



TAX POLICY CENTER
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Why the Pandemic Did not Crash State Revenues? Exploring the Changing Patterns in State Income Taxes

FTA Revenue Estimation Conference
Pittsburgh, Pennsylvania

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Overview

- The drivers behind state fiscal boom in 2021
- Long-term trends in state personal income tax revenues
- Capital gains and the stock market
- Trends in personal income tax revenues since the Great Recession
- Is the boom over? Early signs of weakness in personal income tax revenues
- Trends in (un)employment and wages
- Demographic trends and its implications for personal income tax revenues
- What's ahead for state budgets?

The state fiscal boom during the second year of COVID-19



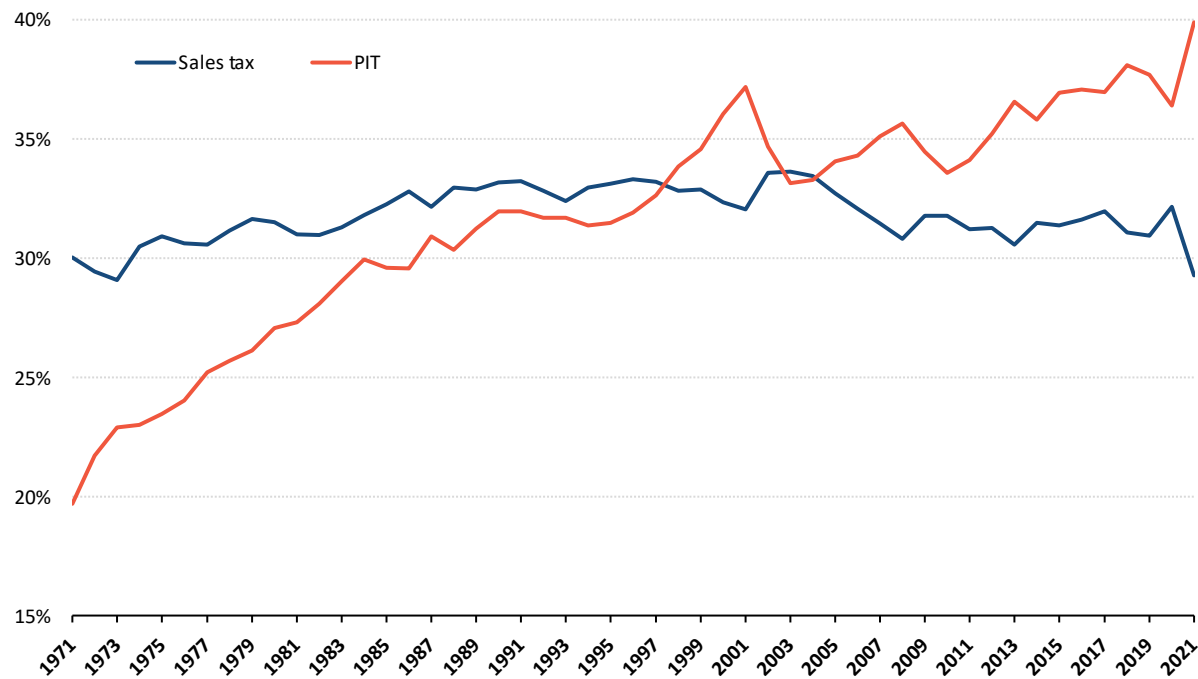
- Inflation, inflation, inflation
 - Supply chain bottlenecks and unprecedented labor shortages drove annual inflation to 4.7% in 2021, a 30-year high. Current inflation rates are above 8%
- The pandemic increased spending on taxable goods
- Robust stock market
 - In 2021, the S&P 500 stock index rose by 33%, the fastest annual rate since 1983.
- IPO bonanza
 - The IPOs boomed in 2021, with companies raising billions through listings.
- Anticipation of federal tax rate hikes
 - The Biden administration stated plans to hike the tax rate on corporations (from 21% to 28%) & on capital gains (from 20% to 39.6% for taxpayers making more than \$1 million a year)

Long-term trends in personal income tax revenues

Personal income tax revenues as share of total taxes doubled in the past 50 years



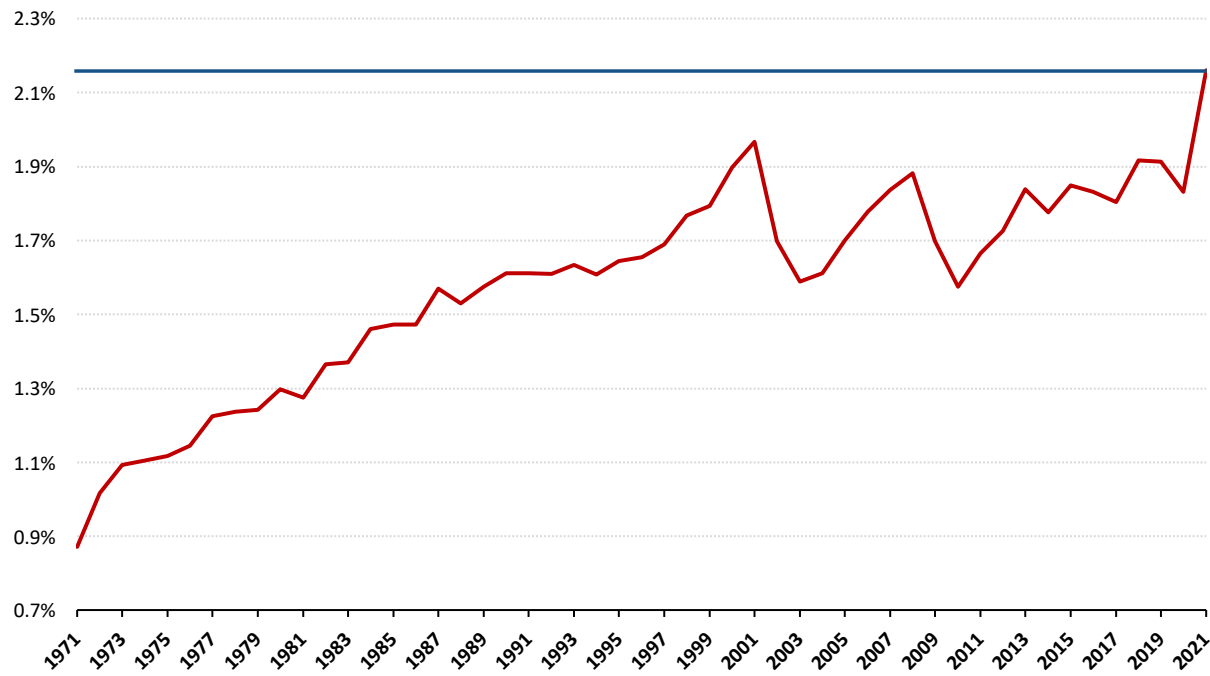
State government personal income taxes and sales taxes as share of total taxes, 1971-2021



