times, and others at other times) and would cut employment taxes more in states with especially high unemployment.



# We simulated a specific proposal for varying payroll tax rates by state

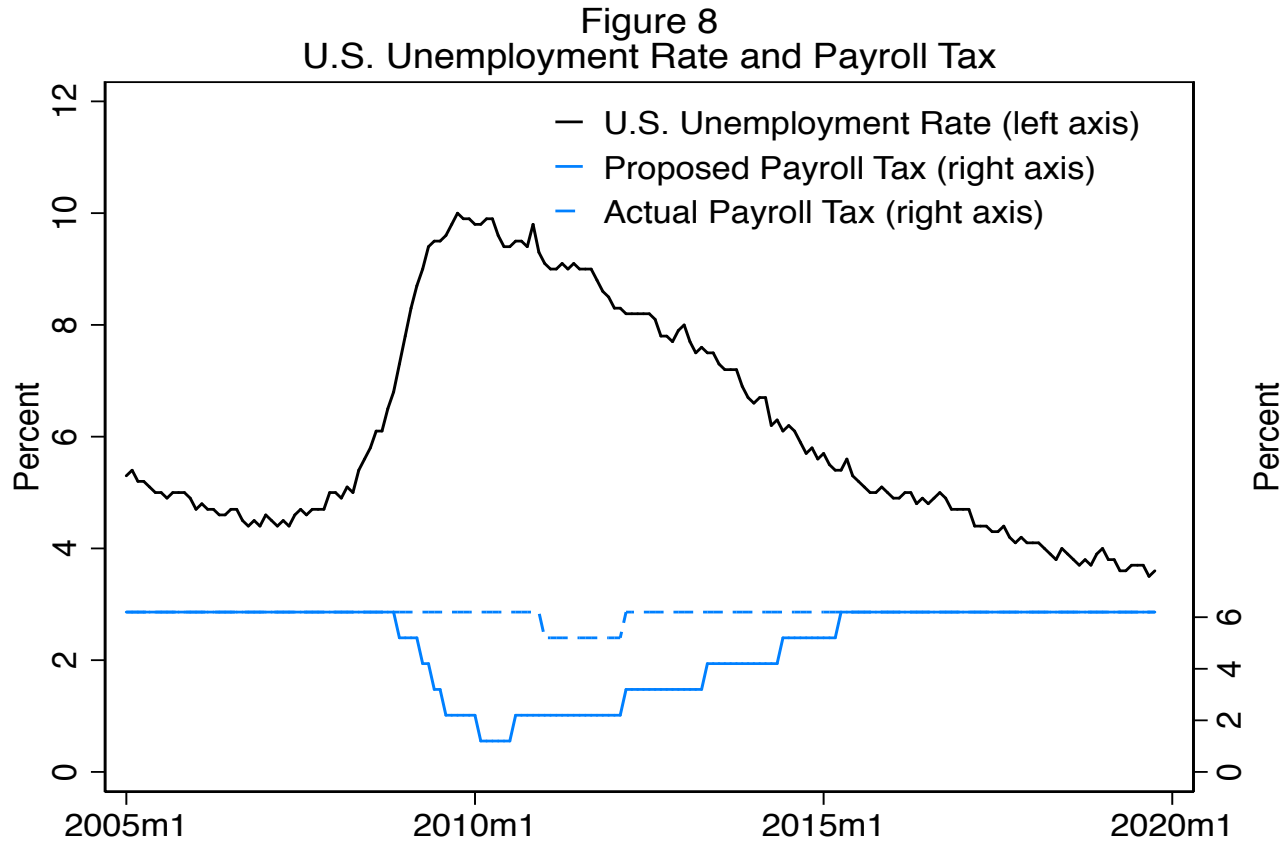
## Trigger:

When the 6-month MA of unemployment rate exceeds the 6<sup>th</sup> lag of the 12-month MA by 1 pp, a recession is deemed to have begun, and that 12-month MA is the “baseline rate.”

