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*Slow tax revenue growth,  
rising pension contributions, and  
Medicaid growth lead state and local  
governments to reshape their finances*

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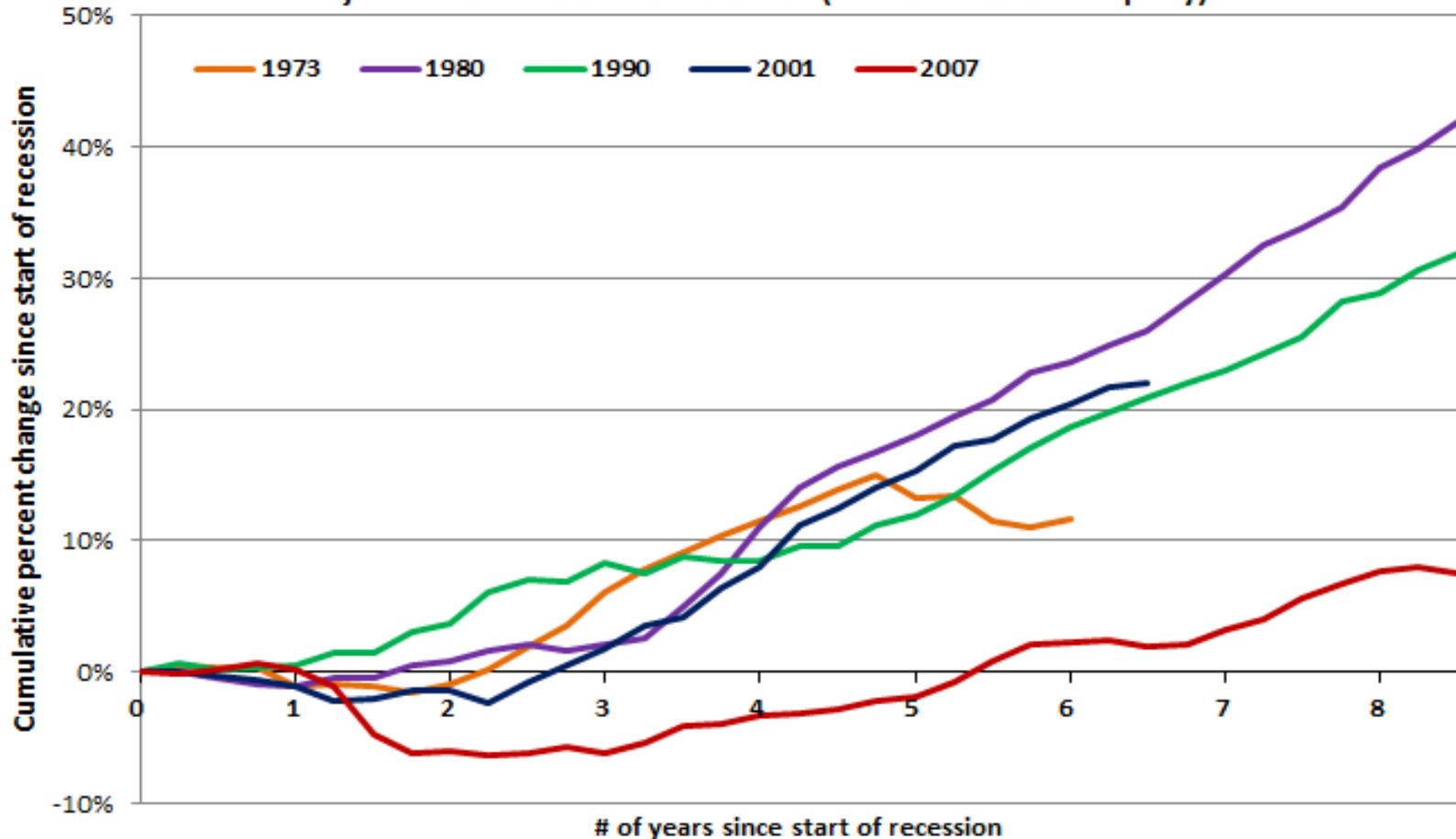
# Outline

- Three major sources of fiscal stress
  - Slow tax revenue growth
  - Extraordinary growth in pension contributions
  - Medicaid spending growth
- S&L government response:
  - Cuts in infrastructure investment
  - Cuts in education (both higher education & K-12)
  - Cuts in social benefits (other than Medicaid)
  - Cuts in S&L gov. personnel, administrative staff
  - Cuts in other areas of the budget
- Outlook
  - Continued slow growth in tax revenues
  - Continued hikes in pension contributions
  - Continued Medicaid spending growth - faster than economy

# Three sources of fiscal stress

# Taxes: Slow tax revenue growth

Percent change in inflation-adjusted state and local government tax revenue from major sources since start of recession (PIT + CIT + Sales + Property)