State government personal income tax revenues as share of GDP



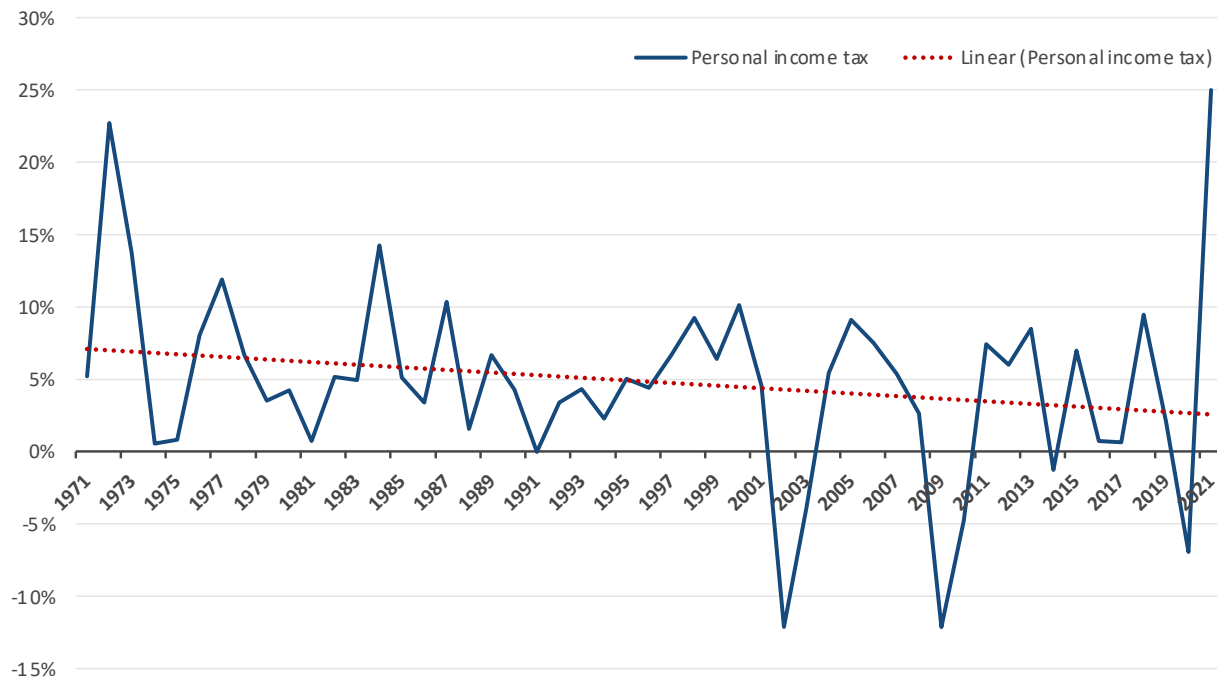
State government personal income taxes as share of GDP, 1971-2021



State personal income tax revenues became far more volatile since 2000's



Year-over-year real percent change in state government personal income taxes, 1971-2021



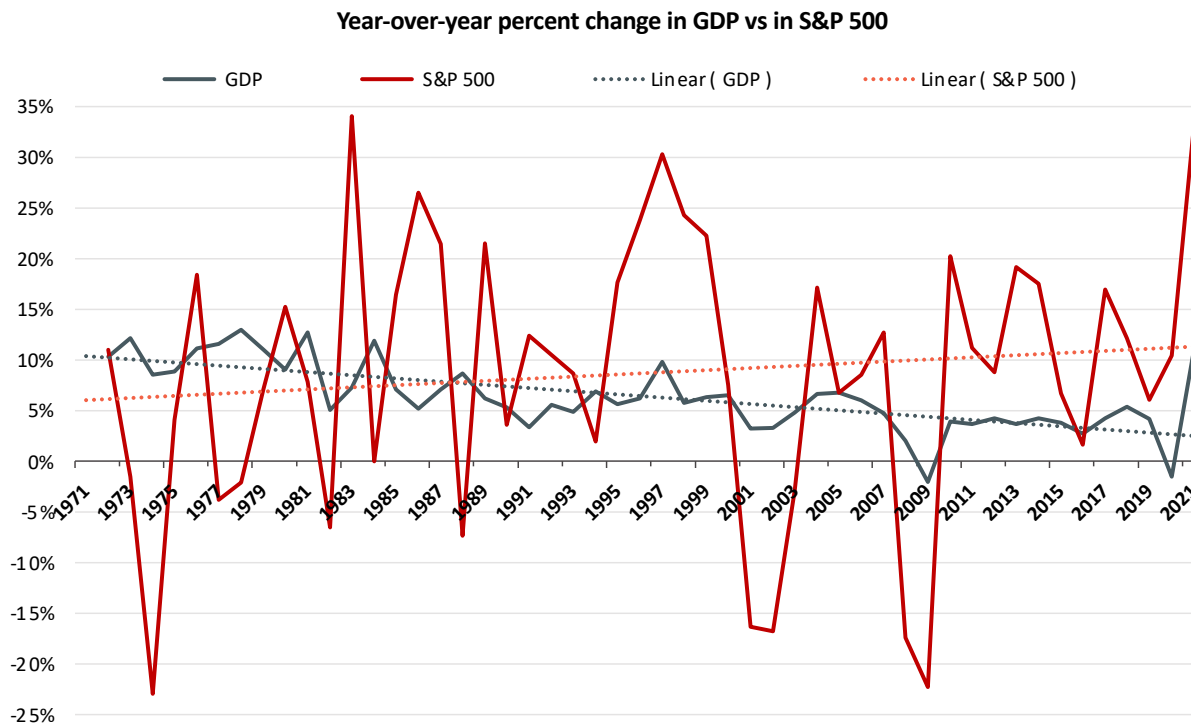
Growth in personal income, adjusted gross income, and major AGI components



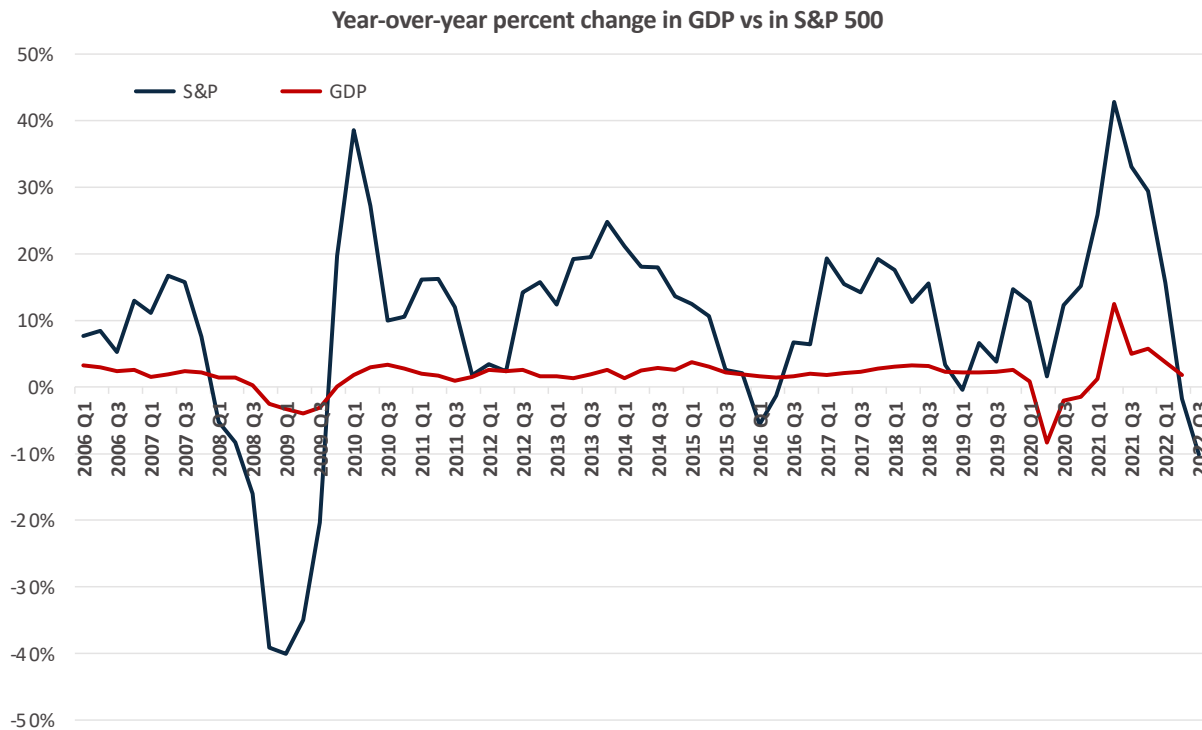
	2013	2014	2015	2016	2017	2018	2019
Personal income	1.3%	5.5%	4.7%	2.6%	4.6%	5.0%	5.1%
AGI	-0.3%	7.2%	4.6%	0.5%	7.8%	5.8%	2.7%
Wages and salaries	2.3%	4.3%	5.1%	1.7%	5.1%	4.4%	4.6%
Capital gains income	-19.5%	43.2%	-0.3%	-10.9%	38.3%	8.1%	-6.5%
Partnership & S-corporation income	-1.2%	9.6%	8.2%	-0.2%	8.3%	1.0%	0.3%
All other elements of AGI	-3.1%	6.9%	3.3%	0.6%	7.5%	12.0%	0.6%

