



2022 State of the Commonwealth Report

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Dragas Center for Economic Analysis and Policy

Strome College of Business

Old Dominion University

February 22, 2023





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GDP and Inflation

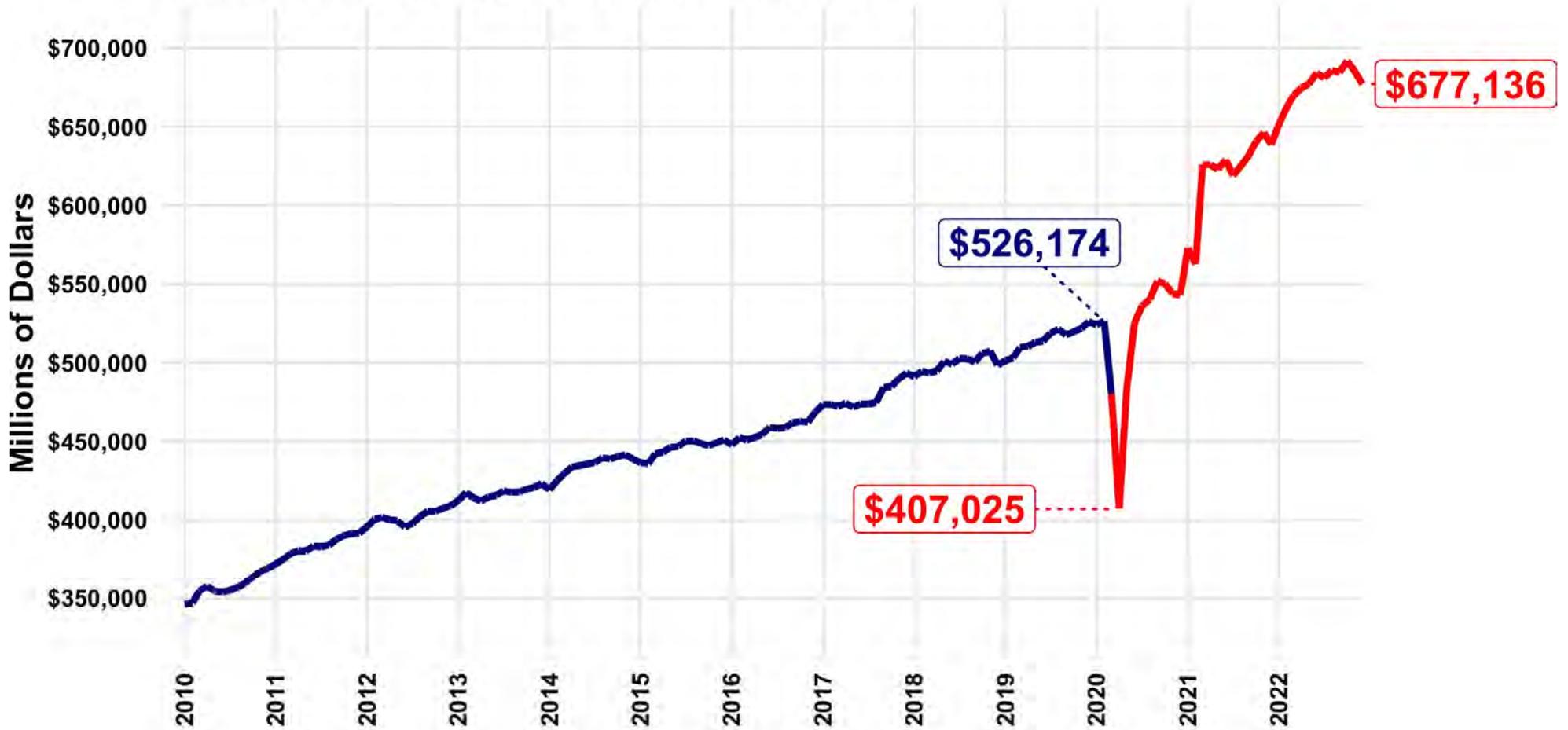


Real Gross Domestic Product United States, Q1 2010 - Q4 2022



Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Compounded annual rate of change, seasonally adjusted annual rate.

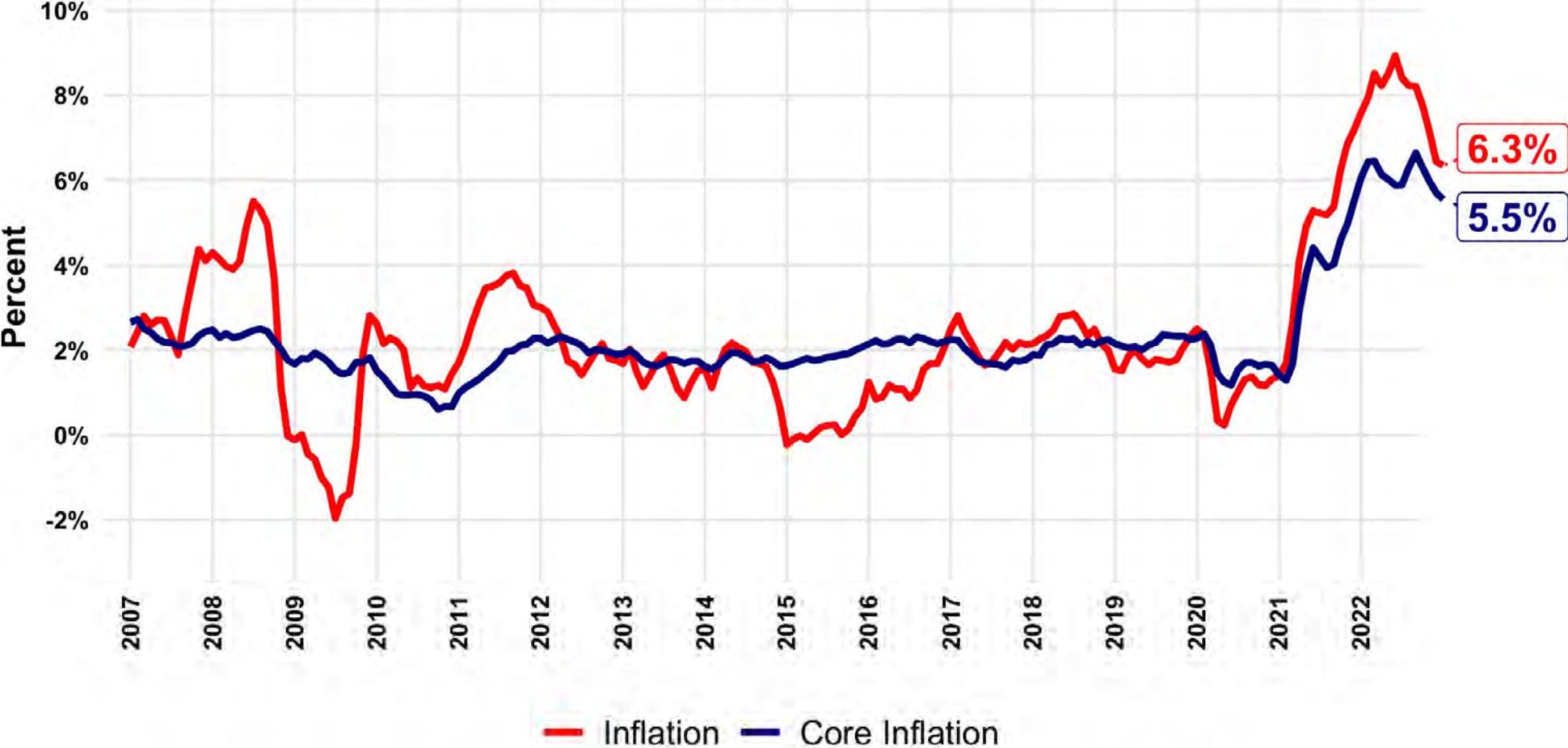
Advance Retail and Food Services Sales United States, January 2010 - December 2022



Source: U.S. Census Bureau, seasonally adjusted data.

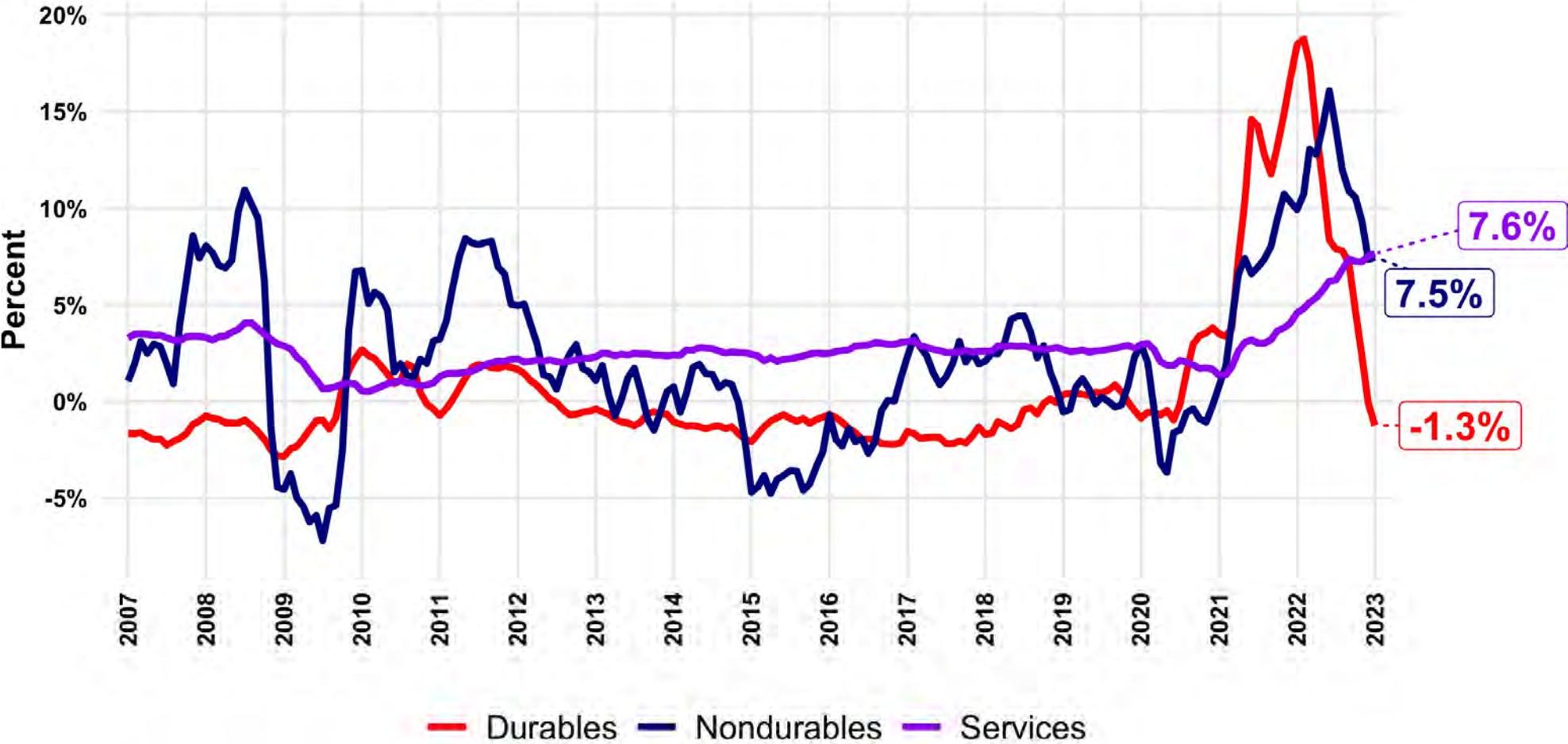
Monthly Inflation

United States, January 2007 - January 2023



Source: Bureau of Labor Statistics, seasonally adjusted data. Core inflation does not include the food and energy sectors.