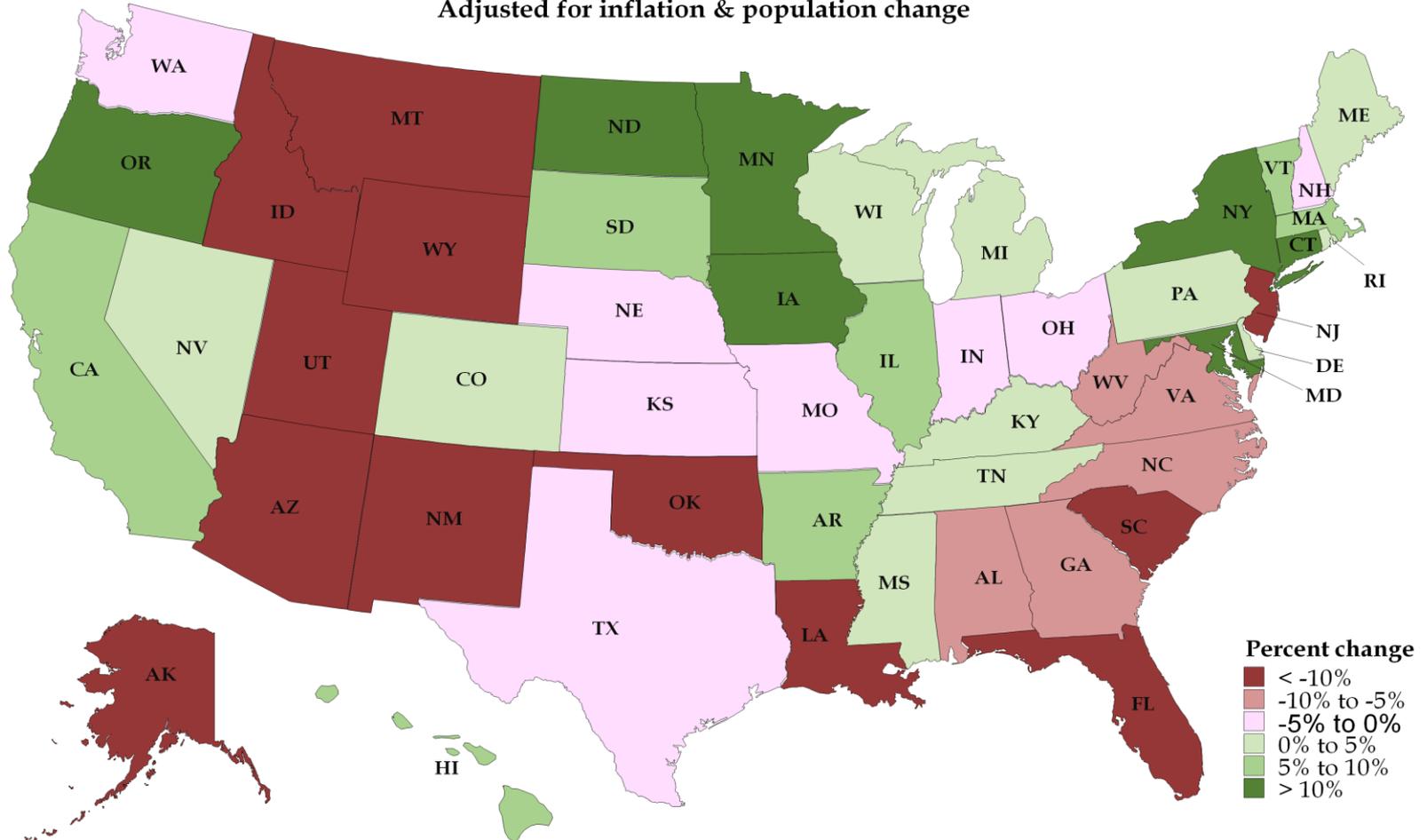


Source: Rockefeller Institute analysis of data from U.S. Census Bureau.

Notes: Data are shown only until the start of the next recession; 1980 & 1981 recessions are treated as single recession.