Capital gains and the stock market

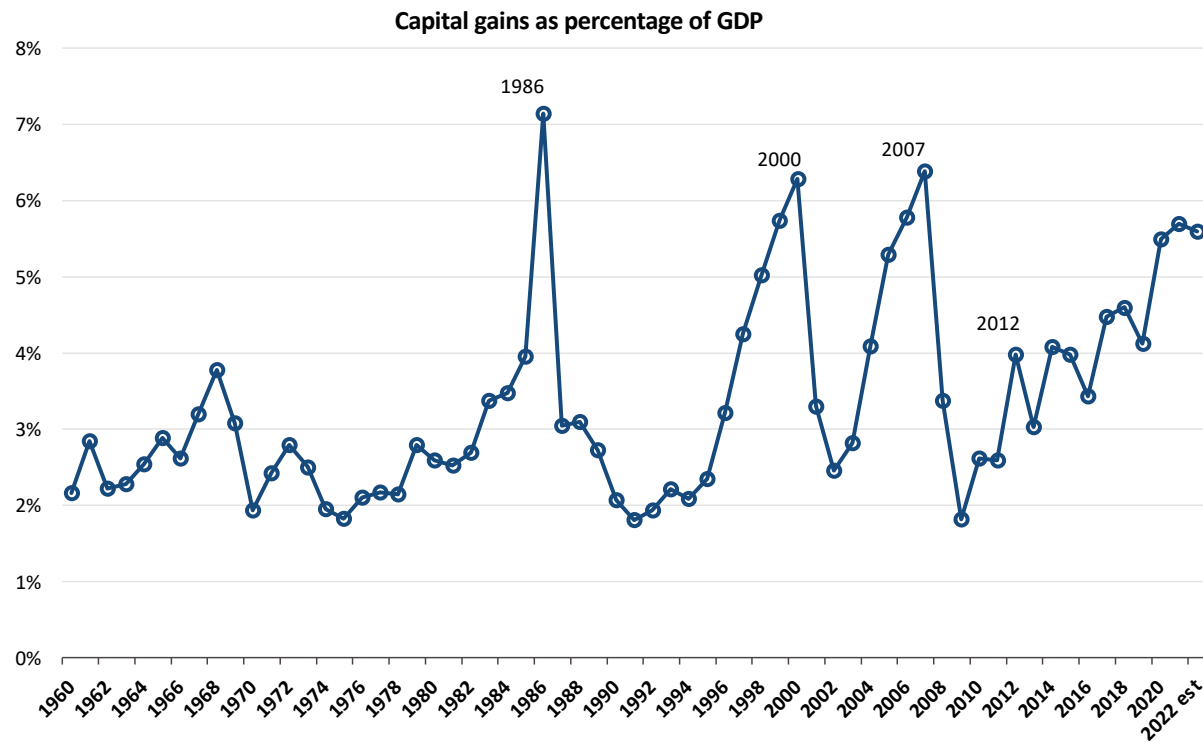
Long-term trends in GDP vs in S&P 500



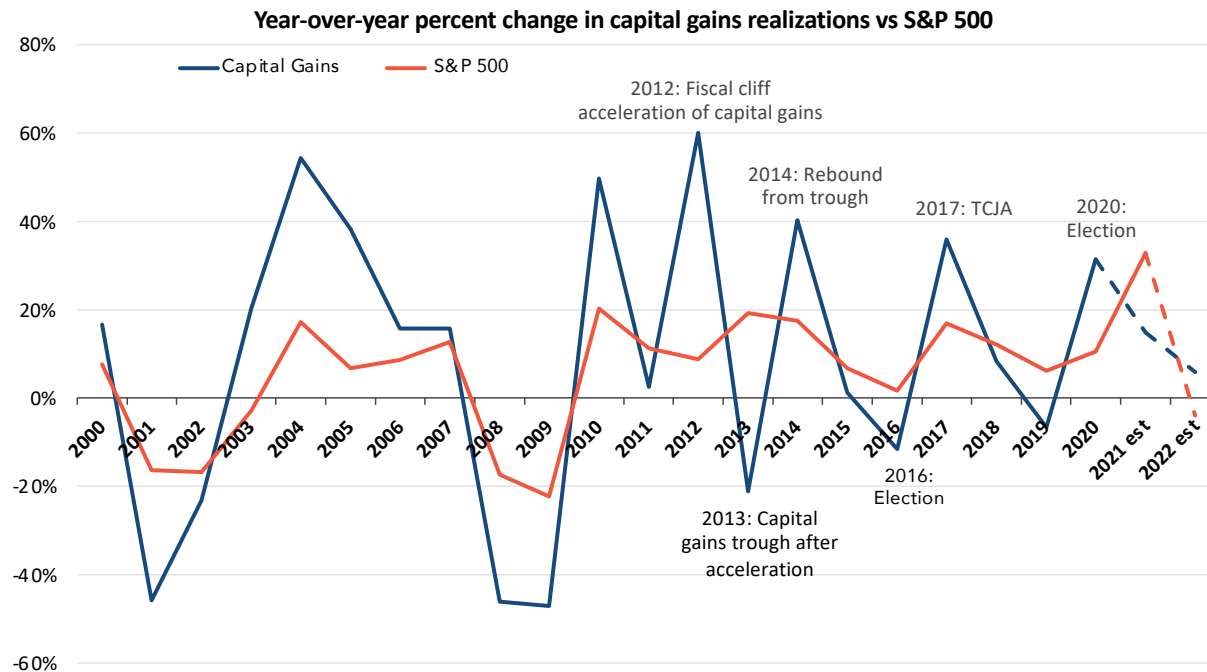
Most recent trends in GDP vs in S&P 500



Capital gains are volatile



Capital gains are loosely related to the stock market



Sources: Capital gains are from CBO and S&P500 from Yahoo Finance.
Estimates for capital gains are from CBO and S&P 500 estimates are based on author's calculations.

Income-tax states ranked by a measure of capital gains dependence



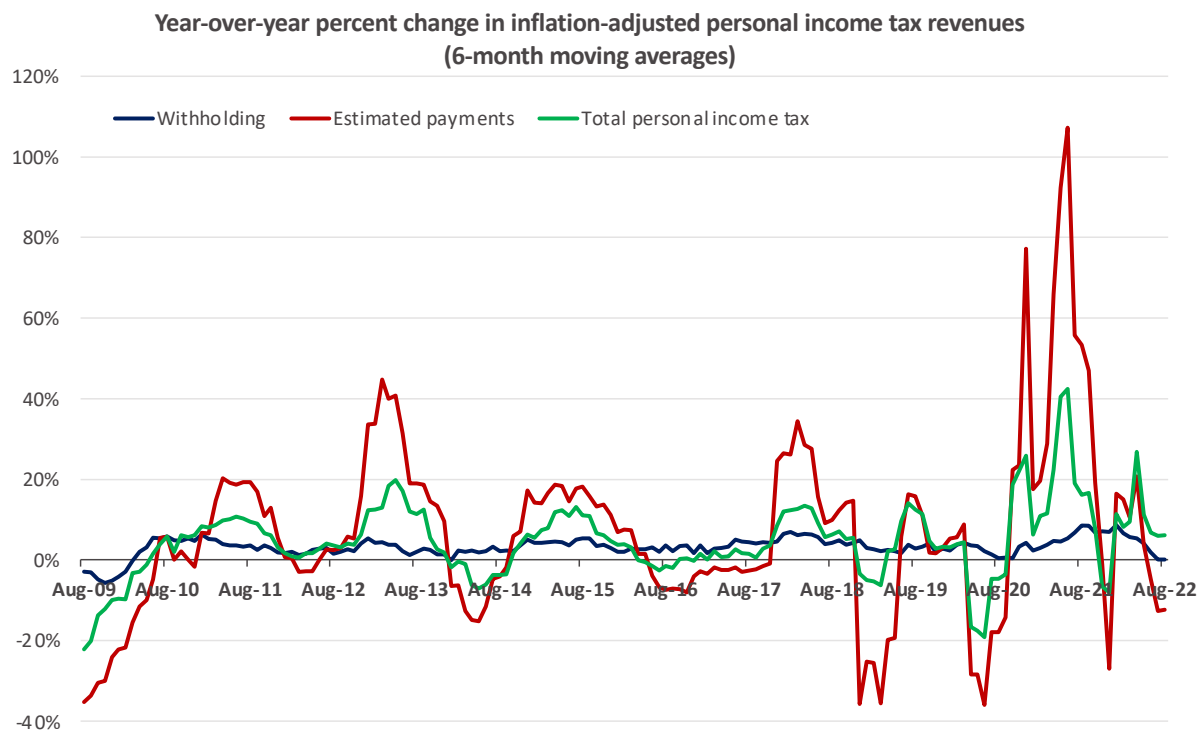
State	Capital gains as share of AGI (2019)	Top capital gains tax rate on corporate equities (2021)	Rank (1=highest), considering capital gains share & top rate together	Personal income tax as share of total taxes (2021)
United States	7.18	5.90		39.9
California	8.26	13.30	1	59.0
New York	8.81	8.82	2	58.8
Vermont	8.06	8.75	3	30.1
Connecticut	8.92	6.99	4	46.5
New Jersey	5.55	10.75	5	38.5
Montana	8.55	6.90	6	48.7
Oregon	5.95	9.90	7	63.2
Idaho	7.98	6.93	8	38.0
Minnesota	5.22	9.85	9	47.7
Massachusetts	9.81	5.00	10	54.2
Utah	9.41	4.95	11	52.8
Wisconsin	5.49	7.65	12	40.5
Nebraska	5.87	6.84	13	45.0
Maine	5.61	7.15	14	38.1
Iowa	4.68	8.53	15	36.1
Colorado	8.67	4.55	16	54.5
South Carolina	5.62	7.00	17	41.1
Rhode Island	6.43	5.99	18	40.5
New Mexico	6.50	5.90	19	16.0
Hawaii	5.14	7.25	20	41.7