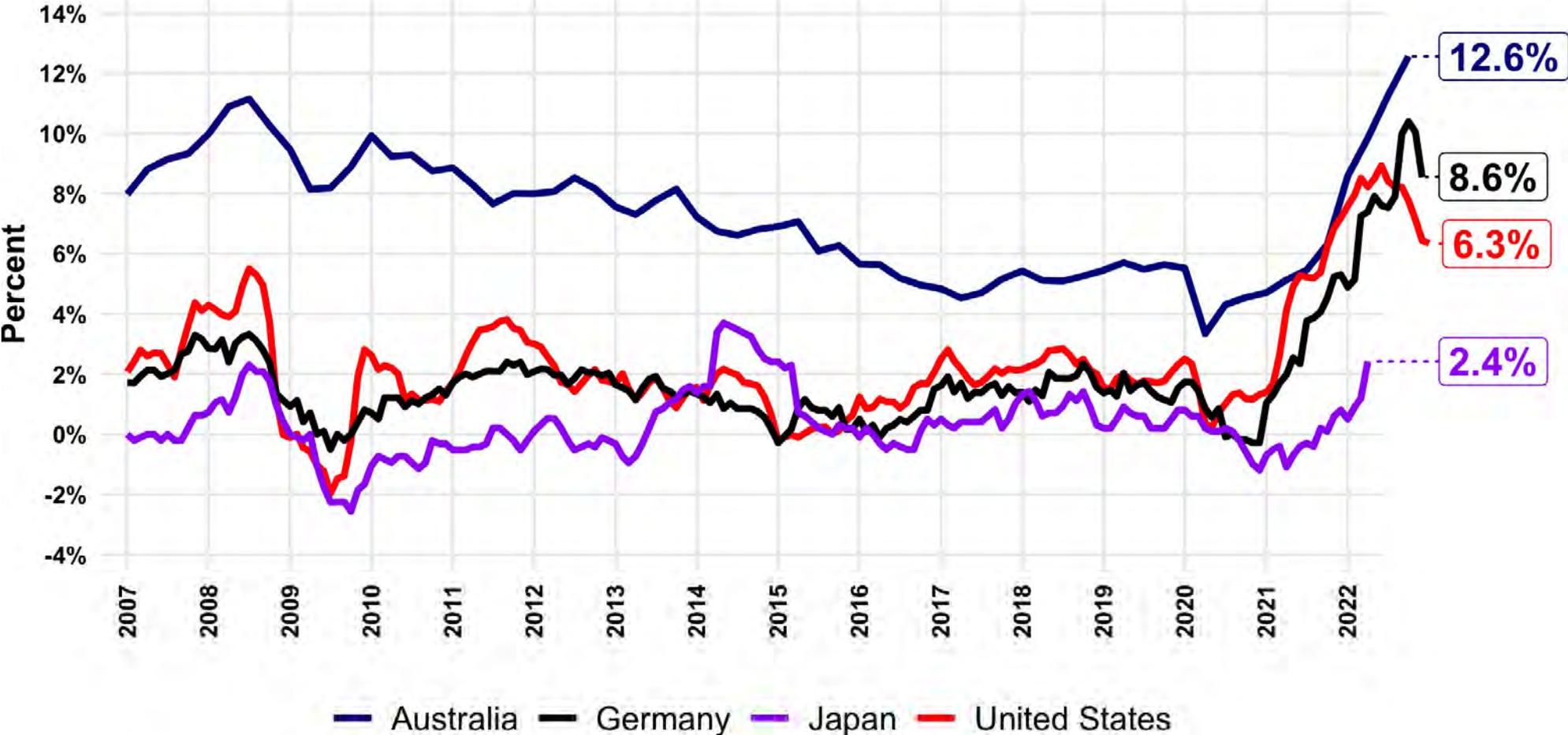
Monthly Inflation in Durables, Nondurables, and Services United States, January 2007 - January 2023



Source: Bureau of Labor Statistics, seasonally adjusted data.

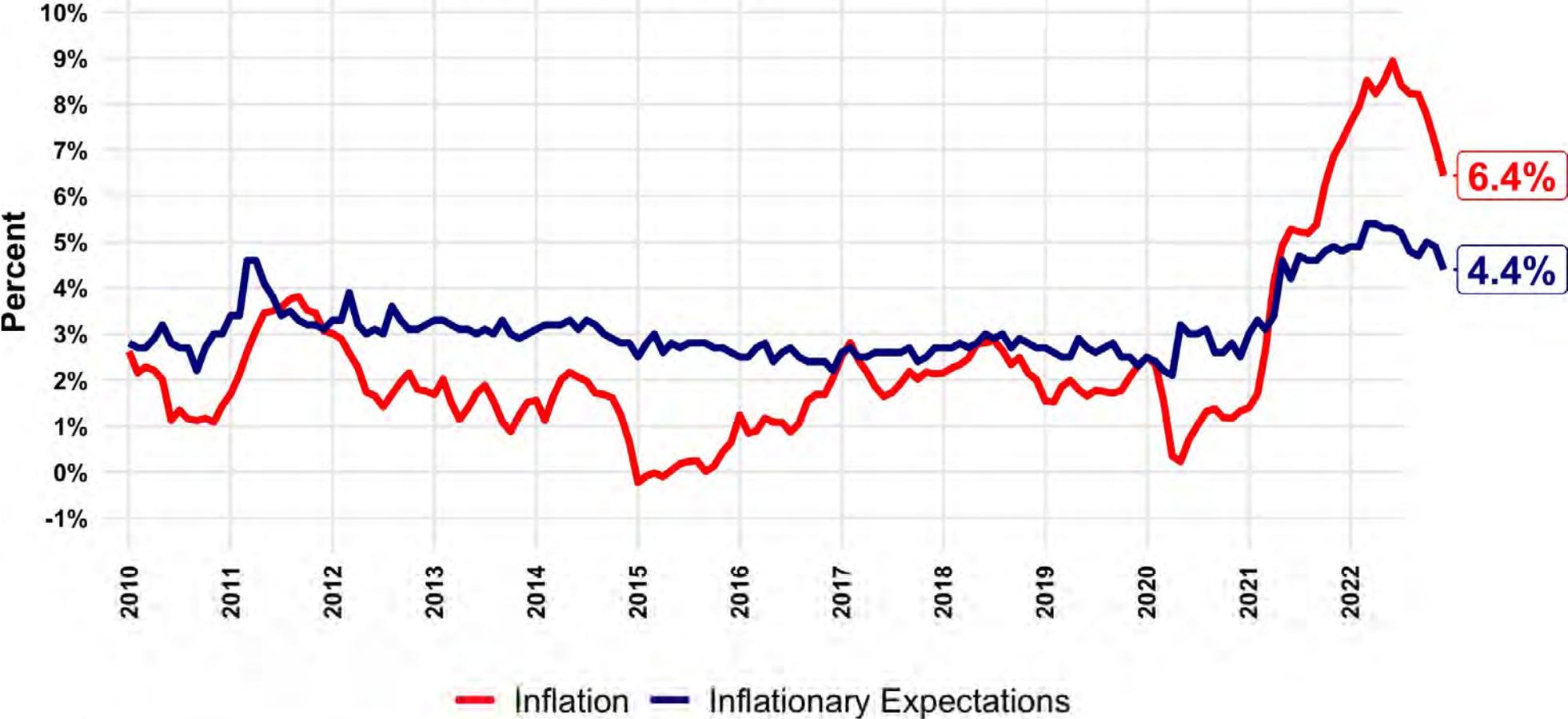
Monthly Inflation

Selected OECD Countries, January 2007 - January 2023



Sources: OECD Main Economic Indicators and Bureau of Labor Statistics, seasonally adjusted data.

Monthly Inflation and Inflationary Expectations United States, January 2010 - December 2022



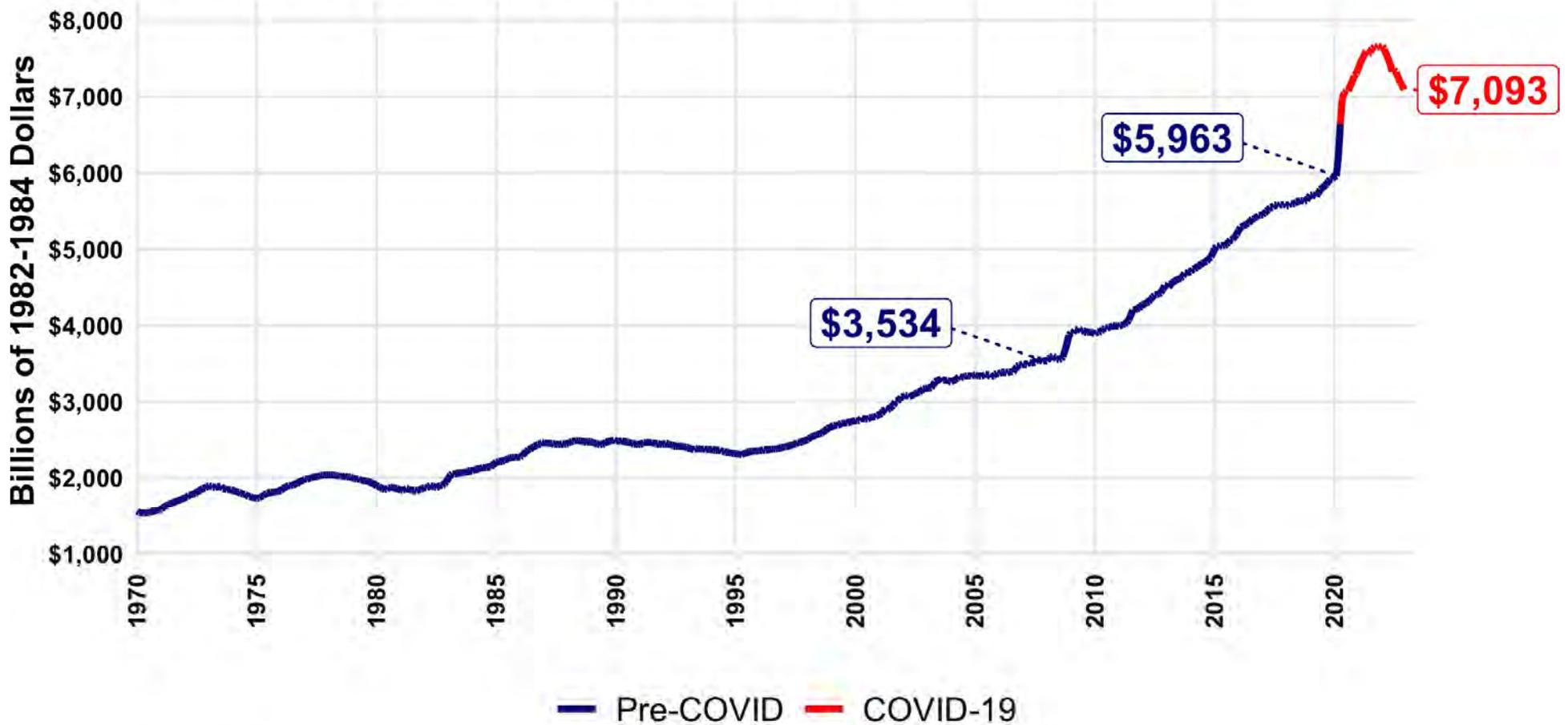
Sources: Bureau of Labor Statistics, seasonally adjusted data;
University of Michigan, Inflationary Expectations, not seasonally adjusted data.

Constant U.S. Treasury Yield Curve (10-Year Minus 2-Year) January 2, 2007 - February 13, 2023



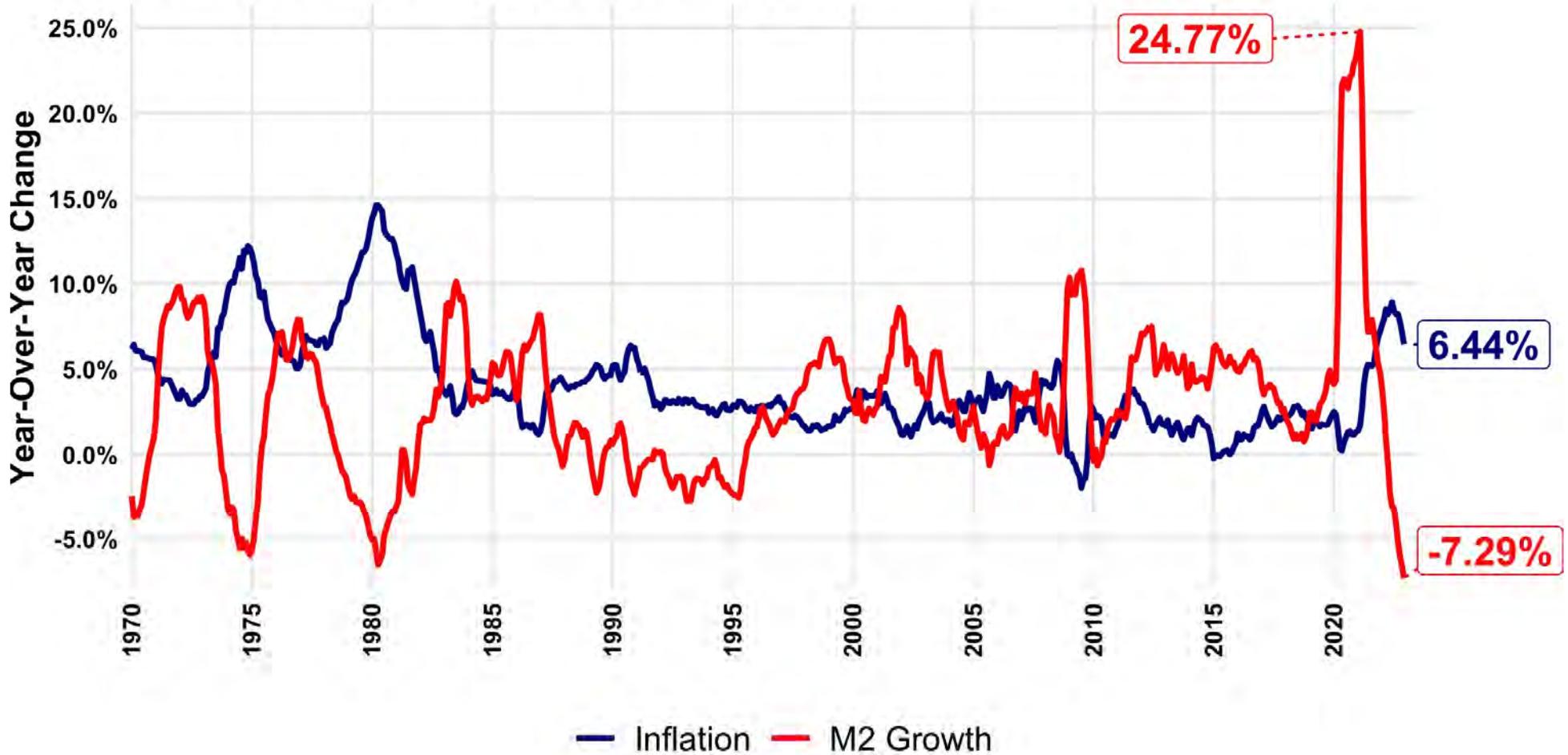
Source: Board of Governors of the Federal Reserve System, not seasonally adjusted data.