# State taxes, adjusted for inflation & population growth, still below pre-recession in **25** states

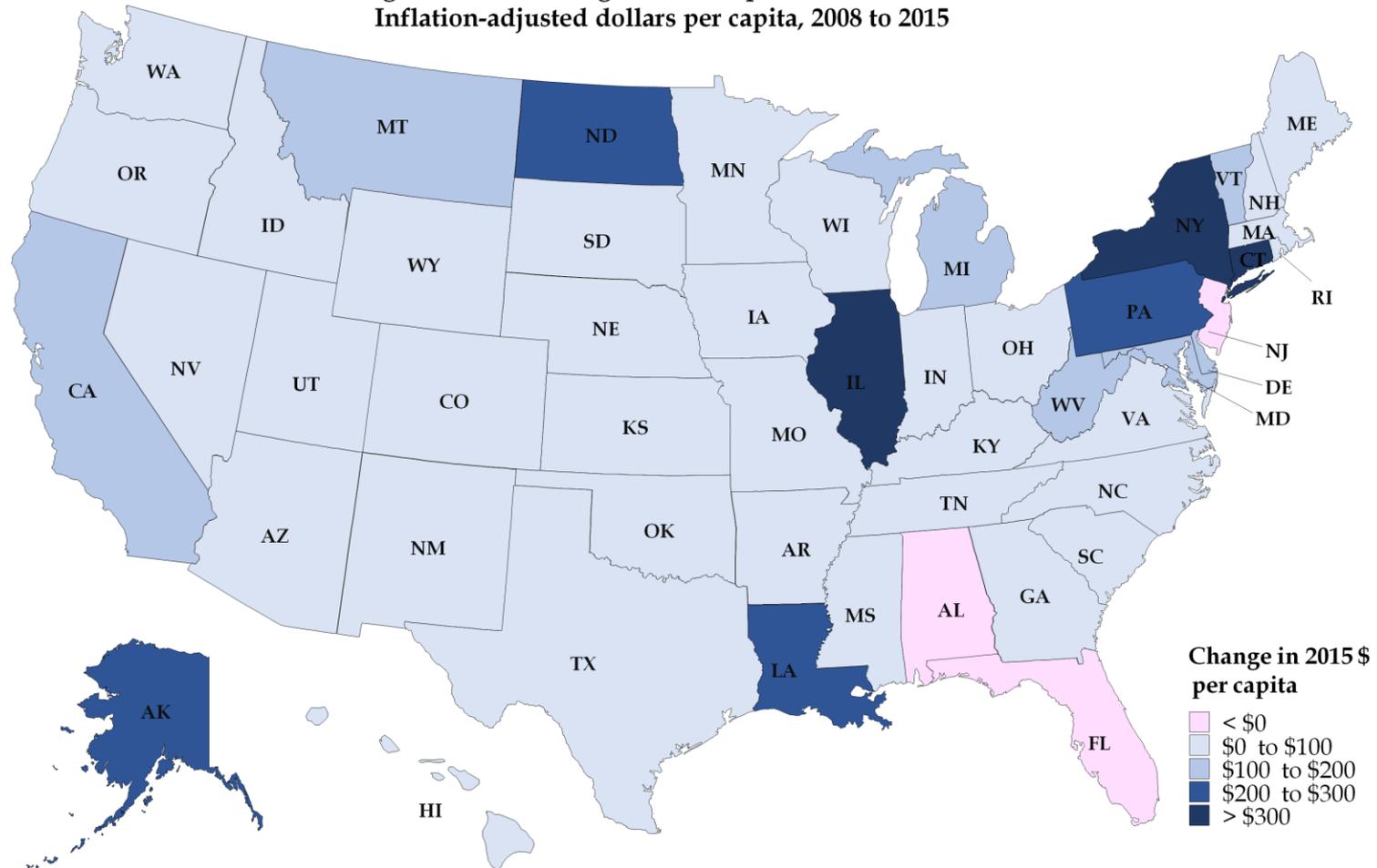
Percent change in 4-quarter moving average of state tax revenues, 2016q2 vs 2007q4  
Adjusted for inflation & population change



Sources: U.S. Census Bureau (tax revenue and population), Bureau of Economic Analysis (GDP price index).

# Pensions: Extraordinary growth in pension contributions in some states (IL, NY, CT)

Change in state & local government pension contributions  
Inflation-adjusted dollars per capita, 2008 to 2015



Source: U.S. Census Bureau, Annual Survey of Public Pensions.

Note: Data adjusted for Alaska (2015) and Connecticut (2008) due to extraordinary contributions funded from bond proceeds.