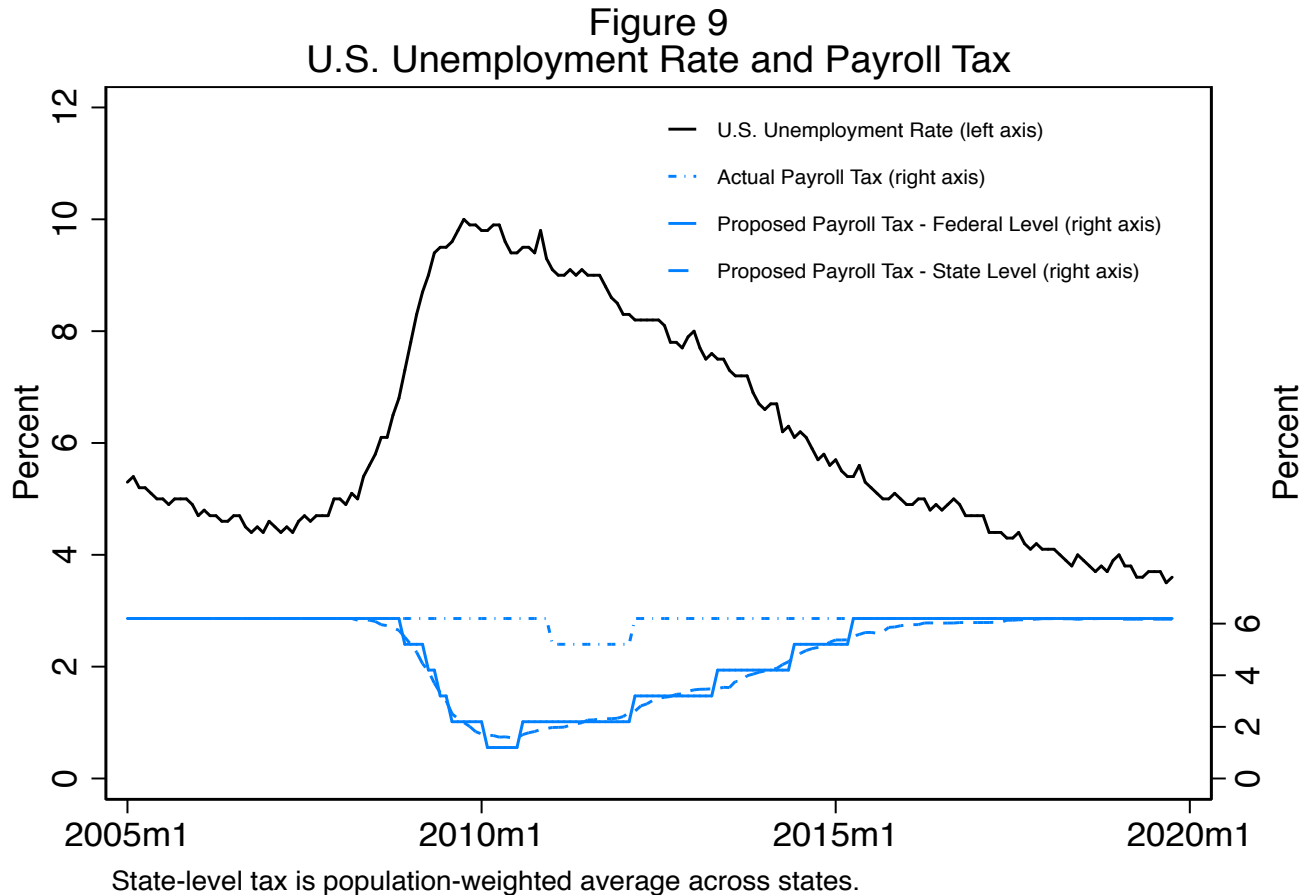
## Policy Change:

For each 1 pp by which the 6-month MA exceeds baseline rate, the employee share of payroll tax is reduced by 1 pp beginning 2 months later. As unemployment rate declines, the process runs in reverse and the tax rate reverts.