State	Capital gains as share of AGI (2019)	Top capital gains tax rate on corporate equities (2021)	Rank (1=highest), considering capital gains share & top rate together	Personal income tax as share of total taxes (2021)
Kansas	5.97	5.70	21	39.7
Virginia	5.86	5.75	22	52.8
Georgia	5.78	5.75	23	51.1
Illinois	6.60	4.95	24	39.4
Arizona	6.93	4.50	25	31.4
Missouri	5.62	5.40	26	51.1
Delaware	4.58	6.60	27	39.8
North Carolina	5.74	5.25	28	45.8
Maryland	5.10	5.75	29	40.4
Arkansas	4.96	5.90	30	29.6
Louisiana	4.67	6.00	31	32.1
Oklahoma	4.91	5.00	32	33.3
Alabama	4.63	5.00	33	34.4
Kentucky	4.46	5.00	34	35.7
Michigan	5.11	4.25	35	34.8
Ohio	4.49	4.80	36	30.5
North Dakota	7.35	2.90	37	11.5
Pennsylvania	5.38	3.07	38	32.2
Mississippi	3.12	5.00	39	26.9
West Virginia	2.39	6.50	40	37.3
Indiana	4.16	3.23	41	39.7

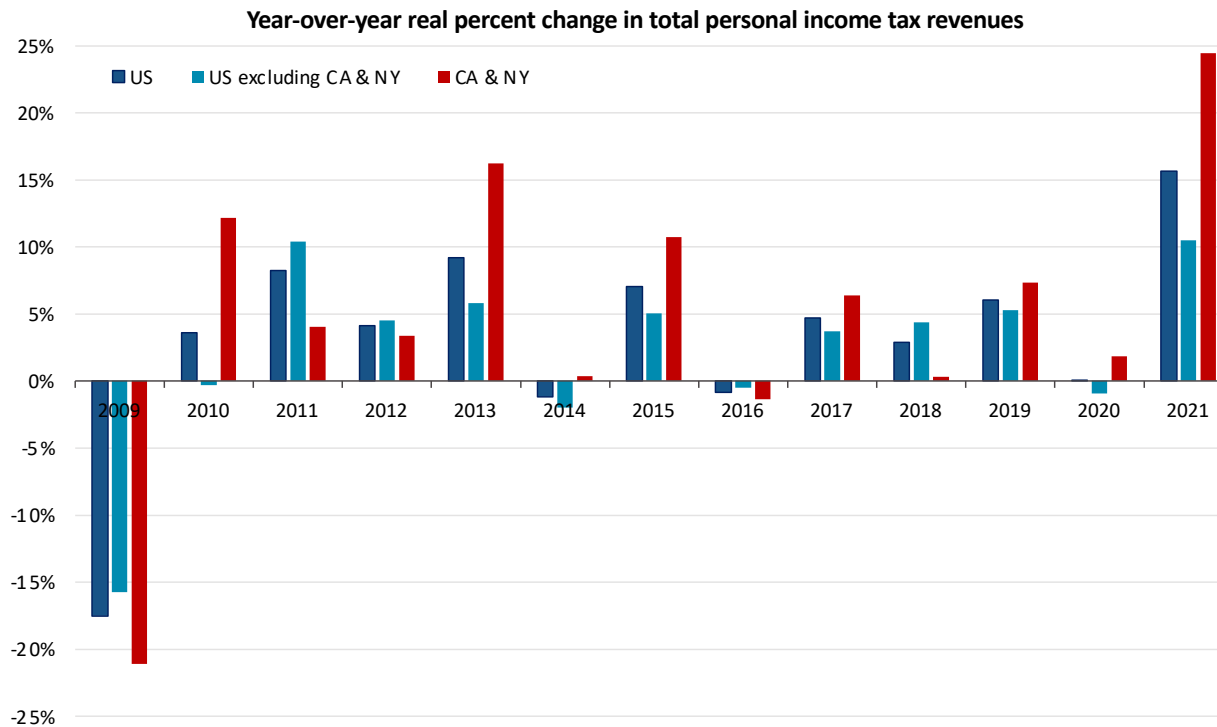
Notes: Rank calculated by the Urban Institute by first indexing each state's capital gains share and top rate, multiplying the two resulting indexes, and ranking them.

Trends in personal income tax revenues since the Great Recession

Large fluctuations in personal income tax revenues driven by volatile estimated payments