# Medicaid: Higher Medicaid spending, driven by recession-related enrollment growth

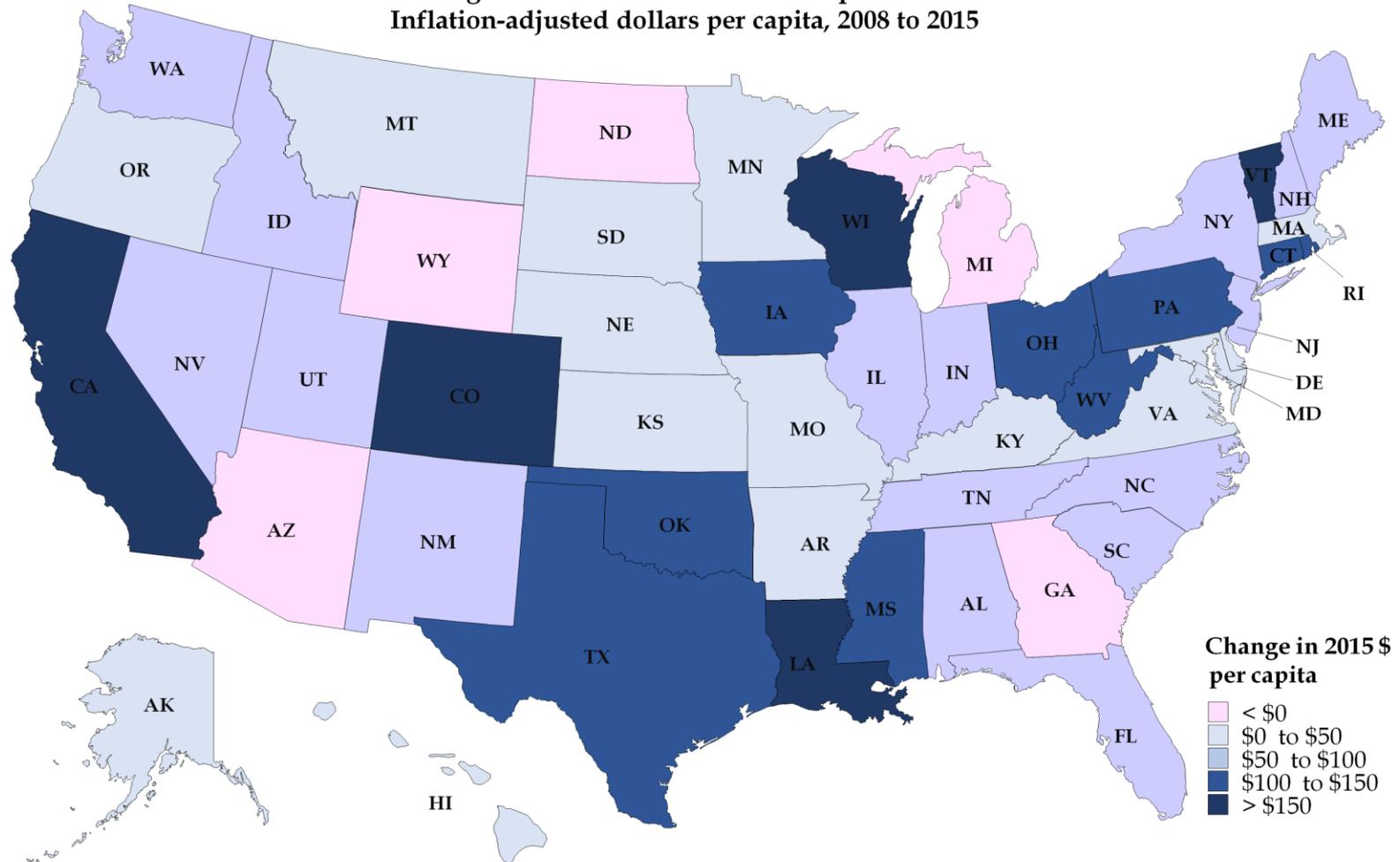
Medicaid Expenditures and Enrollment Before, During and After the Great Recession					
Federal fiscal years	Enrollment (millions)	Expenditures (billions of 2015\$)			Notes
		Total	Federal	State	
2005	46.3	\$357.6	\$204.7	\$152.9	
2008	47.7	368.5	210.3	158.3	
2011	56.5	431.8	275.2	156.6	
2013	58.9	442.6	254.3	188.3	
2015	70.1	524.5	329.3	195.2	
<b>% change</b>					
2005 to 2008	2.9%	3.1%	2.7%	3.5%	Slow growth in enrollment and spending.
2008 to 2011	18.5	17.2	30.9	(1.1)	Recession-related enrollment growth, cost absorbed by federal ARRA.
2011 to 2013	4.3	2.5	(7.6)	20.3	Slow enrollment growth but state spending rises as ARRA wanes.
2013 to 2015	19.0	18.5	29.5	3.7	ACA-related enrollment kicks in, driving federal expenditures up.
Post recession:					State post-recession 23.4% increase driven by 2008-2011 enrollment rises.
2008 to 2015	47.1	42.3	56.6	23.4	
<b>\$ change</b>					
2005 to 2008	1.3	\$10.9	\$5.6	\$5.4	
2008 to 2011	8.8	63.2	64.9	(1.7)	
2011 to 2013	2.4	10.8	(20.9)	31.7	
2013 to 2015	11.2	81.9	75.0	6.9	
Post recession:					State post-recession \$37 billion increase driven by 2008-2011 enrollment rises.
2008 to 2015	22.4	156.0	119.0	37.0	

**Sources:** CMS (expenditures), MACPAC (enrollment), Bureau of Economic Analysis (GDP price index).

**Note:** Enrollment is average monthly enrollment for the federal fiscal year. Enrollment for 2015 estimated by authors.

# Inflation-adjusted state-funded Medicaid spending per-capita was up in 45 states

Change in state-funded Medicaid expenditures  
Inflation-adjusted dollars per capita, 2008 to 2015



Sources: CMS (Medicaid), U.S. Census Bureau (population), and Bureau of Economic Analysis (GDP price index).