# We simulated a specific proposal for varying payroll tax rates by state (cont.)



# We simulated a specific proposal for varying payroll tax rates by state (cont.)



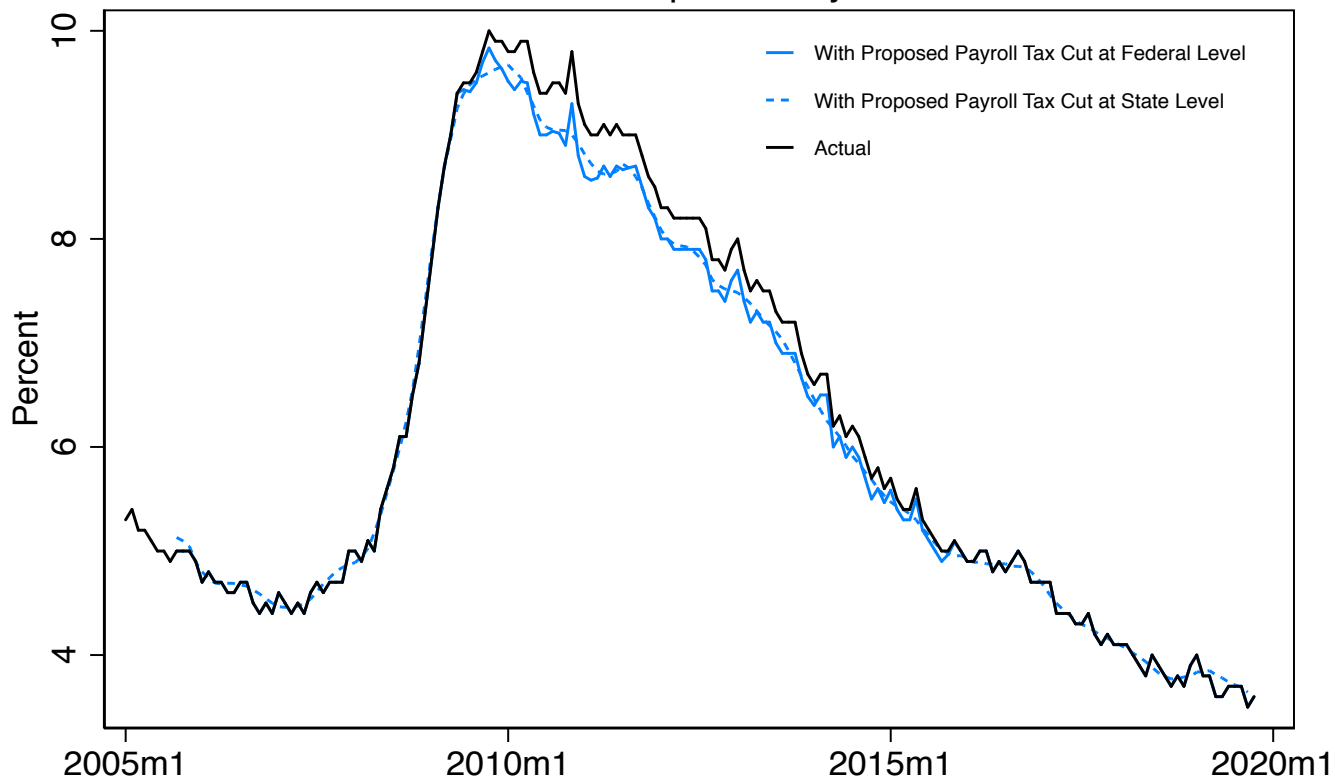
# We estimated the macroeconomic effects of this proposal

According to CBO and JCT, the 2 pp cut in payroll tax rate in 2011 reduced federal revenues by \$112 billion. CBO estimated that the multiplier for GDP was 0.5 (with some lag), implying an increase in GDP of 0.36 percent. Applying Okun's law gives a reduction in the unemployment rate of 0.18 percentage points (with a further lag).