Real M2 Money Stock United States, January 1970 - December 2022



Source: Federal Reserve Bank of St. Louis, Real M2 Money Stock.
M2 is a measure of the money supply that includes cash, checking deposits, and easily-convertible near money.

Inflation and Growth of M2 Real Money Stock United States, January 1970 - December 2022



Sources: Bureau of Labor Statistics and Federal Reserve Bank of St. Louis, Real M2 Money Stock.

Monthly and Annual Percentage Change in the Consumer Price Index United States, January 2007 - January 2023



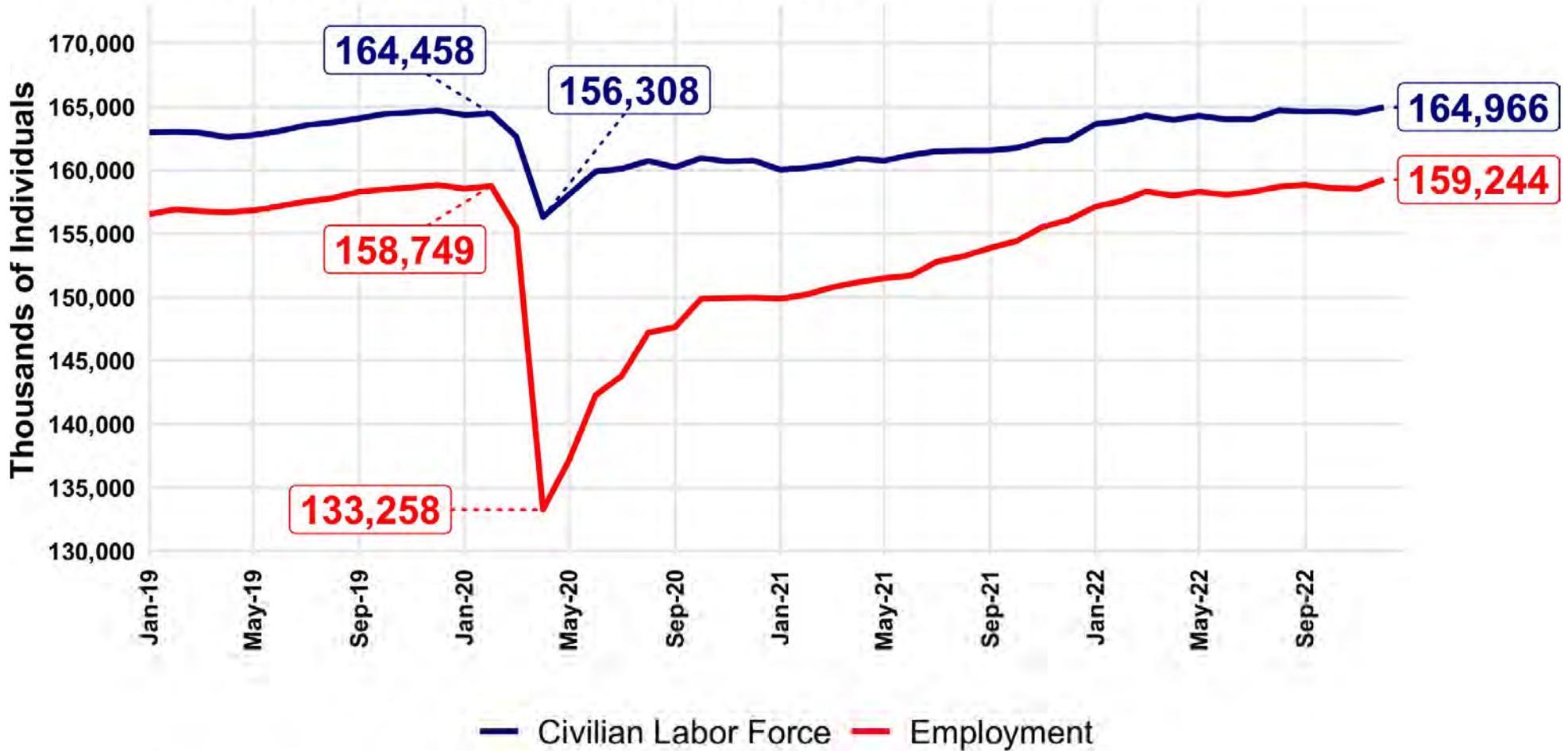
— Year-Over-Year Inflation — Six-Month Moving Average of Monthly Annualized Inflation

Source: Bureau of Labor Statistics, seasonally adjusted data. Annualized change for monthly data.
Year-over-year percentage change in the Consumer Price Index and month-over-month annualized percentage change in the Consumer Price Index.

Labor Markets Recover

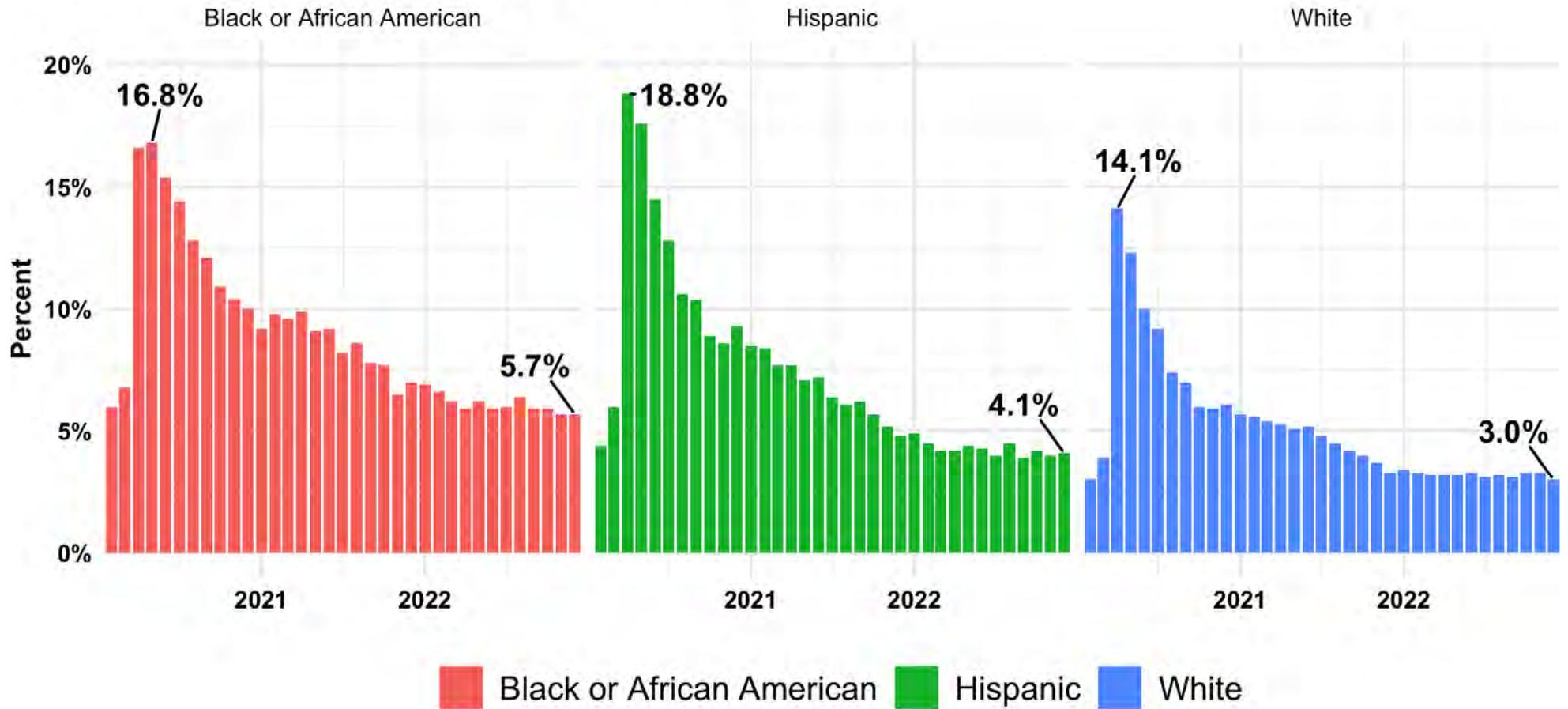


Civilian Labor Force and Individual Employment United States, January 2019 - December 2022



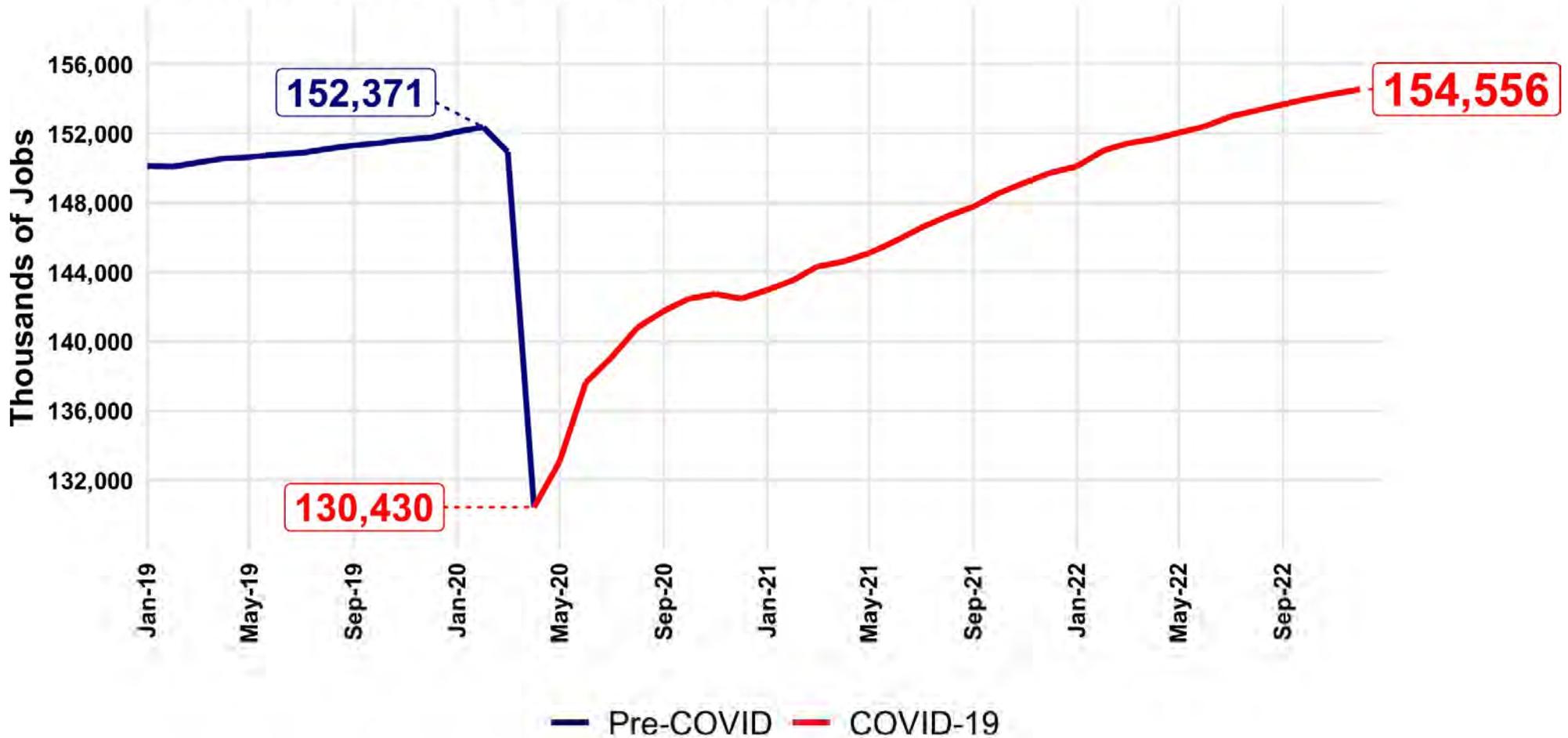
Source: Bureau of Labor Statistics, seasonally adjusted data.