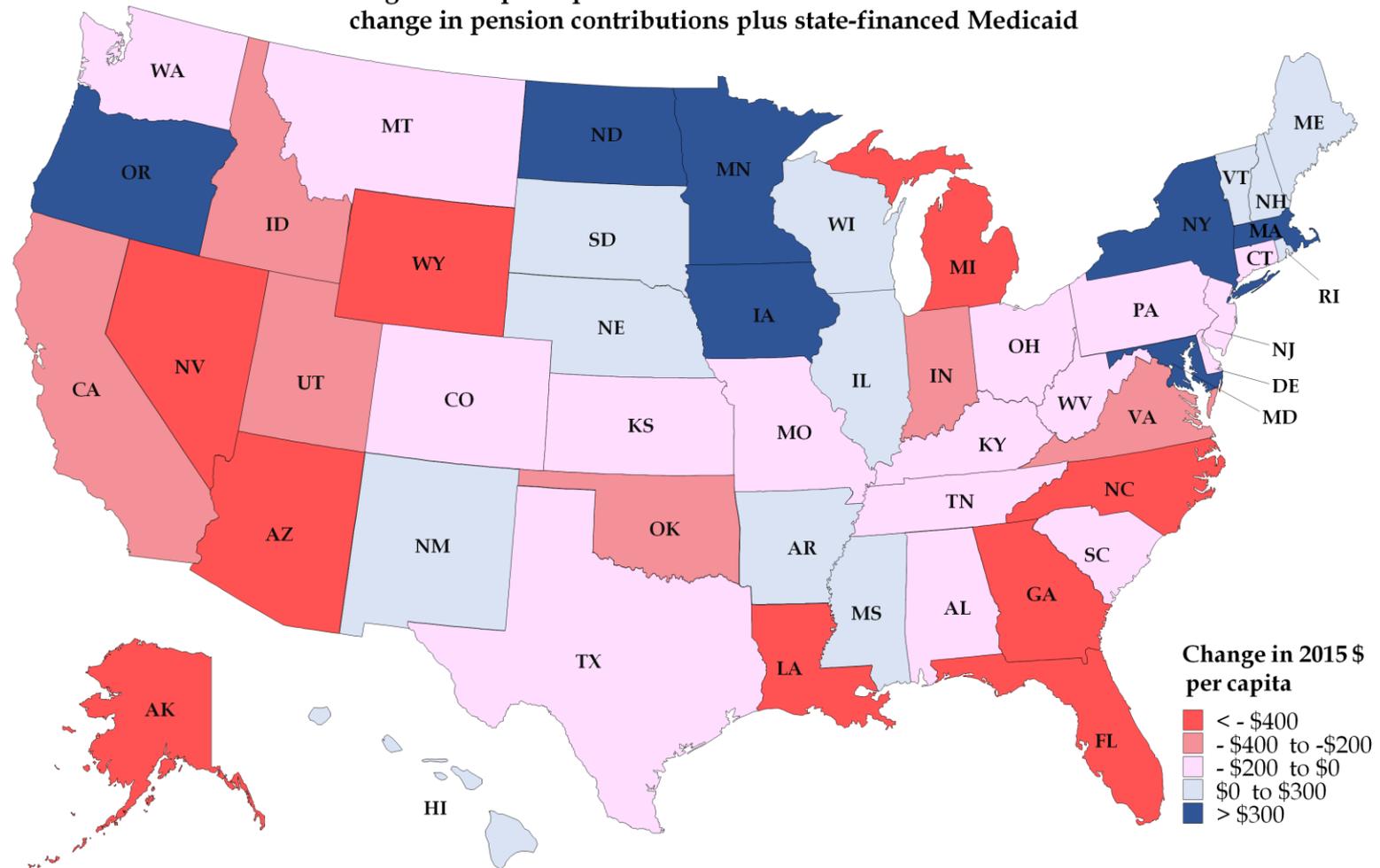
# Conclusion: Pension contributions & Medicaid combined grew by nearly as much as state & local gov. taxes between 2008 & 2015

**Pension Contributions, Medicaid and Taxes: Before and After the Great Recession  
(Billions of 2015\$)**

	<b>2008</b>	<b>2015</b>	<b>\$ change</b>	<b>% change</b>
Pension contributions—state and local	\$88.8	\$129.1	\$40.3	45.4%
Medicaid state share (mostly paid by states)	158.6	195.2	36.6	23.1%
Pensions plus Medicaid	247.4	324.4	77.0	31.1%
Taxes—state and local	\$1,468.1	\$1,555.3	\$87.3	5.9%

# Conclusion: Tax revenue growth hasn't kept up with pension contribution & Medicaid increases

Change in real per-capita state-local taxes from 2008 to 2015 minus change in pension contributions plus state-financed Medicaid



Sources: CMS (Medicaid), U.S. Census Bureau (pension contributions and population), and Bureau of Economic Analysis (GDP price index).

# State and Local Government Response

# Cuts in infrastructure spending

State and Local Government Inflation-Adjusted Gross Investment (Billions of 2015\$)				
	2009	2015	\$ change	% change
<b>Gross investment</b>	<b>\$399.3</b>	<b>\$352.2</b>	<b>(\$47.1)</b>	<b>-11.8%</b>
Education	91.1	66.5	(24.6)	-27.0%
Water & sewer systems	41.7	34.9	(6.8)	-16.3%
Office	23.4	19.2	(4.2)	-18.1%
Transportation total	112.0	119.3	7.3	6.5%
<i>Highways and streets</i>	88.4	92.8	4.4	4.9%
<i>Other transportation</i>	23.5	26.5	3.0	12.6%
Public safety	5.2	3.7	(1.5)	-28.4%
Health care	6.7	5.1	(1.6)	-24.0%
Amusement and recreation	8.5	5.3	(3.2)	-37.4%
Power	12.3	8.3	(4.0)	-32.6%
Equipment, intellectual property	80.5	75.2	(5.3)	-6.6%
All other	17.9	14.7	(3.2)	-18.0%