Thus, a 1 pp cut in the payroll tax rate would reduce the unemployment rate by roughly 0.1 percentage point, with a lag.

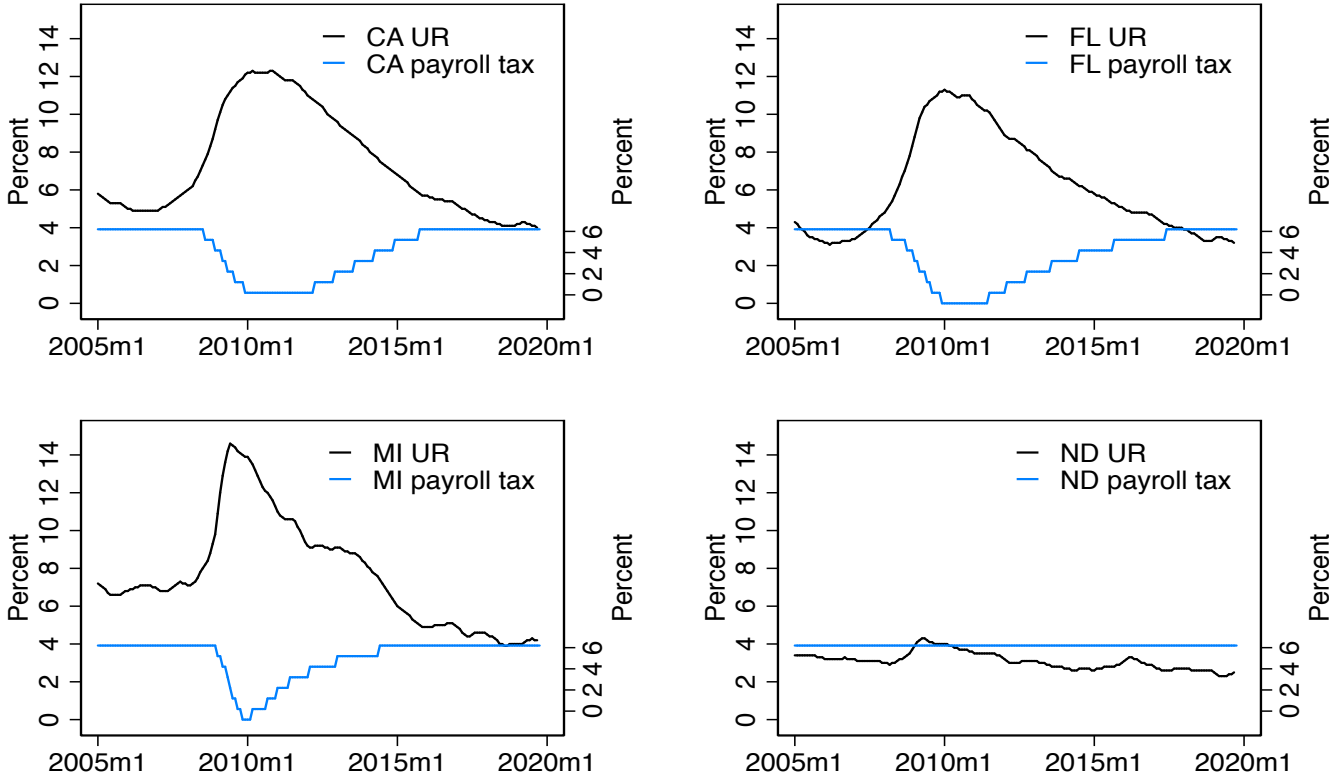
# We estimated the macroeconomic effects of this proposal (cont.)

Figure 10  
U.S. Unemployment Rate:  
Actual and with Proposed Payroll Tax Cuts



# The proposal would have generated starkly different tax rates across states

Figure 11  
Examples of Proposed State Payroll Tax Changes



# Conclusion

U.S. states experience significantly different cyclical patterns of unemployment, and those differences warrant a national fiscal policy response.

Enacting countercyclical fiscal policy calibrated to state unemployment rates would reduce the cost of recessions.