Unemployment Rate by Race and Ethnicity United States, February 2020 - December 2022



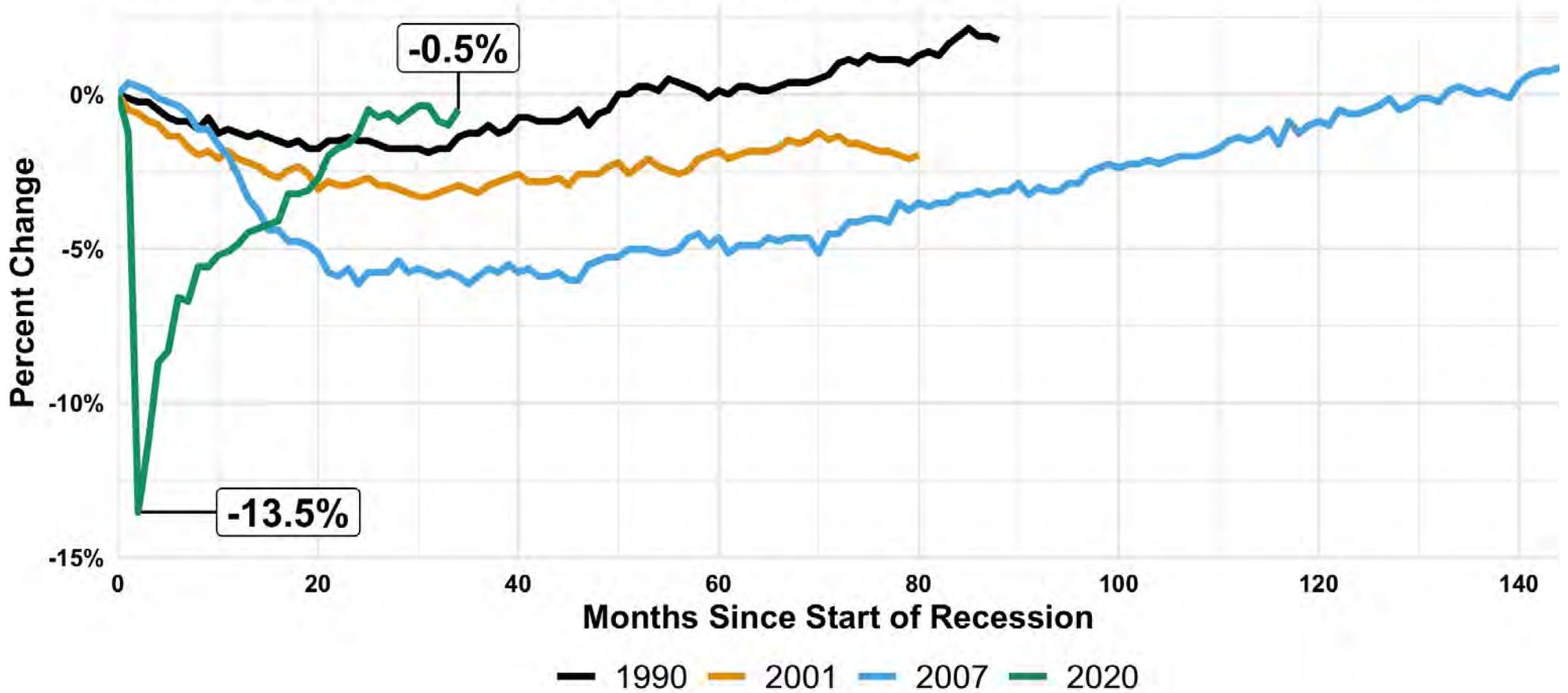
Source: Bureau of Labor Statistics, seasonally adjusted data.

Nonfarm Payrolls (Jobs) United States, January 2019 - December 2022



Source: Bureau of Labor Statistics, seasonally adjusted data.

Employment-Population Ratio for Workers Aged 25 to 54 United States, Recessions of 1990, 2001, 2007, and 2020



Source: Bureau of Labor Statistics, seasonally adjusted data.
Change in employment-population ratio from the start of each recession.

Job Openings and Quits United States, January 2019 - December 2022



Source: Bureau of Labor Statistics, seasonally adjusted data.

Virginia Lags the Nation

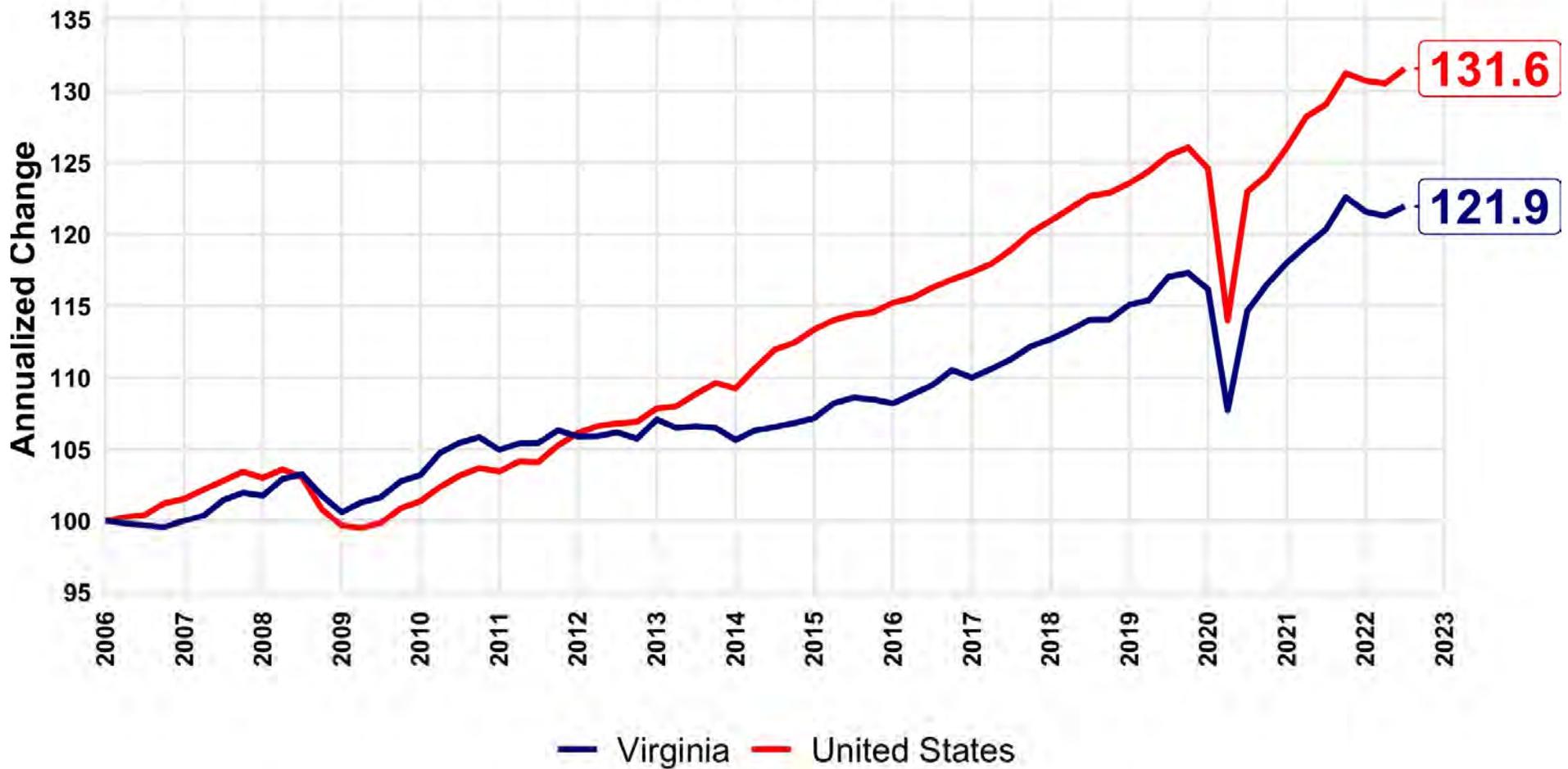


Real Gross Domestic Product Virginia, Q1 2010 - Q3 2022



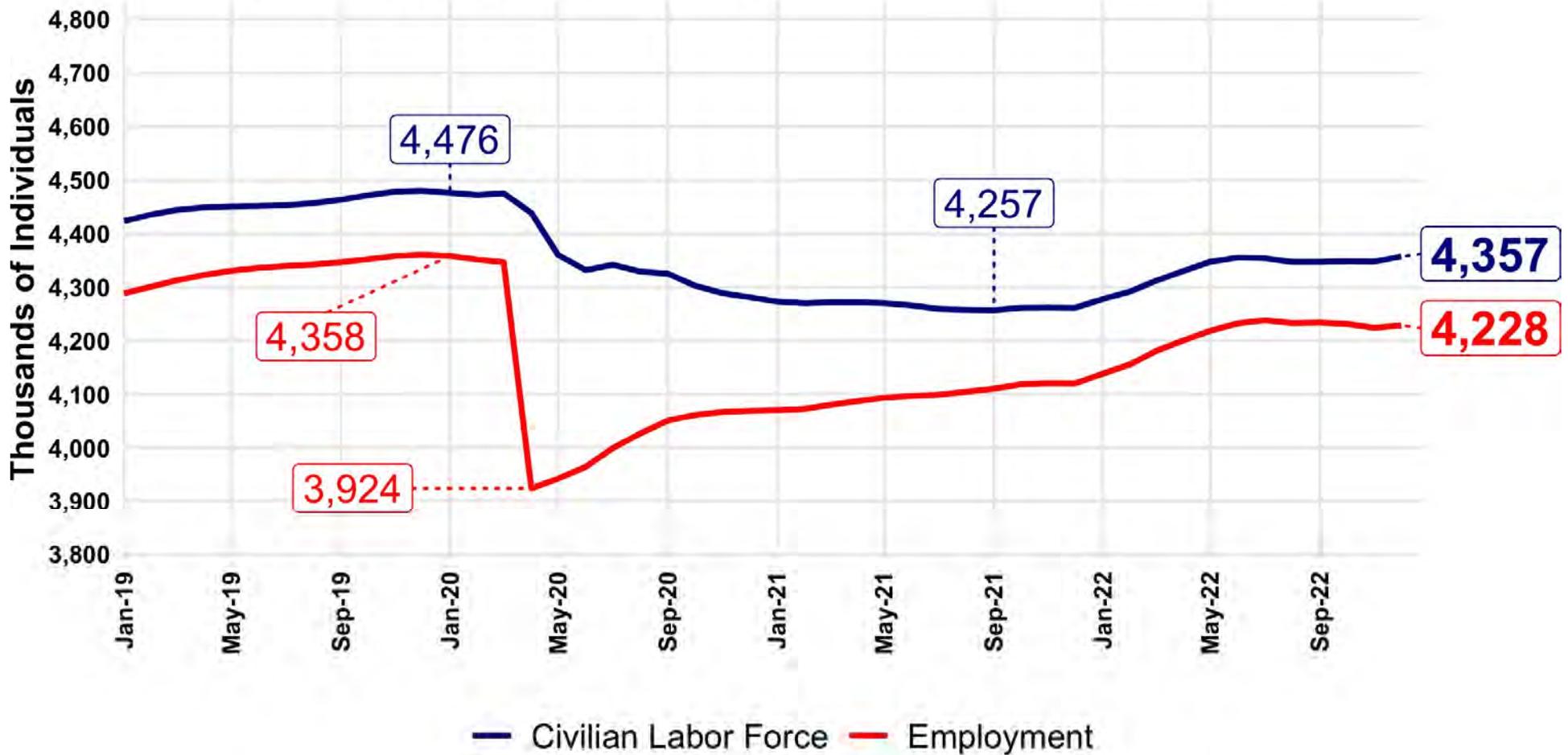
Source: U.S. Bureau of Economic Analysis. Compounded annual rate of change, seasonally adjusted annual rate.

Growth in Real Gross Domestic Product Virginia and the United States, Q1 2006 - Q3 2022



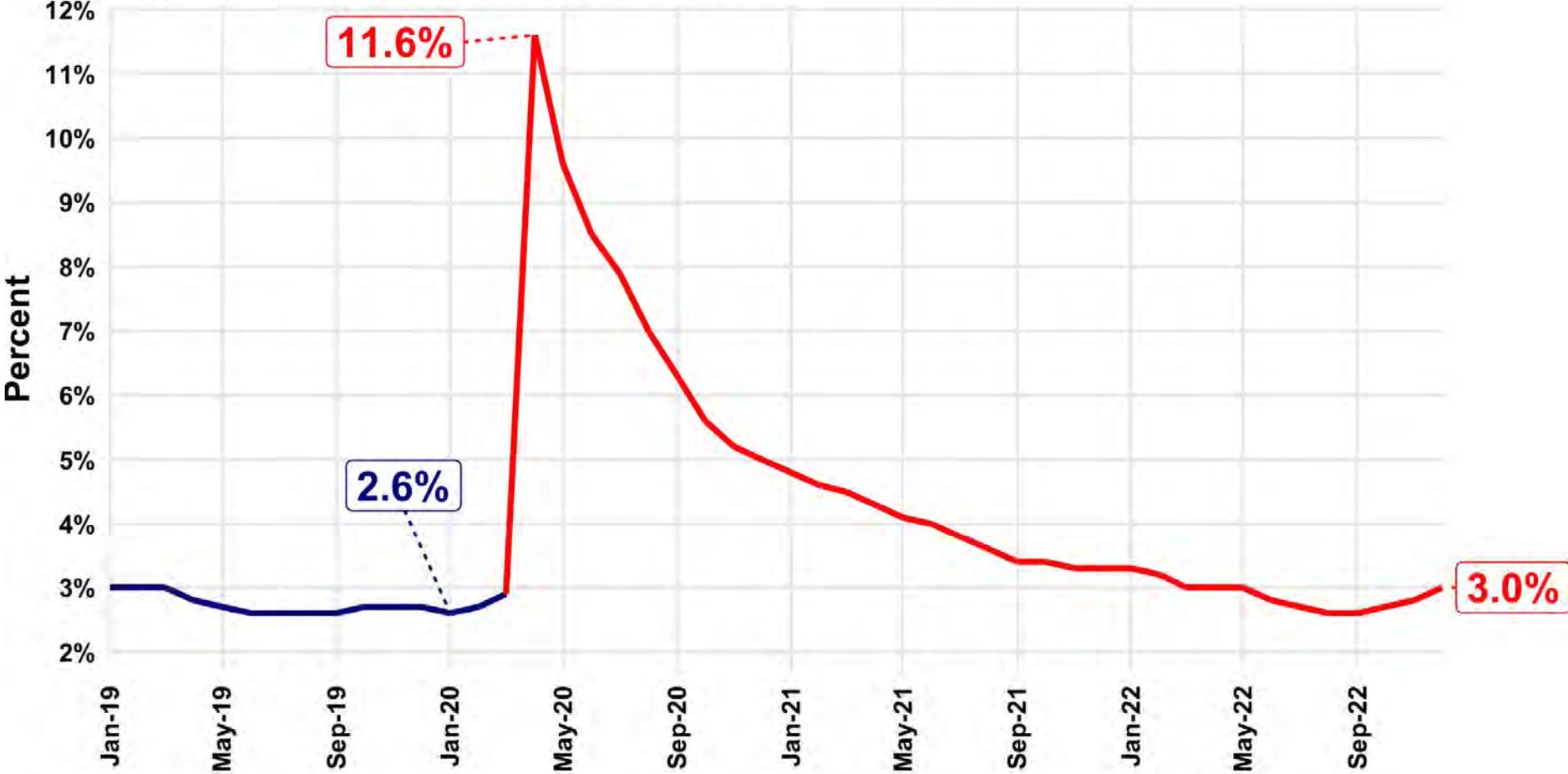
Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy.