**Sources:** Bureau of Economic Analysis, Table 5.9.5B (gross investment) and Table 1.1.4 (GDP price index).

**Note:** All items adjusted by GDP price index, not expenditure-specific indexes.

# Cuts in consumption spending

State and Local Government Inflation-Adjusted Consumption Expenditures (Billions of 2015\$)				
	2009	2015	\$ change	% change
<b>State &amp; local gov. consumption expenditures, total</b>	<b>\$1,659.2</b>	<b>\$1,641.2</b>	<b>(\$18.0)</b>	<b>-1.1%</b>
Education	778.0	791.7	13.7	1.8%
Public safety	309.8	308.0	(1.8)	-0.6%
Economic affairs	185.5	184.3	(1.2)	-0.6%
General public service	192.1	179.3	(12.8)	-6.6%
Income security	82.7	78.0	(4.7)	-5.7%
Net health expenditures; excludes Medicaid	68.7	61.3	(7.4)	-10.8%
Recreation & culture	32.3	29.7	(2.6)	-8.2%
Housing and community service	10.1	8.9	(1.2)	-12.1%

**Sources:** Bureau of Economic Analysis, Table 3.17 (expenditure data) and Table 1.1.4 (GDP price index).  
**Note:** All items adjusted by GDP price index, not expenditure-specific indexes.

# Cuts in higher education support

Higher Education Enrollment and Inflation-Adjusted Per FTE Revenues Before, During and After the Great Recession					
State FY	FTE enrollment (millions)	2014\$ per FTE			Net tuition as % of total education revenues
		Educational appropriations	Net tuition	Total educational revenues	
2000	8,605	\$8,011	\$3,313	\$11,323	29.3%
2005	9,896	7,154	4,053	11,169	36.3%
2008	10,254	7,966	4,419	12,344	35.8%
2011	11,644	6,717	4,947	11,612	42.6%
2014	11,138	6,552	5,777	12,266	47.1%
% change					Change in %
2000 to 2005	15.0%	-10.7%	22.3%	-1.4%	7.0%
2005 to 2008	3.6%	11.4%	9.0%	10.5%	-0.5%
2008 to 2011	13.6%	-15.7%	12.0%	-5.9%	6.8%
2011 to 2014	-4.4%	-2.5%	16.8%	5.6%	4.5%
Post-Recession: 2008 to 2014	8.6%	-17.8%	30.7%	-0.6%	11.3%