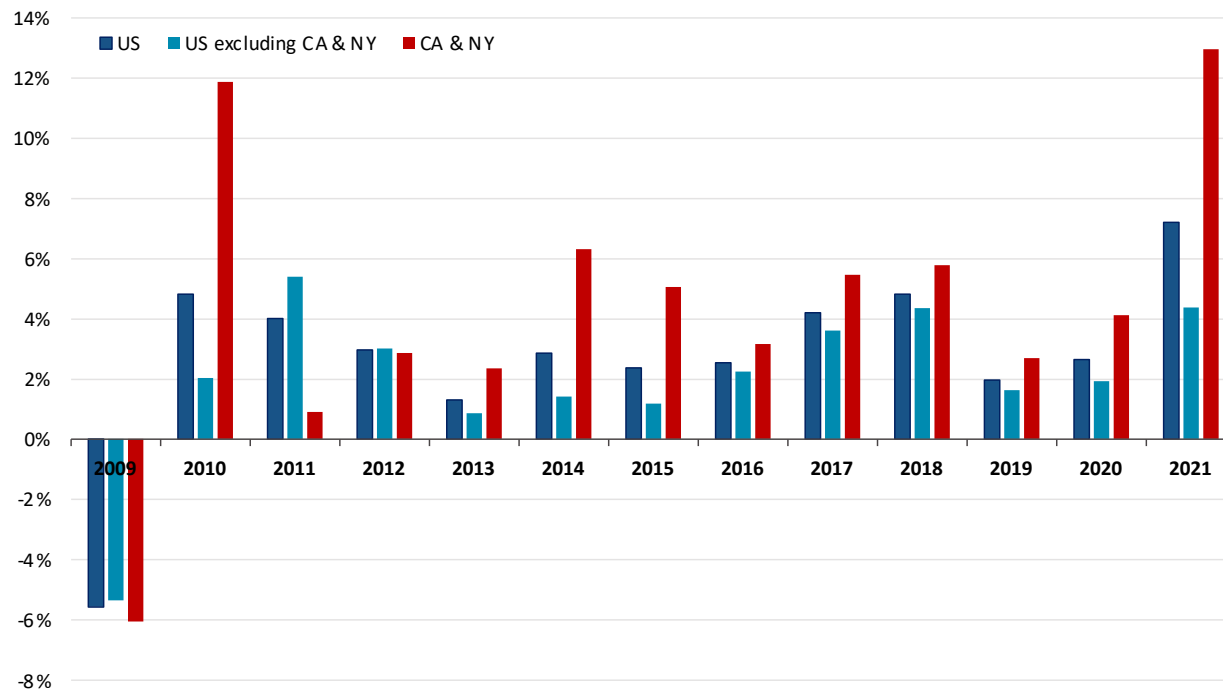


Trends in personal income taxes

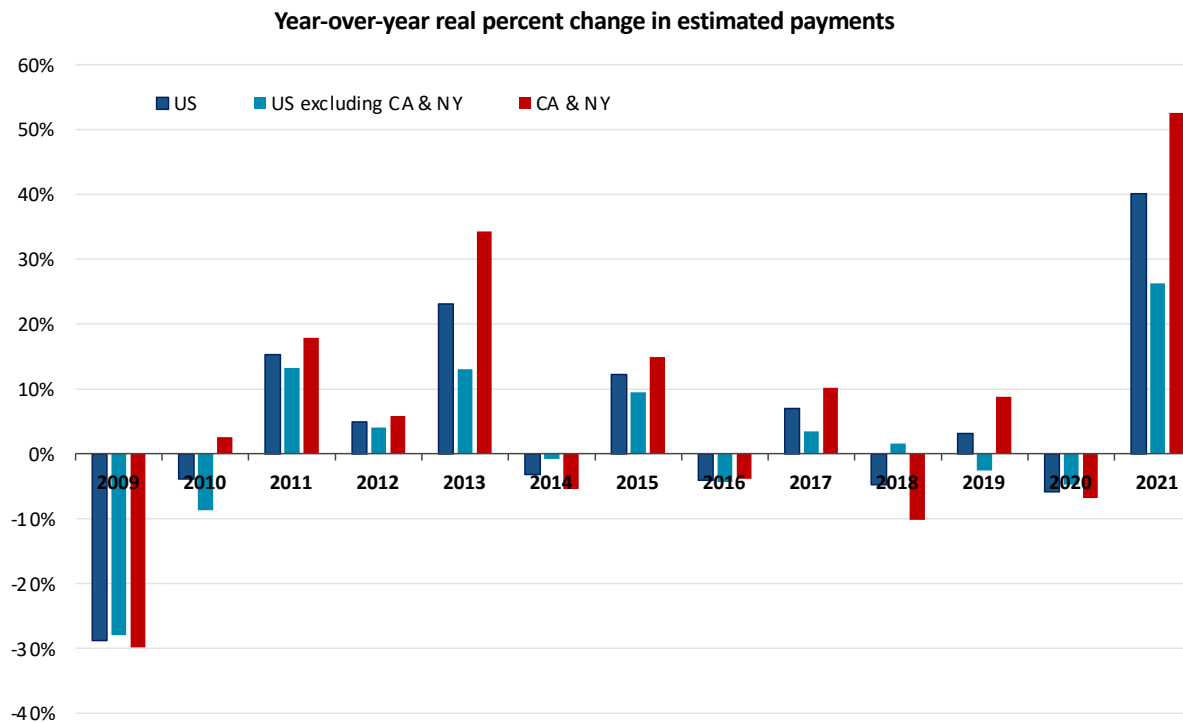


Trends in withholding taxes

Year-over-year real percent change in withholding



Trends in estimated taxes

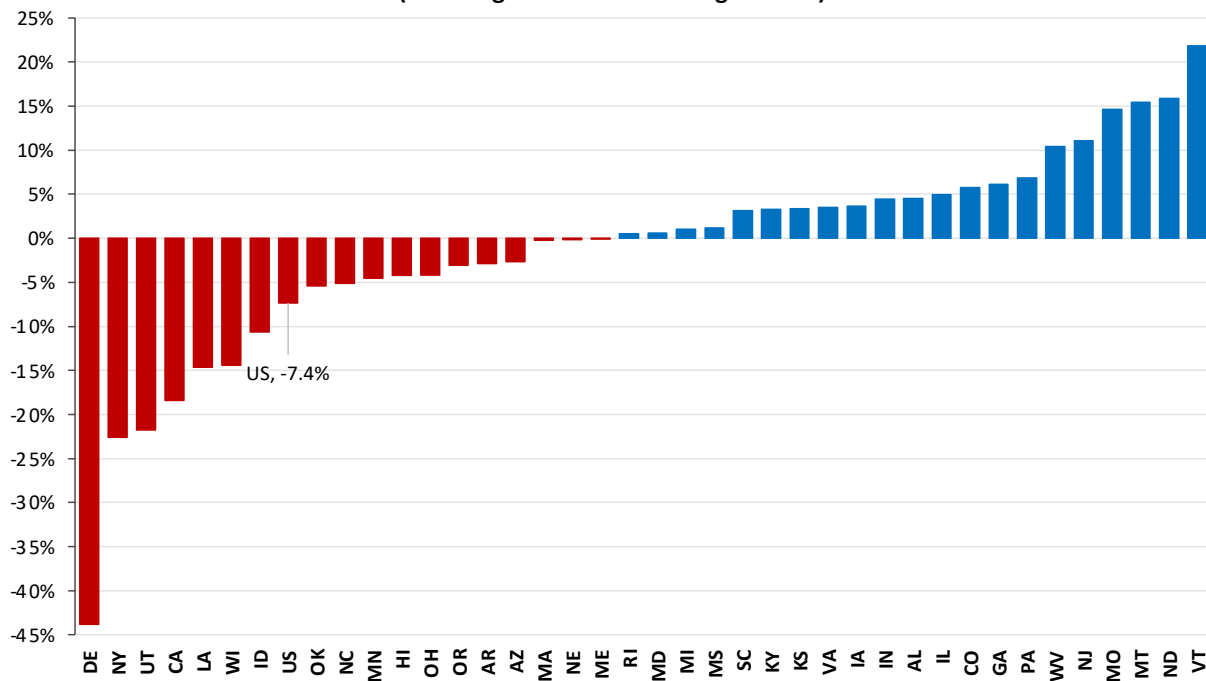


Is the fiscal boom over? Early signs of weakness in personal income tax revenues

Early signs of weakness in personal income tax revenues

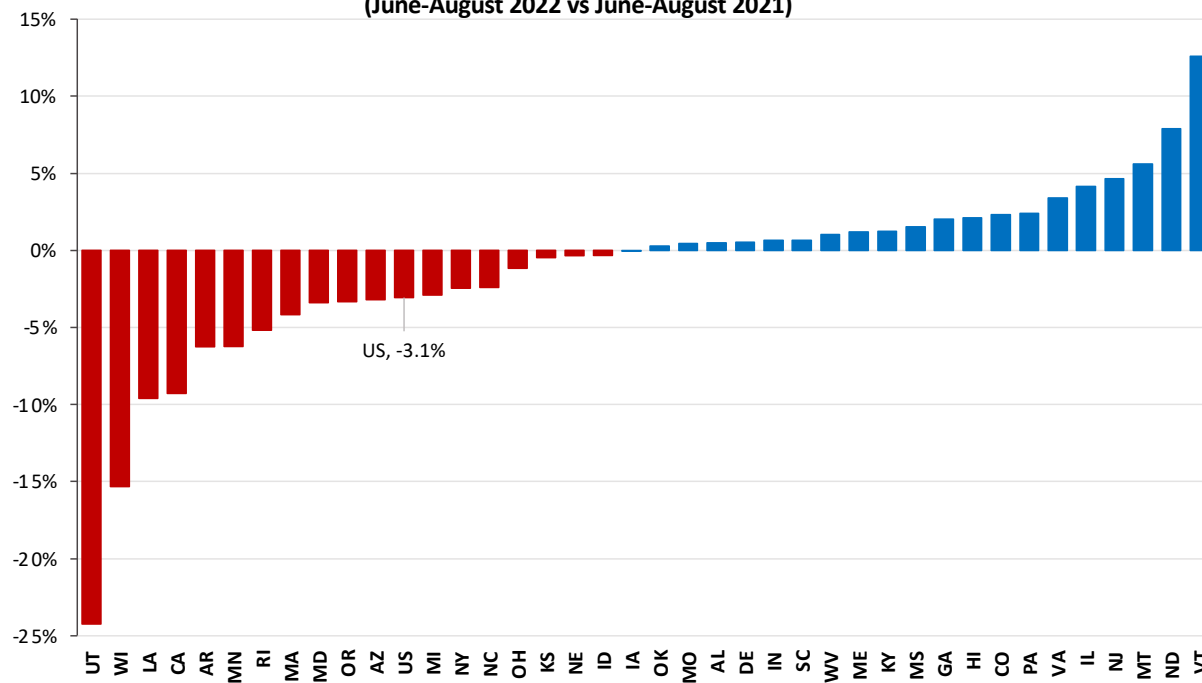


Year-over-year real percent change in personal income taxes
(June-August 2022 vs June-August 2021)