Civilian Labor Force and Individual Employment Virginia, January 2019 - December 2022



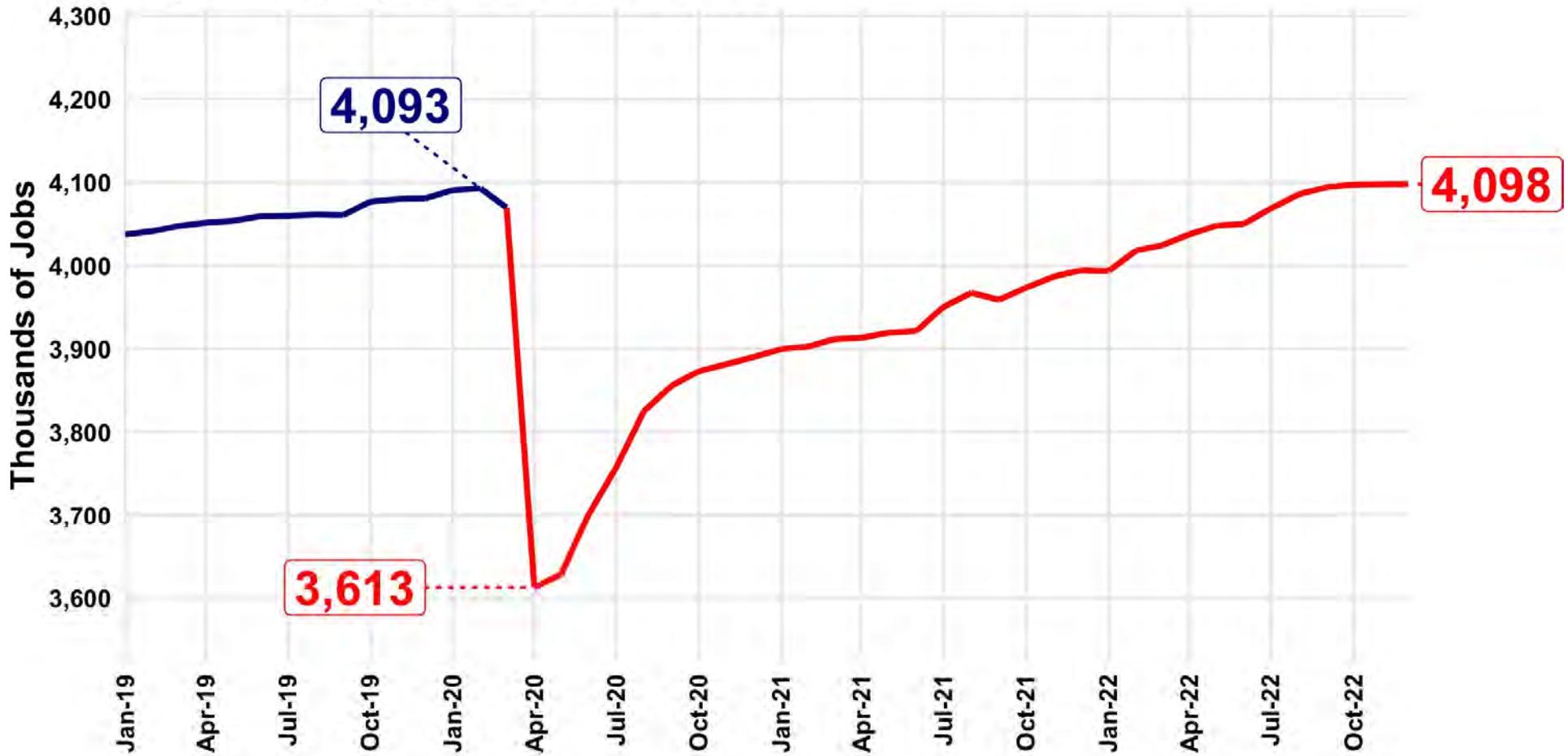
Source: Bureau of Labor Statistics, seasonally adjusted data.

Unemployment Rate (U3) Virginia, January 2019 - December 2022



Source: Bureau of Labor Statistics, seasonally adjusted data.

Nonfarm Payrolls (Jobs) Virginia, January 2019 - December 2022



Source: Bureau of Labor Statistics, seasonally adjusted data.

Job Openings and Quits Virginia, January 2019 - November 2022

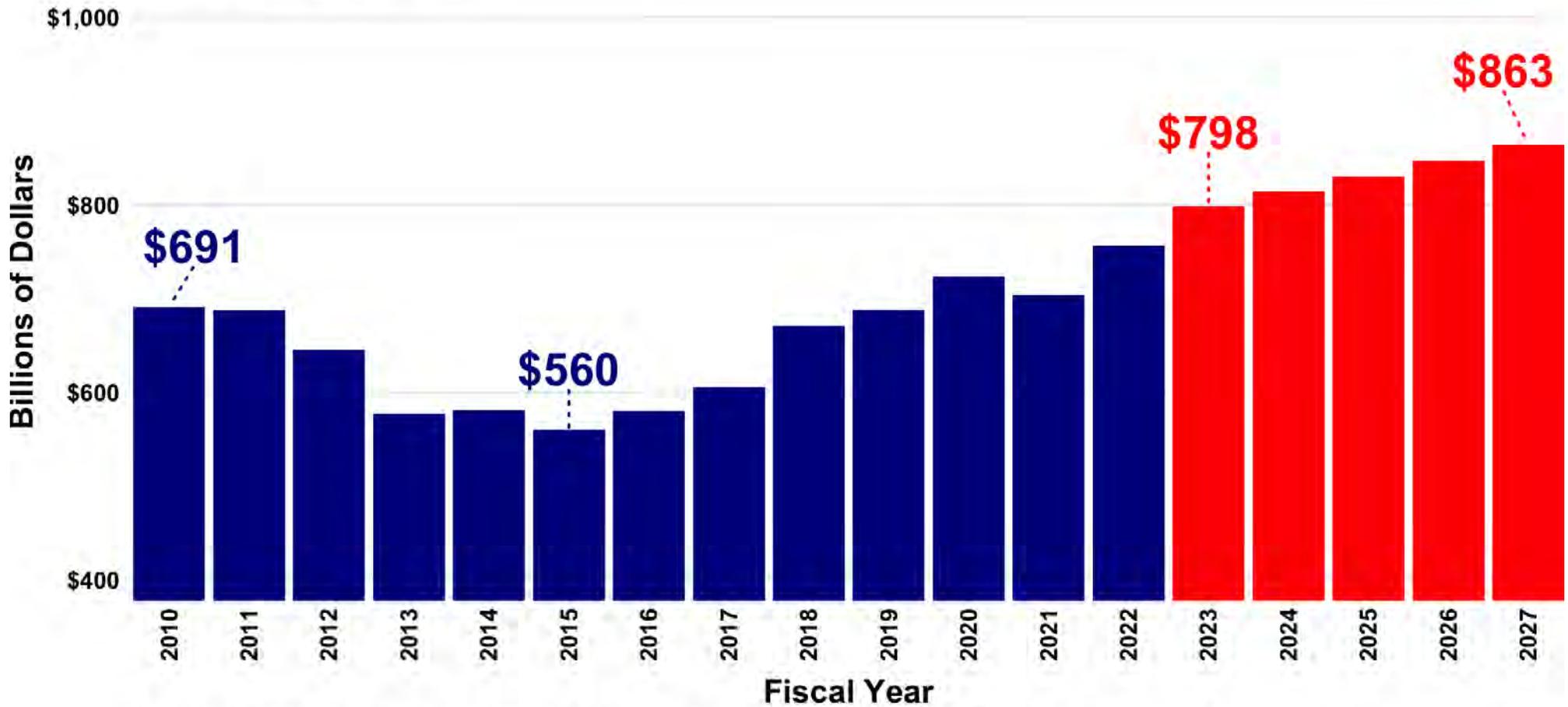


Source: Bureau of Labor Statistics, seasonally adjusted data.

Defense

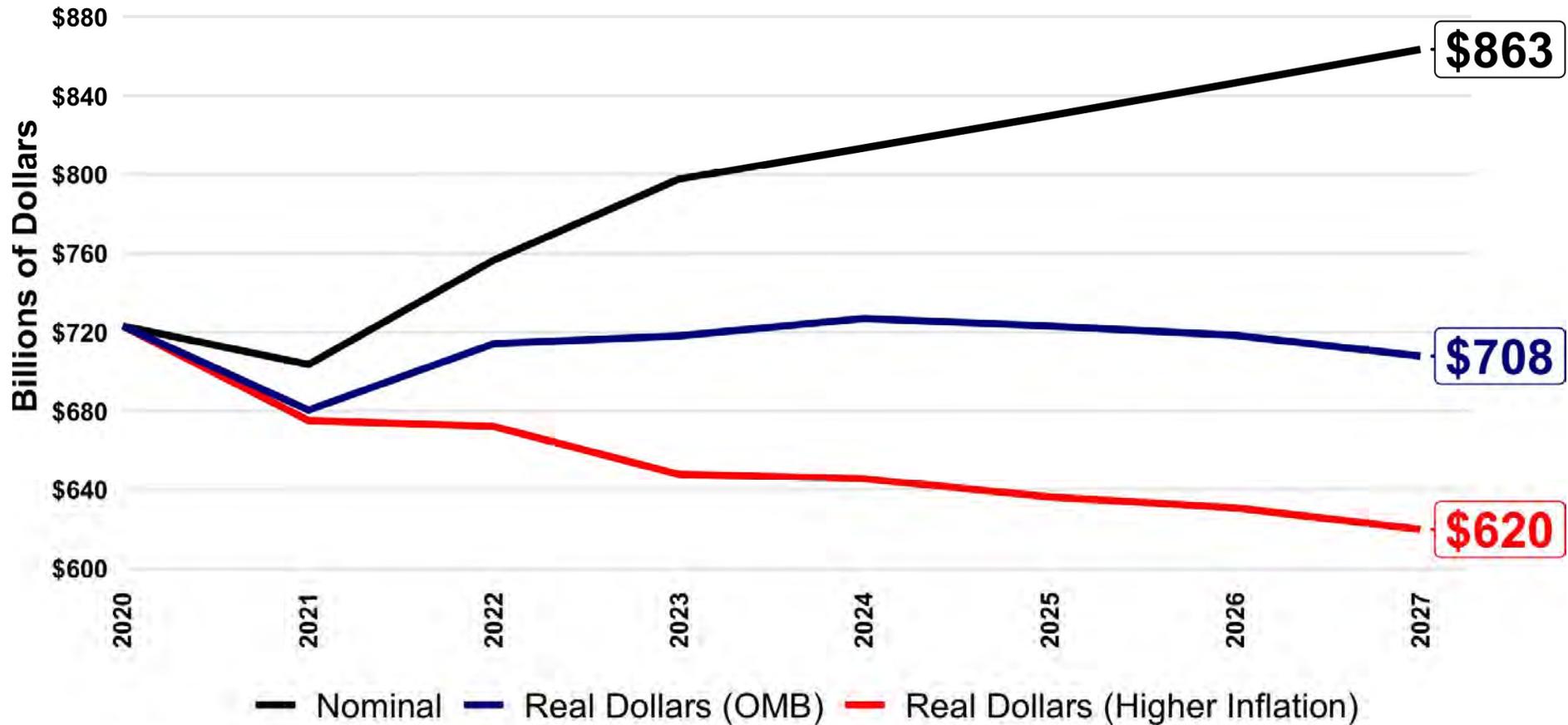


Department of Defense Base Budget Fiscal Year 2010 - 2027*



Sources: Office of Management and Budget, FY 2023 Omnibus, and Dragas Center for Economic Analysis and Policy.
*FY 2023 is an estimate. FY 2024 - FY 2027 are forecasts.