**Source:** State Higher Education Executive Officers (SHEEO).  
**Note:** Adjusted for inflation using GDP price index.

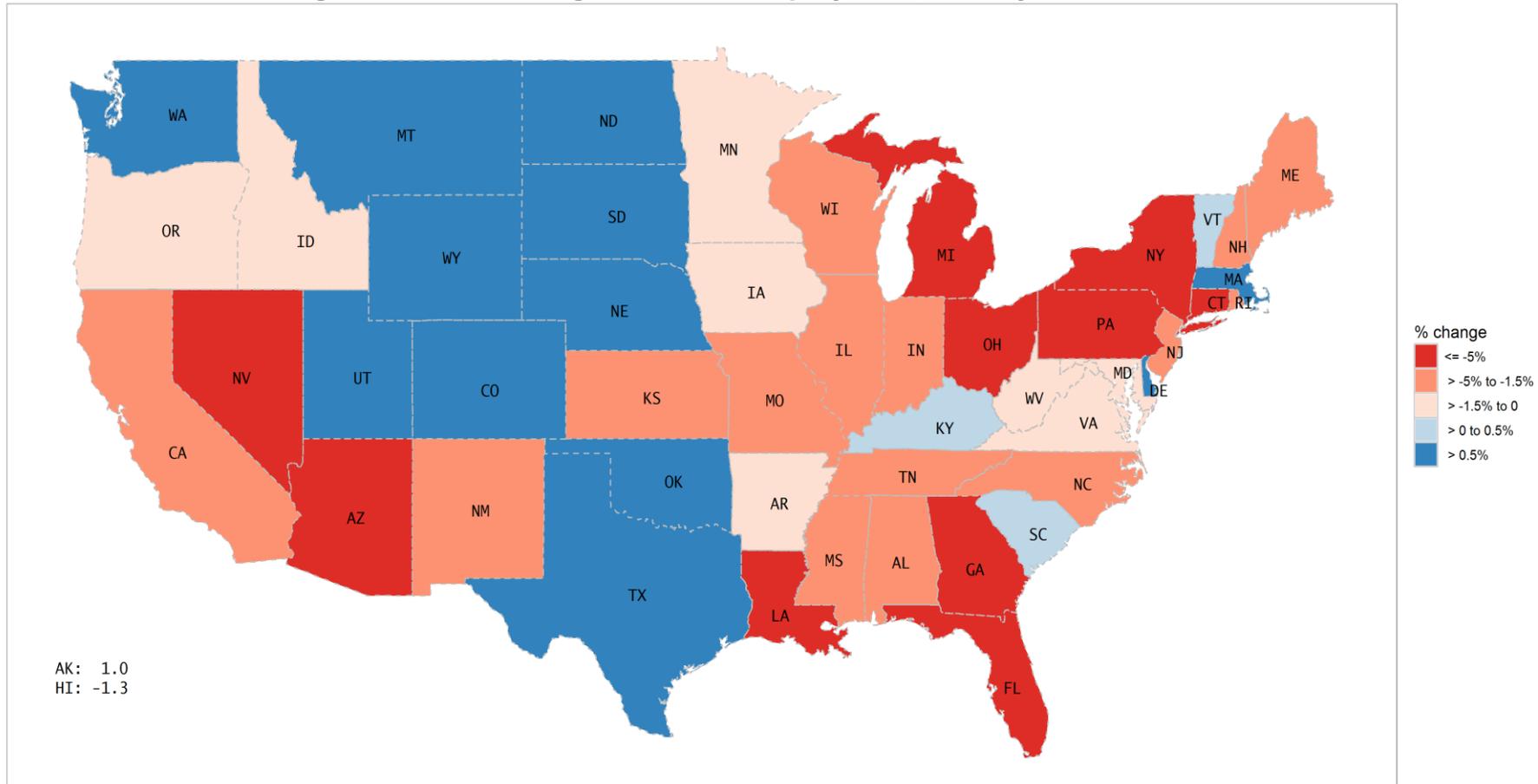
# Cuts in K-12 education spending

<b>K-12 Enrollment and Inflation-Adjusted Expenditures Before, During and After the Great Recession</b>			
<b>School year</b>	<b>Fall enrollment (millions)</b>	<b>2014 \$</b>	
		<b>K-12 expenditures \$ billions</b>	<b>K-12 per pupil expenditures</b>
2000	46.9	\$507.5	\$10,905
2005	48.8	591.1	12,177
2008	49.3	655.2	13,286
2011	49.5	636.5	12,895
2014	50.0	625.0	12,564
<b>% change</b>			
2000 to 2005	4.1%	16.5%	11.7%
2005 to 2008	1.0%	10.8%	9.1%
2008 to 2011	0.4%	-2.9%	-2.9%
2011 to 2014	1.1%	-1.8%	-2.6%
Post-Recession:			
2008 to 2014	1.5%	-4.6%	-5.4%

**Source:** National Center for Education Statistics (NCES).  
**Note:** Adjusted for inflation using GDP price index.

# State and local government employment is lower than in 2009 in 35 states

Percent change in state & local government employment, fiscal years 2009 to 2015



Source: Rockefeller Institute analysis of Quarterly Census of Employment and Wages from BLS

# Outlook

# States forecast weak tax revenue growth in fiscal year 2017

Most Recent Actual Revenue Collections Versus Revenue Forecasts from States			
	% change in actual collections		% change in forecasts
	2014-2015	2015-2016	2016-2017
<b>Personal income tax</b>			
Median forecast	7.7%	2.9%	3.9%
Number of states with over 5% growth	30	11	5
<b>Sales tax</b>			
Median forecast	4.7%	2.9%	3.9%
Number of states with over 5% growth	19	9	9
<b>Source:</b> Individual state data, analysis by the Rockefeller Institute.			
<b>Note:</b> Reflects 36 states with income tax forecasts and 38 states with sales tax forecasts.			

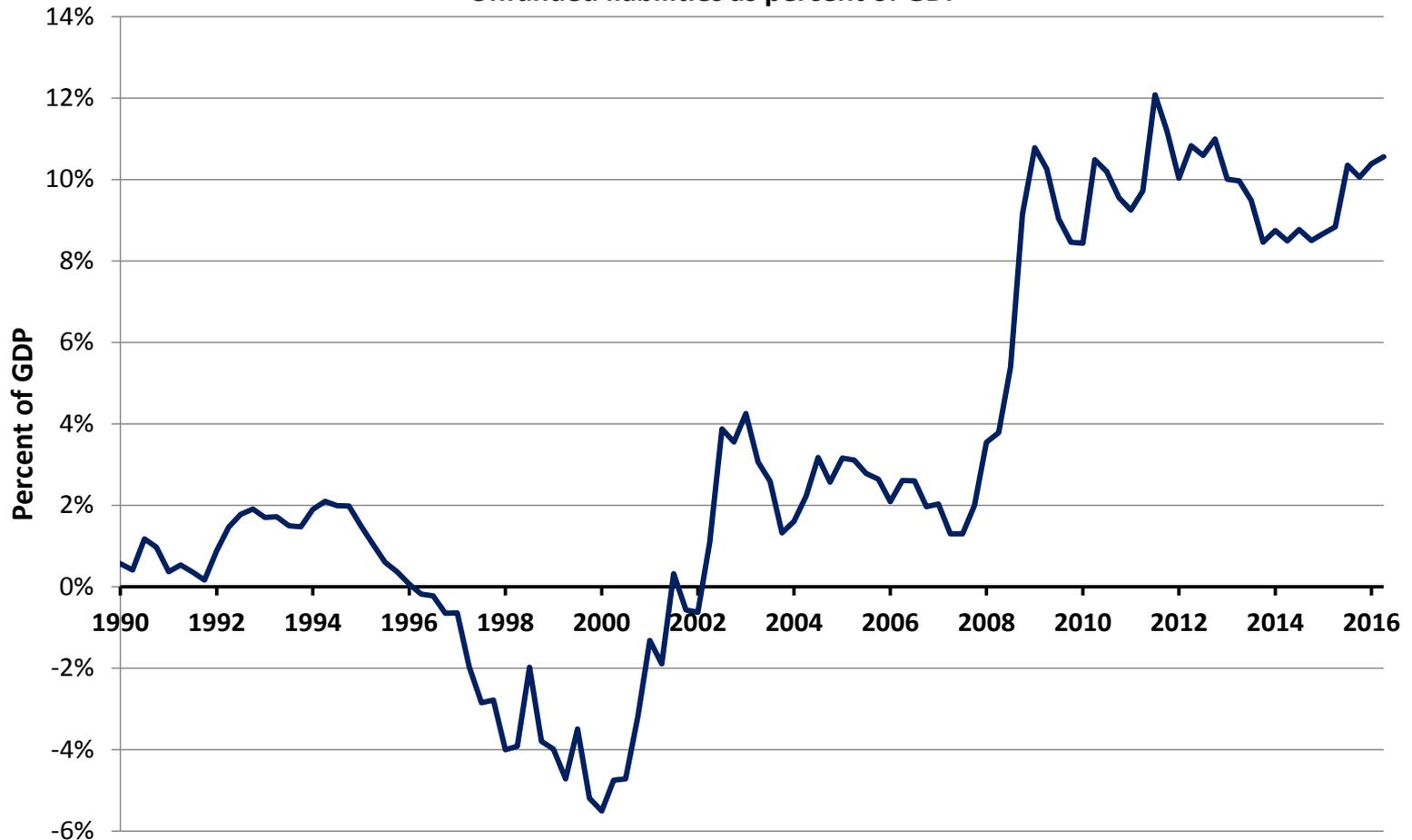
# Oil and coal states face special difficulties