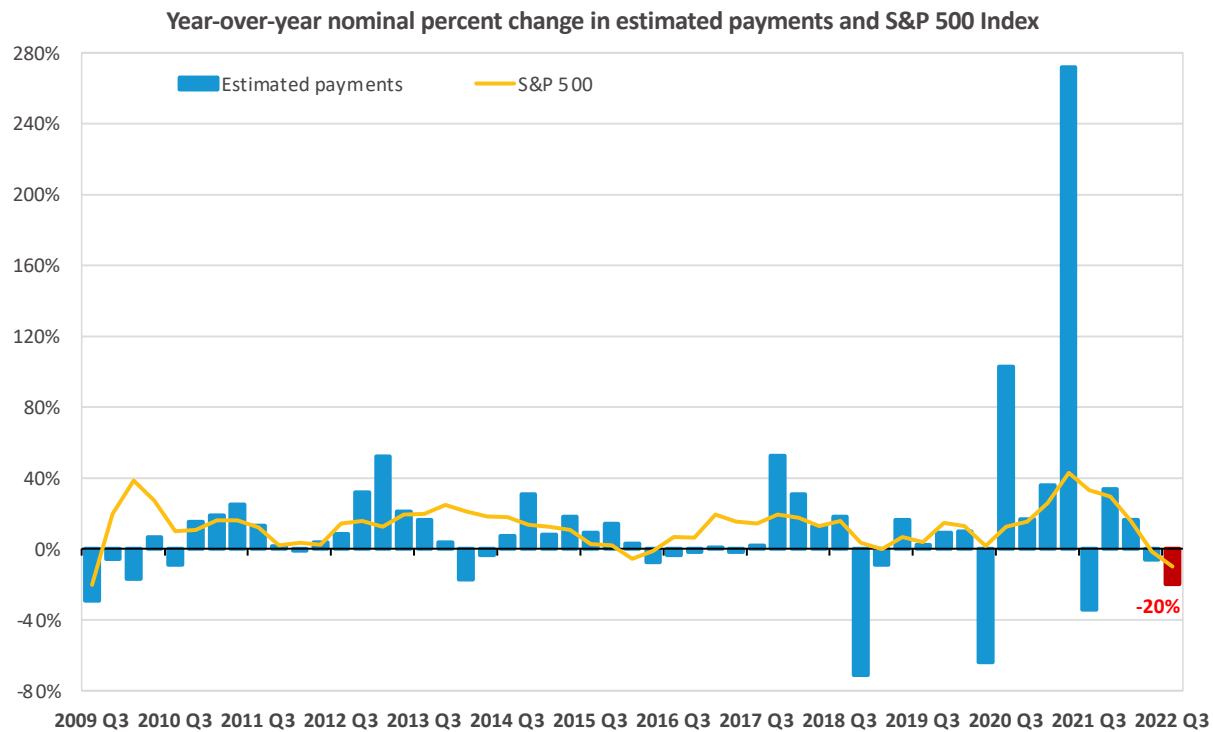


Early signs of weakness in withholding

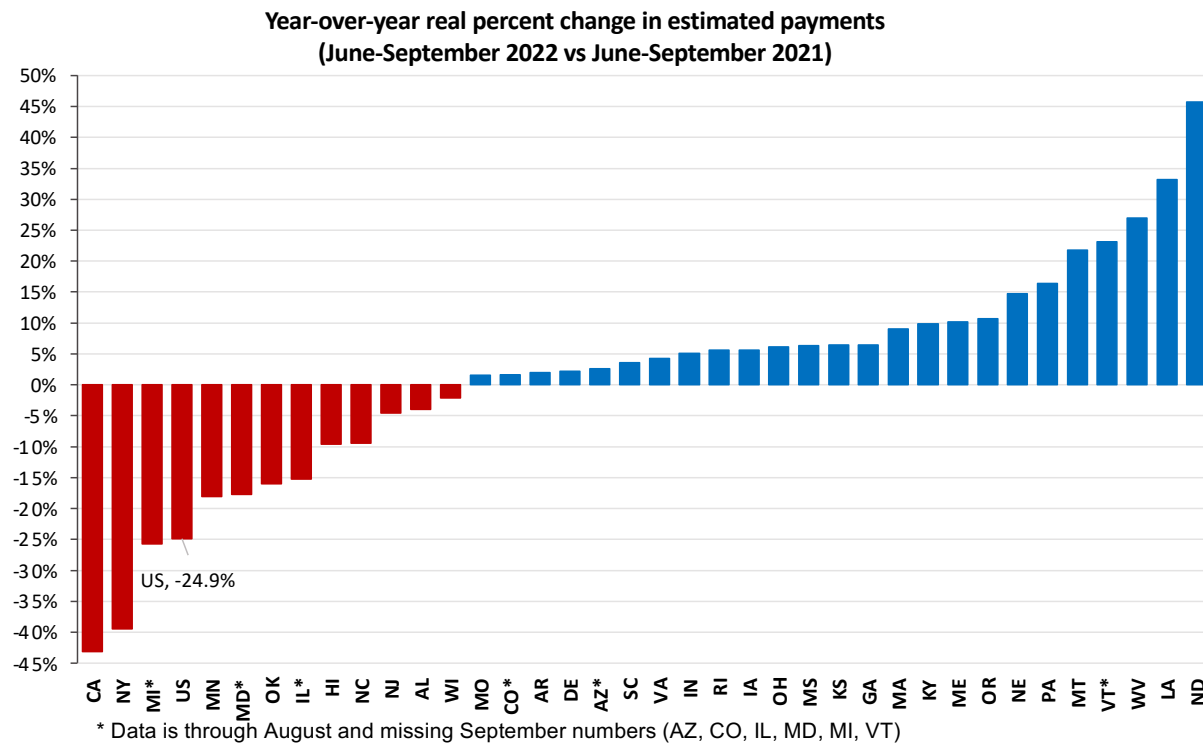
Year-over-year real percent change in withholding taxes
(June-August 2022 vs June-August 2021)