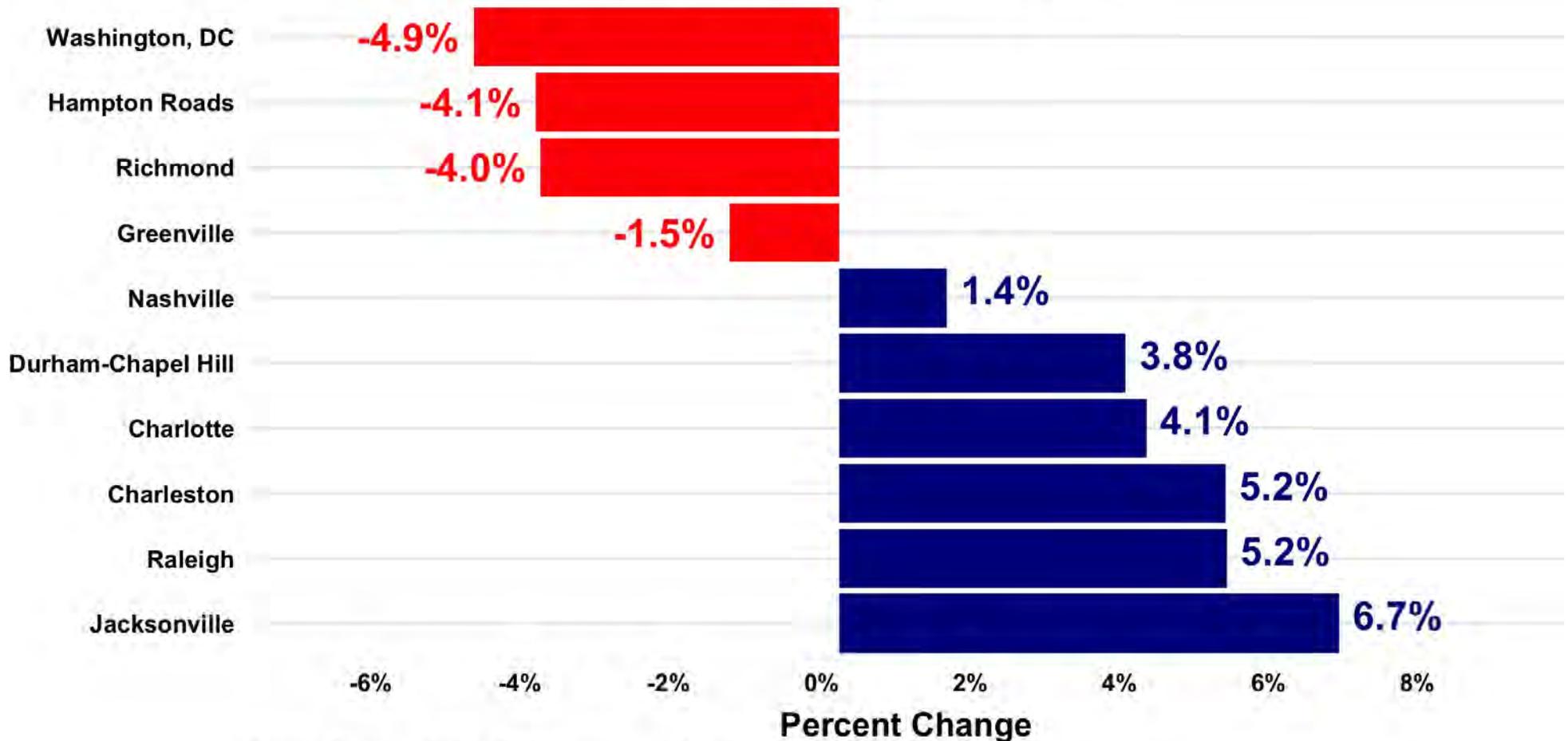
Department of Defense Base Budget Fiscal Years 2020 - 2027*



Sources: Office of Management, FY 2023 Omnibus, and Dragas Center for Economic Analysis and Policy.

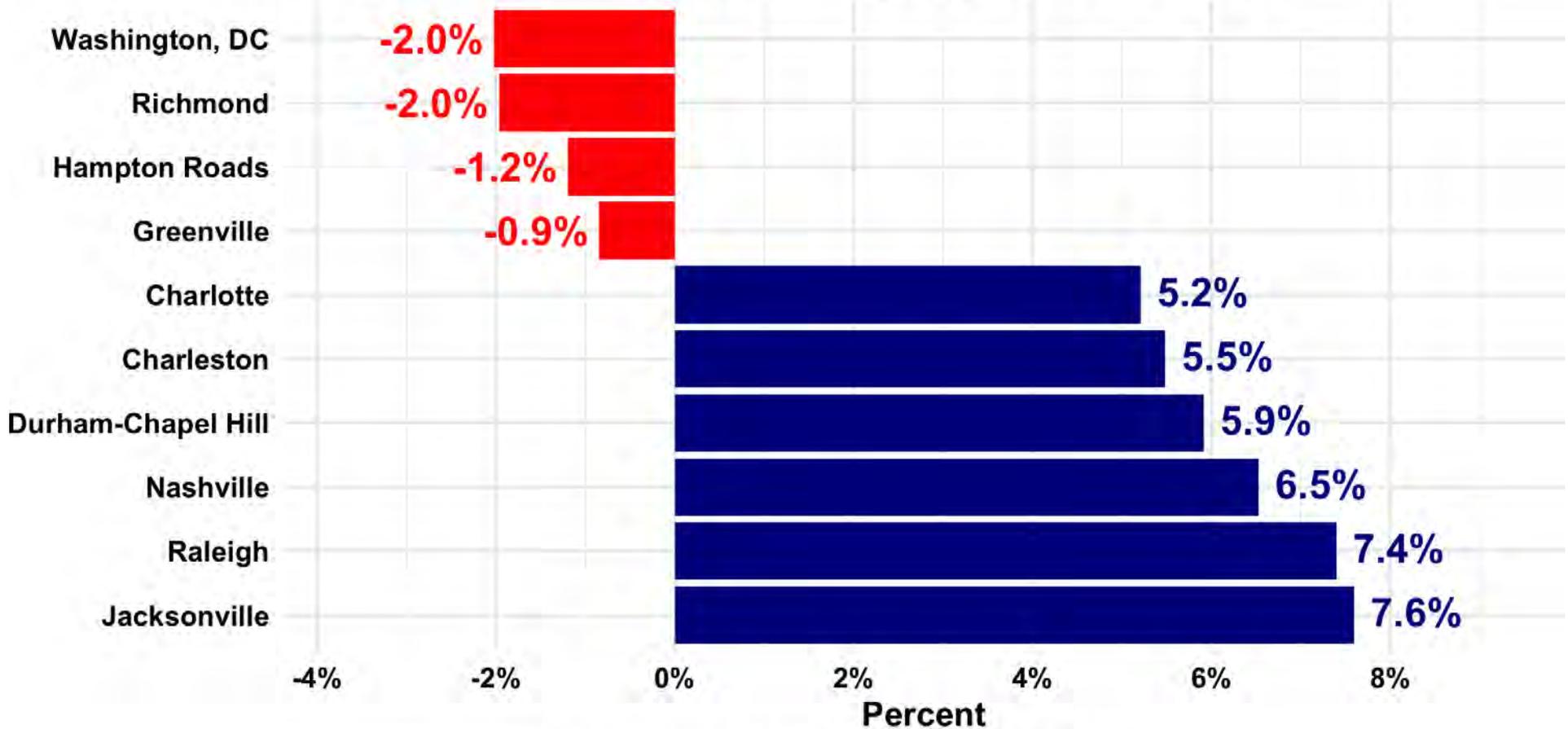
*FY 2023 is an estimate. FY 2024 - FY 2027 are forecasts. 2020 is the base year for real dollars.

Change in Civilian Labor Force Selected Metro Areas, February 2020 - December 2022



Source: Bureau of Labor Statistics, seasonally adjusted data. Hampton Roads is the Virginia Beach-Newport News MSA and Washington, DC is the Washington-Arlington-Alexandria MSA.

Growth in Nonfarm Payrolls Selected Metropolitan Areas, February 2020 - December 2022



Source: Bureau of Labor Statistics, seasonally adjusted data. Hampton Roads is the Virginia Beach-Newport News MSA and Washington, DC is the Washington-Arlington-Alexandria MSA.

Looking Ahead

- China's recovery in the 2nd half of 2023 will ease supply chain constraints globally.
- Economic growth stagnates in the 2nd half of 2023, but the U.S. and Virginia may avoid a recession.
- Even with higher unemployment in the latter half of 2023, employers will find it difficult to fill some positions as long COVID, retirements, and the opioid epidemic limit labor force participation.
- Congress is a major source of downside risk. A failure to extend the debt ceiling would spark a global financial crisis much worse than the Great Recession of 2007 - 2009.
- In the best case, the U.S. 'muddles through' through 2023.

National and Virginia Forecast

	2020	2021	2022	2023
U.S. Real GDP Growth	-2.8%	5.9%	2.2%	0.9%
Civilian Job Growth	-5.8%	2.8%	4.1%	0.2%
Unemployment Rate	8.1%	5.4%	3.7%	4.1%
Inflation Rate	1.2%	6.7%	8.0%	4.8%
Core Inflation Rate	1.6%	5.0%	6.2%	4.0%
Federal Funds Rate	0.2%	0.2%	4.5%	5.0%
10-year Treasury Bill	0.9%	1.4%	2.9%	3.5%
30-year Conventional Mortgage	3.1%	3.0%	5.3%	5.5%
Federal Deficit (Fiscal Year, Billions)	-\$3,132	-\$2,772	-\$1,375	-\$1,200
Virginia Real GDP Growth	-2.1%	5.5%	2.4%	1.5%
Virginia Civilian Job Growth	-5.0%	2.2%	3.2%	0.9%

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- Follow **DragasCenterODU** on Facebook, LinkedIn, and Twitter for up-to-date information to help you understand new economic developments.