Economy, Employment and Taxes in Oil- and Mineral-Dependent States								
State	Mining industries as share of state GDP, 2014			Employment change, Sep. 2016 vs. Jan. 2015	Severance taxes as % of total taxes (FY 2015)	Percent change, 4-quarters ending June 2016 vs. year		
	Oil & gas extraction	All other mining activities	Total mining			Severance taxes	Other taxes	Total taxes
Alaska	19.7%	7.8%	27.4%	-1.1%	12.2%	-39.4%	41.7%	-24.6%
Louisiana	5.0%	2.2%	7.3%	-1.6%	7.5%	-44.7%	0.7%	-3.8%
New Mexico	8.8%	5.0%	13.7%	-0.3%	16.7%	-45.6%	20.2%	-10.5%
North Dakota	7.4%	10.6%	18.0%	-5.2%	49.6%	-40.6%	-31.5%	-32.4%
Oklahoma	14.6%	2.7%	17.3%	-1.3%	5.9%	-47.4%	30.9%	-10.2%
Texas	10.8%	2.4%	13.3%	2.6%	7.3%	-36.5%	-5.3%	-5.7%
West Virginia	4.8%	10.4%	15.2%	-1.4%	12.0%	-32.8%	-3.1%	-7.8%
Wyoming	11.8%	15.8%	27.6%	-5.1%	37.5%	0.0%	-8.6%	-8.6%
<b>Oil states</b>	<b>10.4%</b>	<b>3.3%</b>	<b>13.8%</b>	<b>1.1%</b>	<b>11.4%</b>	<b>-42.7%</b>	<b>-3.3%</b>	<b>-8.2%</b>
<b>Non-oil states</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.9%</b>	<b>3.1%</b>	<b>0.2%</b>	<b>-41.7%</b>	<b>2.3%</b>	<b>2.2%</b>
<b>United States</b>	<b>1.8%</b>	<b>0.9%</b>	<b>2.6%</b>	<b>2.9%</b>	<b>1.4%</b>	<b>-42.6%</b>	<b>1.8%</b>	<b>1.1%</b>

**Sources:** Bureau of Economic Analysis (GDP), Bureau of Labor Statistics (employment) and U.S. Census Bureau (taxes).  
**Notes:** Analysis by the Rockefeller Institute.

# Pension contributions are poised to rise further

State and local government defined benefit pension plans in the United States  
Unfunded liabilities as percent of GDP



**Sources:** Federal Reserve Board, Financial Accounts of the United States (L.120.b (Q) State and Local Government Employee Retirement Funds: Defined Benefit Plans) and Bureau of Economic Analysis (Table 1.1.5).

# Medicaid still expected to grow faster than the economy

Medicaid growth faster than the economy		
	AAGR 1990-2007	AAGR 2016-2019
Medicaid	9.7%	5.6%
Federal	9.7%	5.2%
State & local	9.6%	6.4%
GDP	5.4%	4.8%

**Source:** S. P. Keehan et al., “National Health Expenditure Projections, 2015-25: Economy, Prices, and Aging Expected to Shape Spending and Enrollment,” Health Affairs 35, no. 8

# Conclusion

- State & local gov. play a crucial role in the economy
  - Responsible for 3/4 of the transportation water infrastructure
  - Finance 90% of the public K-12 schools
  - Provide a majority of the higher education
  - Implement much of the social safety net
- They have scaled many of the activities back due to:
  - Slow growth in taxes
  - Rapid growth in pension contributions
  - Enrollment-driven Medicaid growth
- Outlook
  - State tax revenues will continue slow growth
  - States will continue to struggle to provide services

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