Large volatility in estimated payments

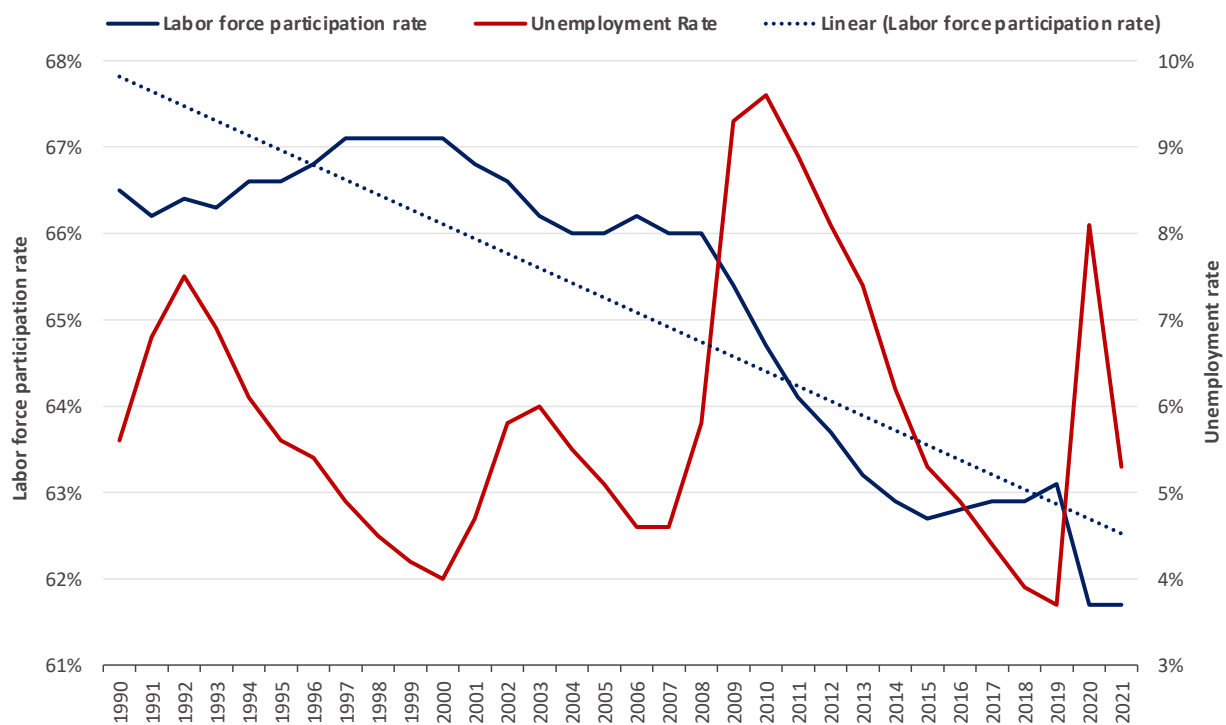


Large variation in estimated payments across the states



Trends in (un)employment and wages and the implications for personal income tax revenues

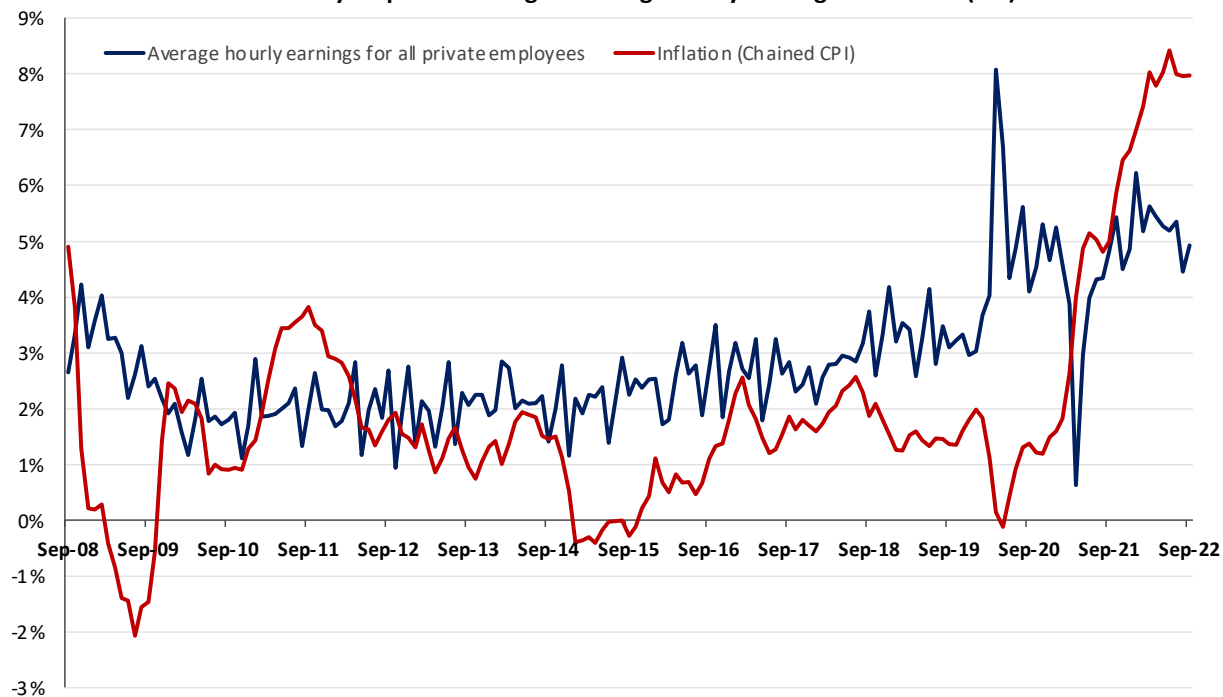
Unemployment rates spiked during the recessions, while the labor force saw steady declines



up with inflation



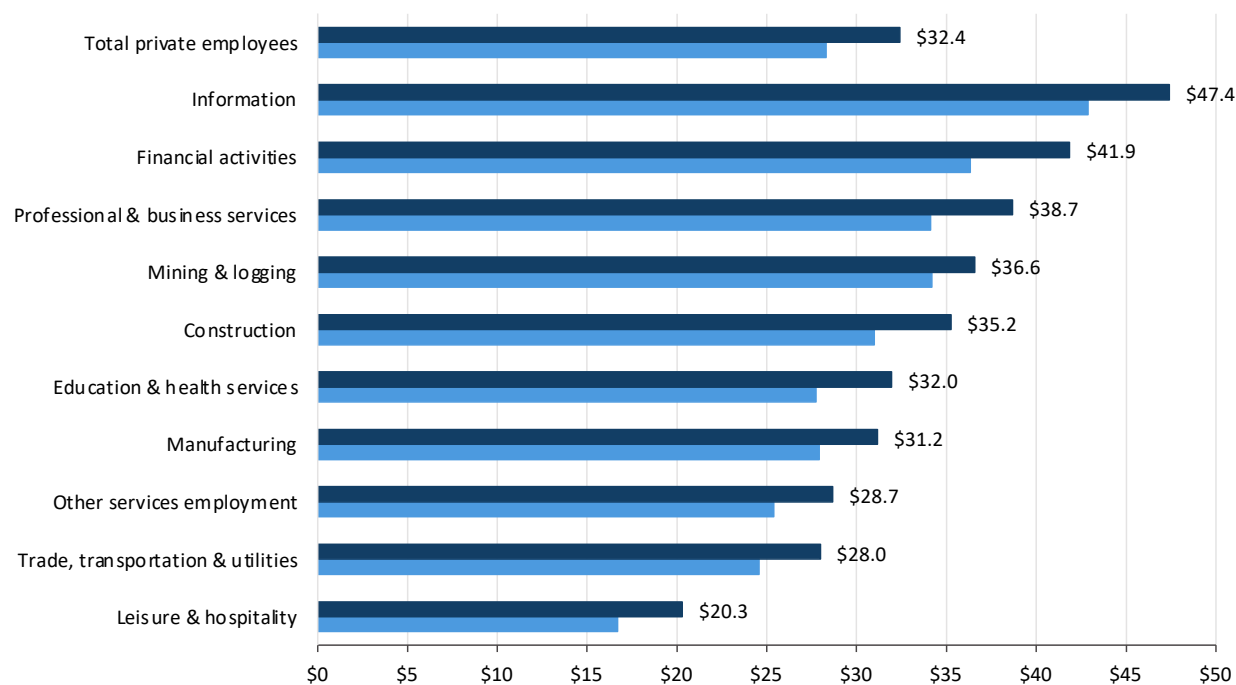
Year-over-year percent change in average hourly earnings vs inflation (CPI)