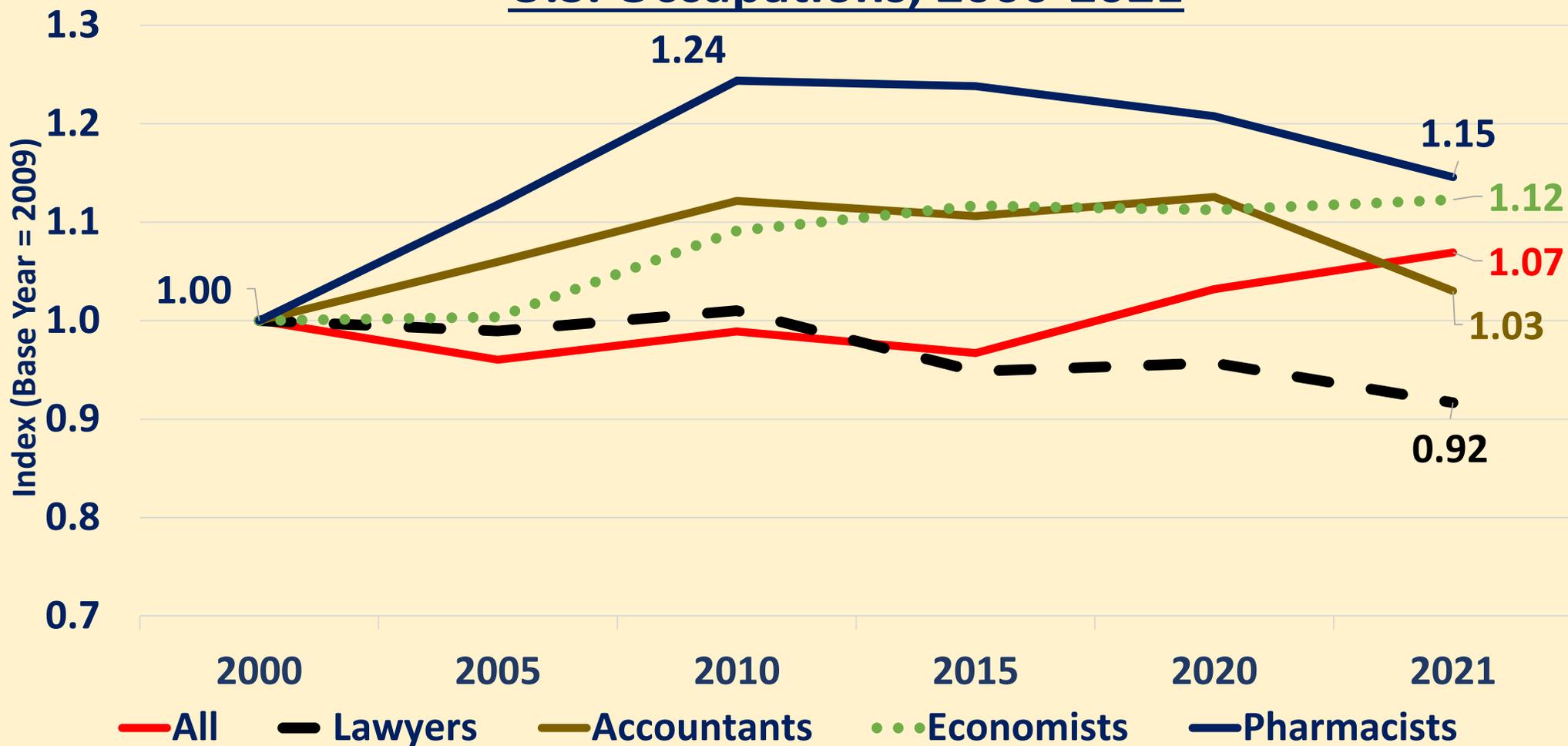


Images v. Reality
in Lawyers' Incomes

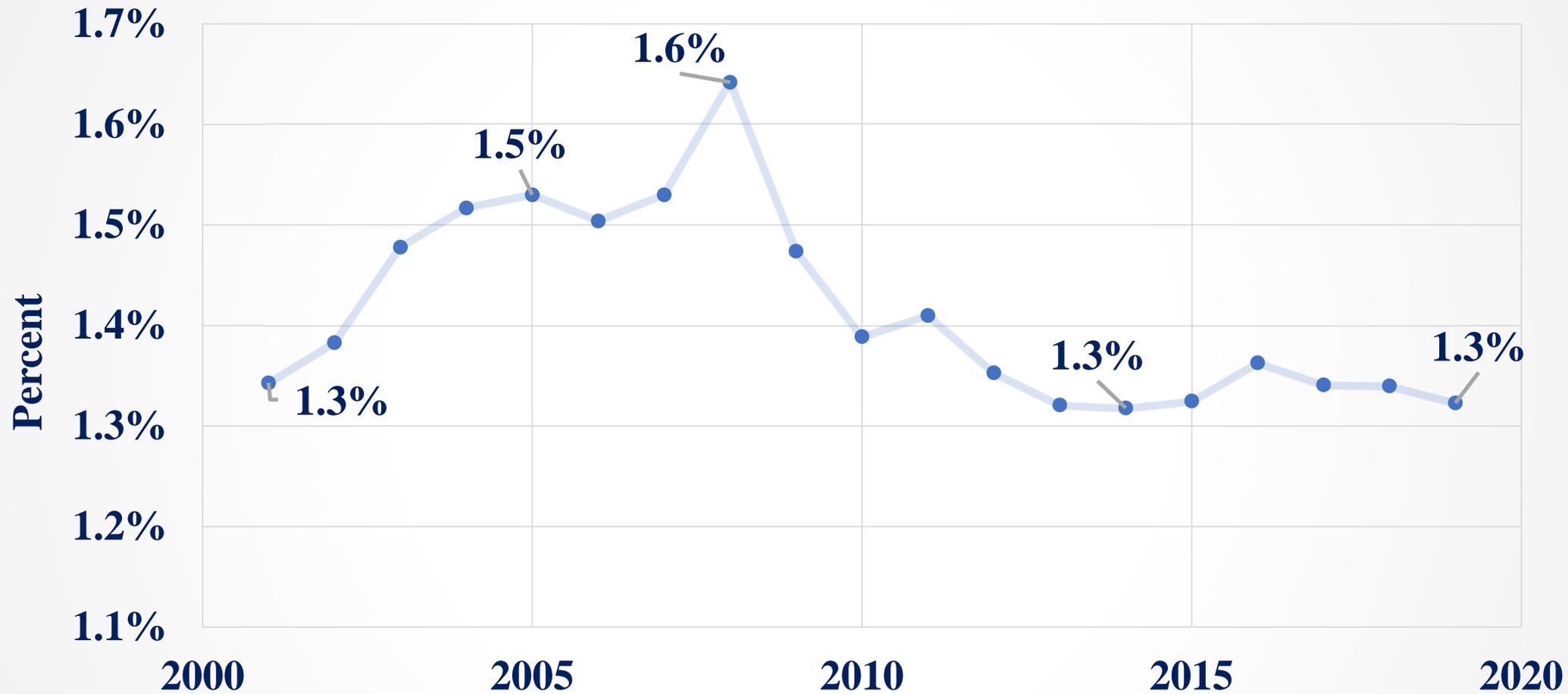


Reality Often Is Different

Changes in Real Median Incomes: U.S. Occupations, 2000-2021



Percent of GDP Devoted to Legal Services (NAICS 5411), 2001-2019



Source: U.S. Census, North American Industrial Classification

Is there an oversupply of lawyers?

- The data I have just presented do not discourage the notion that society has more lawyers than it readily can accommodate.
- But what does this really mean? To me (and perhaps most economists), it signifies an extended period of years when the real (price-adjusted) incomes in an occupation have declined. If, over a space of 20 years, real incomes in an occupation such as the law have declined, then this is *prima facie* evidence that society is placing a lower value on the work of these individuals. Hence, we might conclude that the supply of such individuals is excessive. But remember that occupations have a variety of characteristics(e.g., location) and income is only one of them.

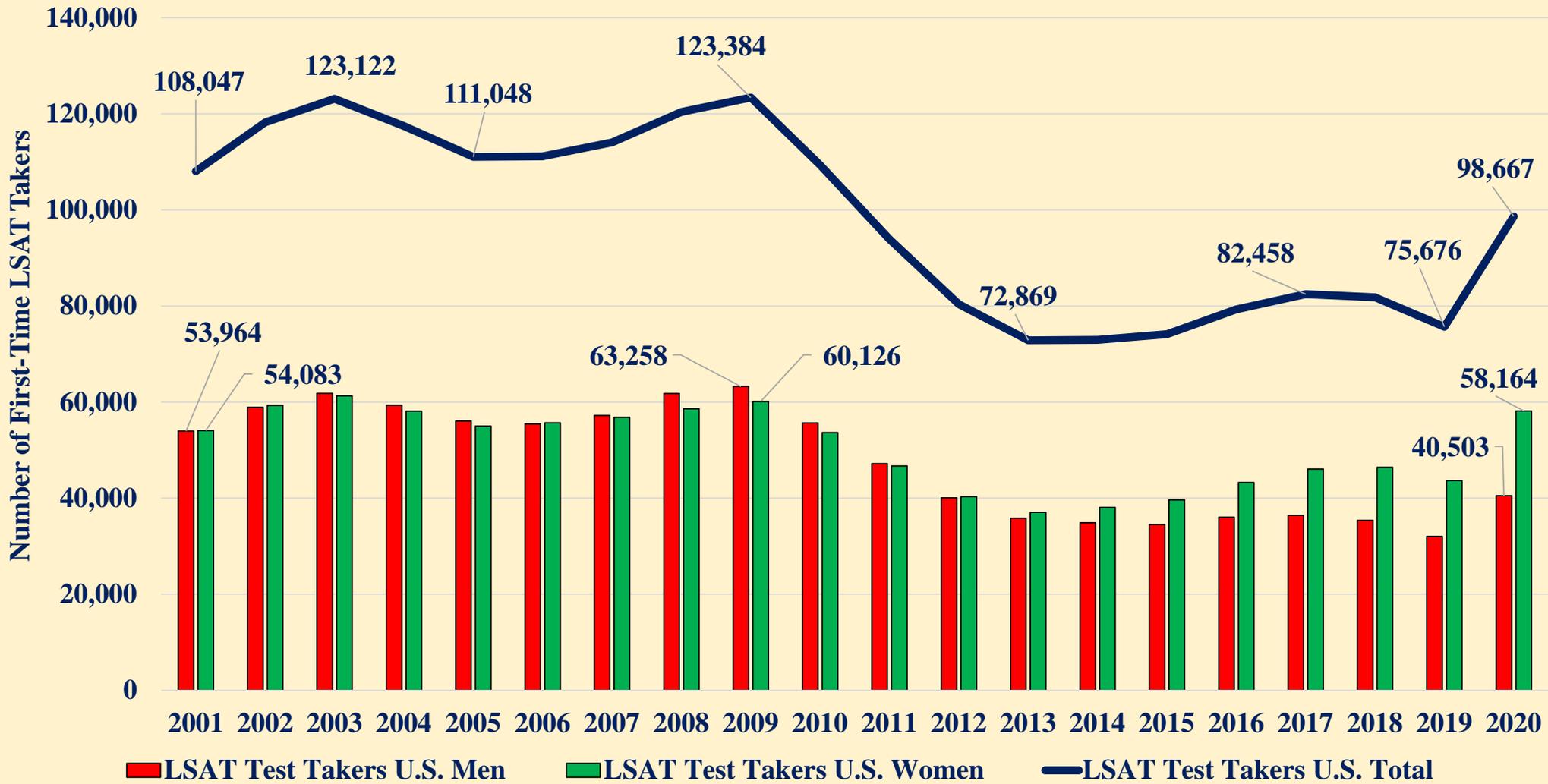
Why?

- One of the most powerful tools in an economist's kit is supply and demand analysis. It is very useful when we seek to explain why prices and incomes are what they are.
- I will start with the supply side. Between 2000 and 2020, the total number of employed individuals in the U.S. increased by 8.69%, while the total number of lawyers increased by 14.56%. Hence, lawyers became relatively more numerous in the U.S., employment mix.

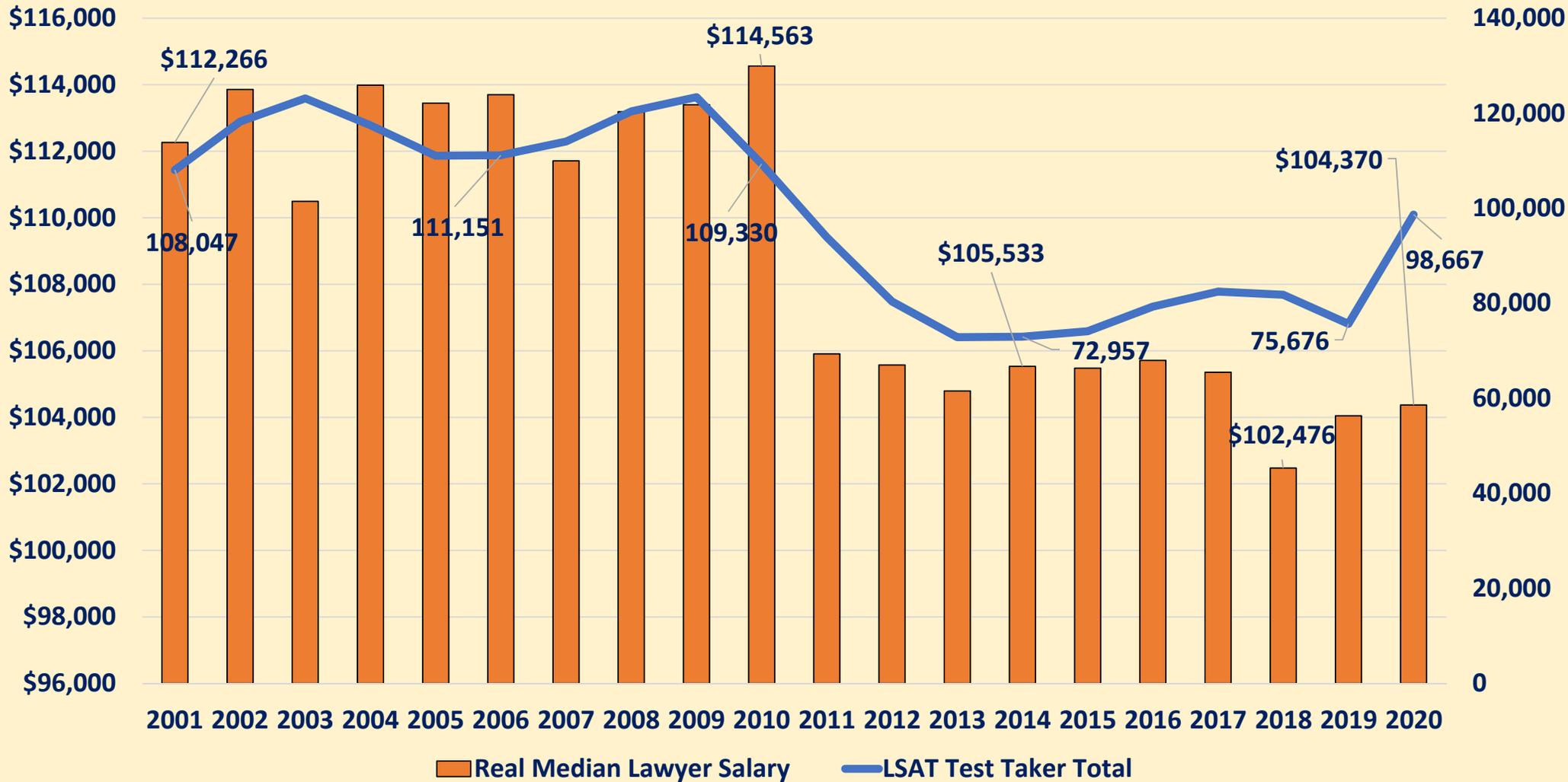
<u>Year</u>	<u>Men First-Time LSAT Takers</u>	<u>Women First-Time LSAT Takers</u>	<u>Total First-Time LSAT Takers</u>	<u>Total First-Time LSAT Takers Per 000</u>
2001	53,964	54,083	108,047	.379
2002	58,909	59,308	118,217	.410
2003	61,817	61,305	123,122	.423
2004	59,346	58,113	117,459	.400
2005	56,052	54,996	111,048	.375
2006	55,456	55,695	111,151	.372
2007	57,229	56,818	114,047	.378
2008	61,790	58,600	120,390	.395
2009	63,258	60,126	123,384	.401
2010	55,669	53,661	109,330	.353
2011	47,189	46,703	93,892	.301
2012	40,059	40,301	80,360	.256
2013	35,825	37,044	72,869	.230
2014	34,886	38,071	72,957	.229
2015	34,495	39,631	74,126	.231
2016	36,045	43,252	79,297	.245
2017	36,404	46,054	82,458	.253
2018	35,391	46,415	81,806	.250
2019	32,024	43,652	75,676	.230
2020	40,503	58,164	98,667	.299