Average hourly earnings increased for all professions



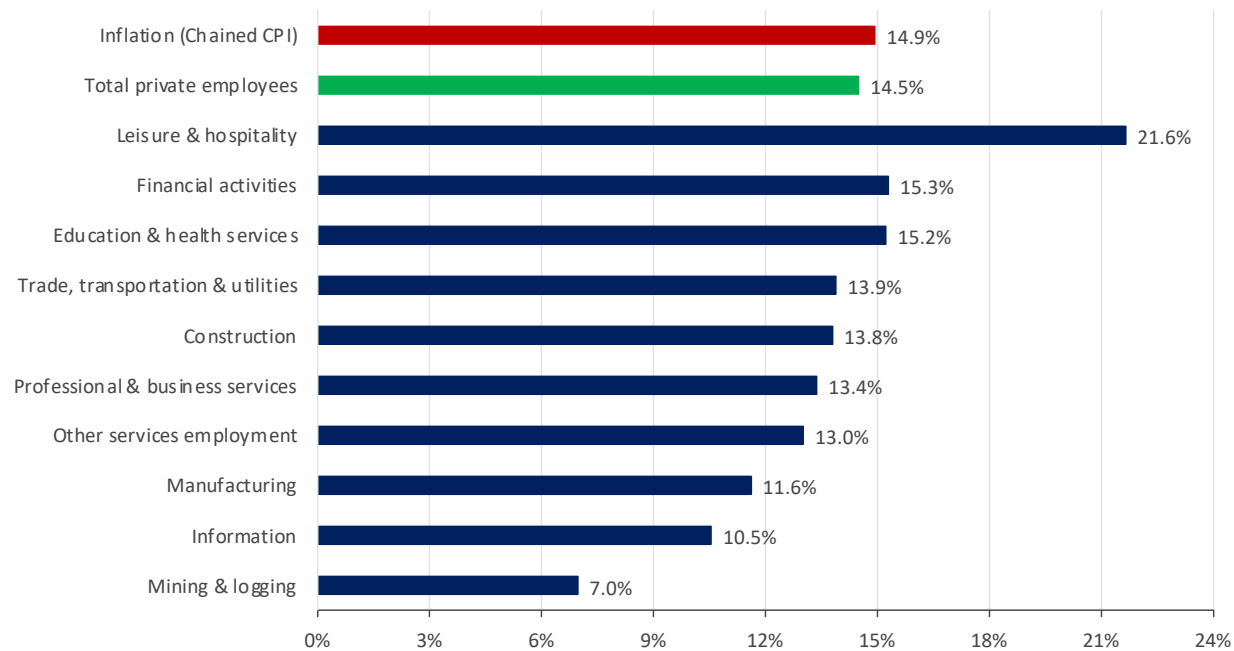
Average hourly earnings in September 2019 vs September 2022



inflation for most professions



Percent change in average hourly earnings vs inflation (CPI) from September 2019 to September 2022



Demographic trends and its implications for personal income tax revenues

and more spending pressures for health care and pensions



Age group	Percent change			Share of total population		
	2000-2010	2010-2020	2000-2020	2000	2010	2020
Total population	9.6%	6.5%	16.8%	100.0%	100.0%	100.0%
Age 0-4	5.3%	-4.4%	0.6%	6.8%	6.5%	5.9%
Age 5-17	1.4%	-0.8%	0.6%	18.9%	17.4%	16.2%
Age 18-59	8.5%	1.4%	10.0%	58.1%	57.5%	54.7%
Age 60-64	56.4%	22.4%	91.5%	3.8%	5.5%	6.3%
Age 65+	15.4%	37.5%	58.7%	12.4%	13.1%	16.9%

Declining birth rate and working age population challenge

Population change by age group and by state, 2020 vs 2015



State	Total	Age 0-4	Age 5-17	Age 18-59	Age 60-64	Age 65+
United States	2.7	(3.1)	(0.4)	(0.1)	9.4	16.8
Alabama	1.4	(0.7)	(1.7)	(2.0)	8.2	14.7
Alaska	(1.0)	(10.2)	(1.5)	(5.2)	2.8	29.5
Arizona	8.6	(2.7)	2.4	6.7	15.0	23.9
Arkansas	1.7	(2.5)	(0.4)	(0.9)	7.0	12.5
California	1.2	(7.9)	(1.9)	(1.0)	8.8	16.4
Colorado	6.5	(3.2)	0.3	5.2	9.4	23.8
Connecticut	(0.9)	(3.8)	(6.3)	(4.1)	10.4	12.4
Delaware	4.7	(1.4)	1.0	(0.7)	17.1	23.2
Florida	7.5	2.5	3.9	4.2	14.9	18.5
Georgia	5.2	(1.8)	0.7	3.1	13.2	21.0
Hawaii	(1.1)	(10.3)	(1.4)	(5.0)	(0.5)	15.4
Idaho	10.6	(0.1)	5.4	8.9	14.4	26.8
Illinois	(2.1)	(7.5)	(5.8)	(5.2)	6.5	13.3
Indiana	2.2	(1.1)	(0.7)	(0.7)	8.1	15.4
Iowa	1.3	(2.1)	(0.1)	(1.8)	5.6	13.1
Kansas	0.1	(7.2)	(1.9)	(2.9)	6.3	14.9
Kentucky	1.1	(2.2)	(0.7)	(2.3)	6.1	14.6
Louisiana	(0.5)	(5.1)	(2.3)	(4.4)	7.0	16.6
Maine	1.6	(1.5)	(3.8)	(2.9)	6.8	17.4
Maryland	1.1	(2.6)	(0.3)	(2.7)	9.8	16.4
Massachusetts	1.4	(3.6)	(3.1)	(1.2)	9.5	14.3
Michigan	0.3	(2.4)	(4.2)	(3.1)	6.8	15.3
Minnesota	3.2	(1.3)	2.1	(0.8)	10.6	18.3
Mississippi	(0.8)	(5.1)	(4.4)	(3.9)	6.7	14.2
Missouri	1.3	(2.1)	(1.1)	(2.2)	9.7	14.0

State	Total	Age 0-4	Age 5-17	Age 18-59	Age 60-64	Age 65+
United States	2.7	(3.1)	(0.4)	(0.1)	9.4	16.8
Montana	4.8	(3.7)	3.2	1.0	4.2	21.2
Nebraska	2.4	(2.2)	2.1	(0.7)	6.8	14.8
Nevada	9.4	2.3	5.2	7.3	13.5	23.6
New Hampshire	2.2	(2.6)	(5.1)	(2.1)	14.2	19.9
New Jersey	0.1	(2.0)	(2.7)	(3.2)	11.1	12.1
New Mexico	0.8	(10.4)	(3.6)	(2.1)	4.3	18.6
New York	(1.6)	(6.1)	(4.1)	(5.2)	7.7	12.4
North Carolina	5.6	0.7	0.8	3.1	11.7	19.9
North Dakota	1.3	(1.2)	6.5	(3.8)	6.2	15.0
Ohio	0.6	(2.0)	(2.6)	(2.7)	7.0	13.8
Oklahoma	1.8	(5.2)	0.8	(0.8)	7.5	13.6
Oregon	5.5	(4.7)	1.2	4.0	0.5	20.7
Pennsylvania	(0.1)	(3.5)	(2.3)	(3.7)	6.9	12.4
Rhode Island	0.0	(2.0)	(5.0)	(3.3)	9.5	13.4
South Carolina	6.6	0.2	3.1	3.0	11.2	22.8
South Dakota	4.5	(0.9)	5.1	0.2	9.9	18.7
Tennessee	4.4	1.0	0.9	2.0	9.3	16.5
Texas	6.9	(1.1)	4.1	5.3	14.5	21.0
Utah	8.9	(4.4)	4.4	9.5	14.0	24.5
Vermont	(0.4)	(7.5)	(5.2)	(4.6)	2.9	17.7
Virginia	2.7	(1.8)	0.5	(0.7)	9.8	17.8
Washington	7.3	0.5	4.1	5.5	7.0	21.3
West Virginia	(3.2)	(10.7)	(4.0)	(7.0)	(2.7)	10.8
Wisconsin	1.2	(3.5)	(2.6)	(2.5)	9.4	17.1
Wyoming	(0.7)	(12.3)	(1.9)	(5.6)	5.1	21.7

What's ahead for state budgets?

- High inflation
- Rising interest rates
- Reduced consumer confidence
- Slowing revenue growth
- Increased spending pressures, exacerbated by higher cost
- Absence of additional federal stimulus money
- Unstable market conditions
- High energy and food prices
- Geopolitical uncertainties

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Thank you!

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