Source: LSAC

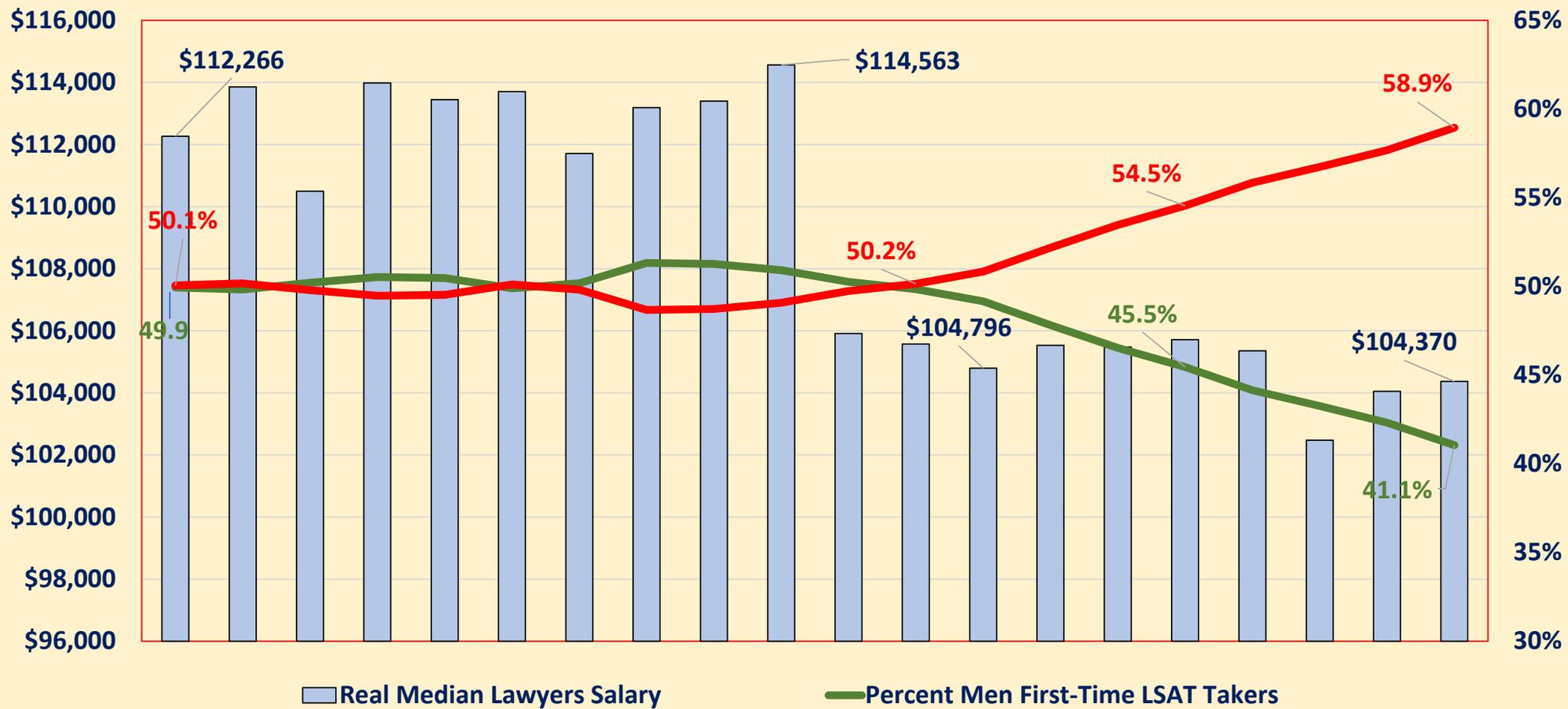
LSAT Test Takers By Gender: 2001-2020



First-Time LSAT Takers and Median State Real Lawyers' Incomes



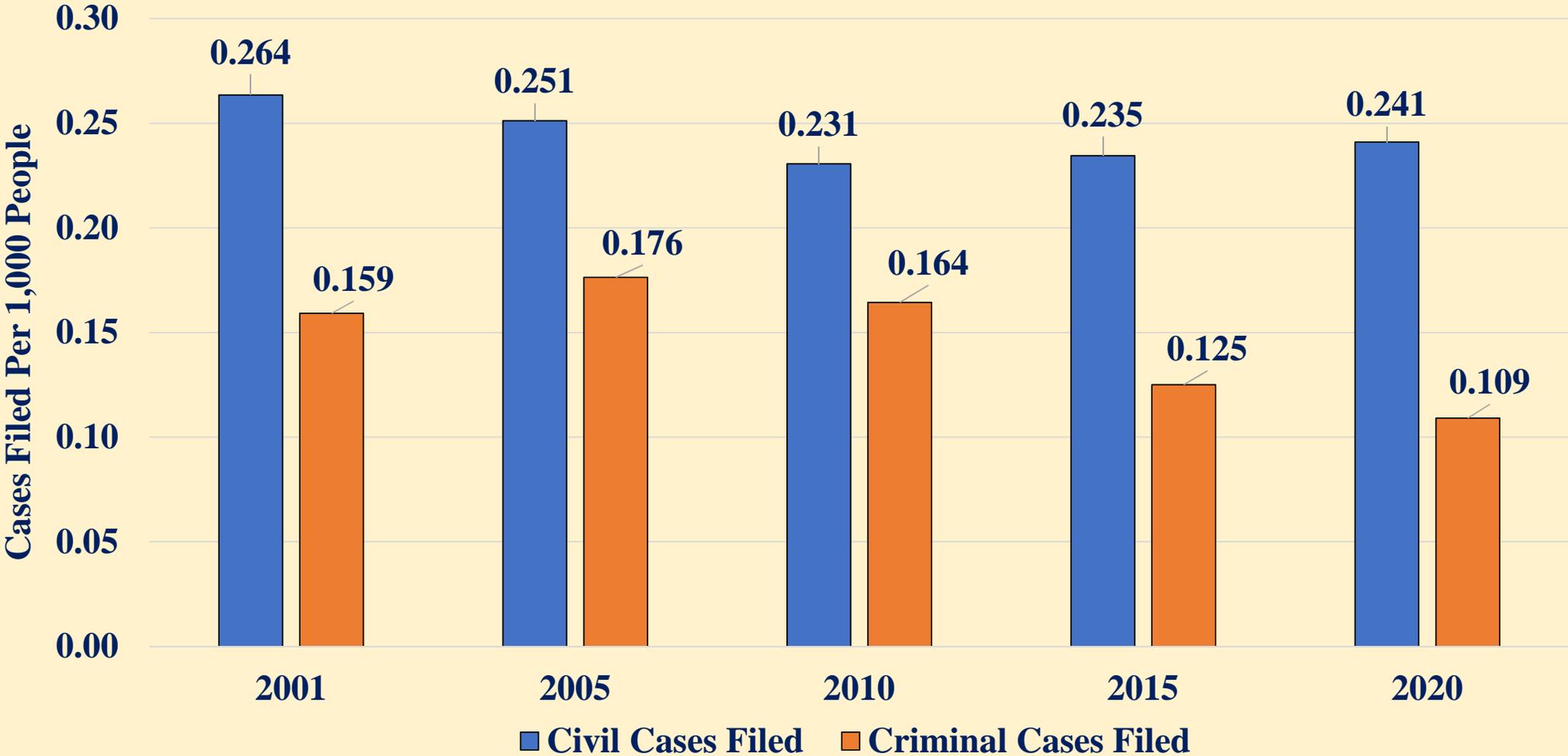
Contrasting Men and Women LSAT Takers and Real Median Lawyers' Incomes, 2000-2020



The Demand Side of the Market:

- Many individuals believe that the demand for lawyers' services has been growing rapidly and that the U.S. has become a litigious society. *"People sue at the drop of a hat."*
- But this does not seem to be the case in general. In relative terms, the demand for many services provided by lawyers has declined. Why? COVID. More arbitrations outside of courts. Conferences instead of court appearances. Fewer divorces.

Median Number of Federal Civil and Criminal Cases Filed Per 1,000 People:
The 50 States Plus the District of Columbia, 2001-2020

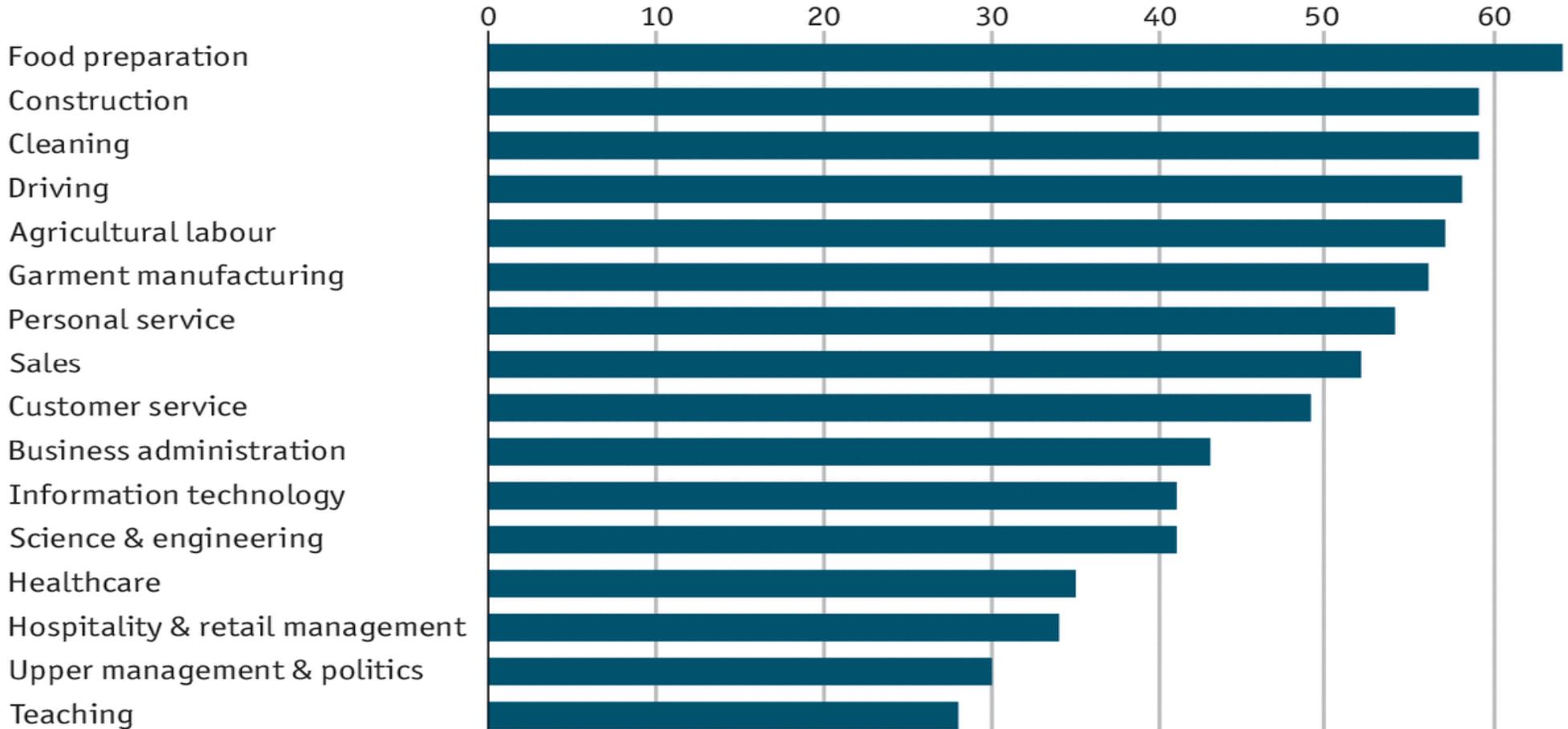


Large Customers Are Forcing Lawyers to Compete

- Large customers (e.g., insurance companies, some state agencies) have sufficient *monopsony power* as buyers that they now routinely tell lawyers what prices they will pay for common legal activities such as defending them a wrongful injury claim, or an automobile collision claim, an employment discrimination claim.
- They may advertise that they will pay, say, \$3,000 for a lawyer to handle a case, but no more, without special dispensation.
- They force lawyers (particularly those in solo practices) to accept lower stipends and implicitly to compete. These are cases that large, well-heeled firms ordinarily do not pursue.

Automated for the people

Automation risk by job type, %



Source: OECD

ANOTHER DEMAND SIDE FACTOR: AUTOMATION

Source: OECD (2019)

Vulnerable Jobs usually exhibit one or more of the following:

- * Repetitive and predictable
- * Software can replicate or replace (think Lexis Nexus and CHAT!)
- * Require little judgment

Resistant Jobs, on the other hand:

- Require judgments such as taste, smell, feel, regard for feelings and relationships (e.g., knowing someone is related to the boss)
 - * Thus, intuition continues to play a part
- However, AI is getting better at all these things!
- Can CHAT do some legal work? Yes.

To close, Yet Another Finding: A Surfeit of Lawyers Reduces Economic Growth

If an excess of lawyers reduces lawyers' incomes, does this relationship also have a negative impact upon economic growth?

- *“...the percentage growth rate of real per capita GSP in state j is (at the 1% statistical significance level) a decreasing function of the number of attorneys per 1,000 people residing in the state.”*
- **This growth depressing effect is modest in amount but strong in terms of its statistical significance and the confidence we may have in it.**

What does all this add up to? *Better Call Saul* has become a more common outcome than law schools wish to admit.



Data and Information Sources:

- **American Bar Association (2021). Statistics Archives.**
- **Bureau of Labor Statistics (2021). Legal Services, NAICS 5411, May 2020 and preceding years, www.bls.gov/oes/2020/may/naics4_541100.htmwww.americanbar.org/groups/legal_education/resources/statistics/statistics-archives.**
- **Law School Admissions Council (2021a). First-time LSAT takers reported by year, state, and gender. Supplied privately to the authors.**
- **Law School Admissions Council (2021b). “Test Registrants and Test Takers.” <https://report.lsac.org/TestTakers.aspx>.**
- **[Automation, skills use and training | OECD Social, Employment and Migration Working Papers | OECD iLibrary \(oecd-ilibrary.org\)](https://oecd-ilibrary.org).**
 - **“Why Has the Median Income of Lawyers Been Declining?” *Journal of Economics and Finance* (July 2022), <https://doi.org/10.1007/s12197-022-09588-6>. (Barbara Blake-Gonzalez, co-author).**
 - **“Using the LSAT as a Thermometer for the Labor Market for Lawyers,” *American Journal of Economics and Sociology*, forthcoming, Barbara Blake-Gonzalez, co-author.**
- **jkoch@odu.edu.**

