

Show Me the Money (\$upply)



By: Anirban Basu
MPP, MA, JD, PHD
Sage Policy Group, Inc.

On Behalf of
Engineering & Construction
Contracting Association
Annual Meeting

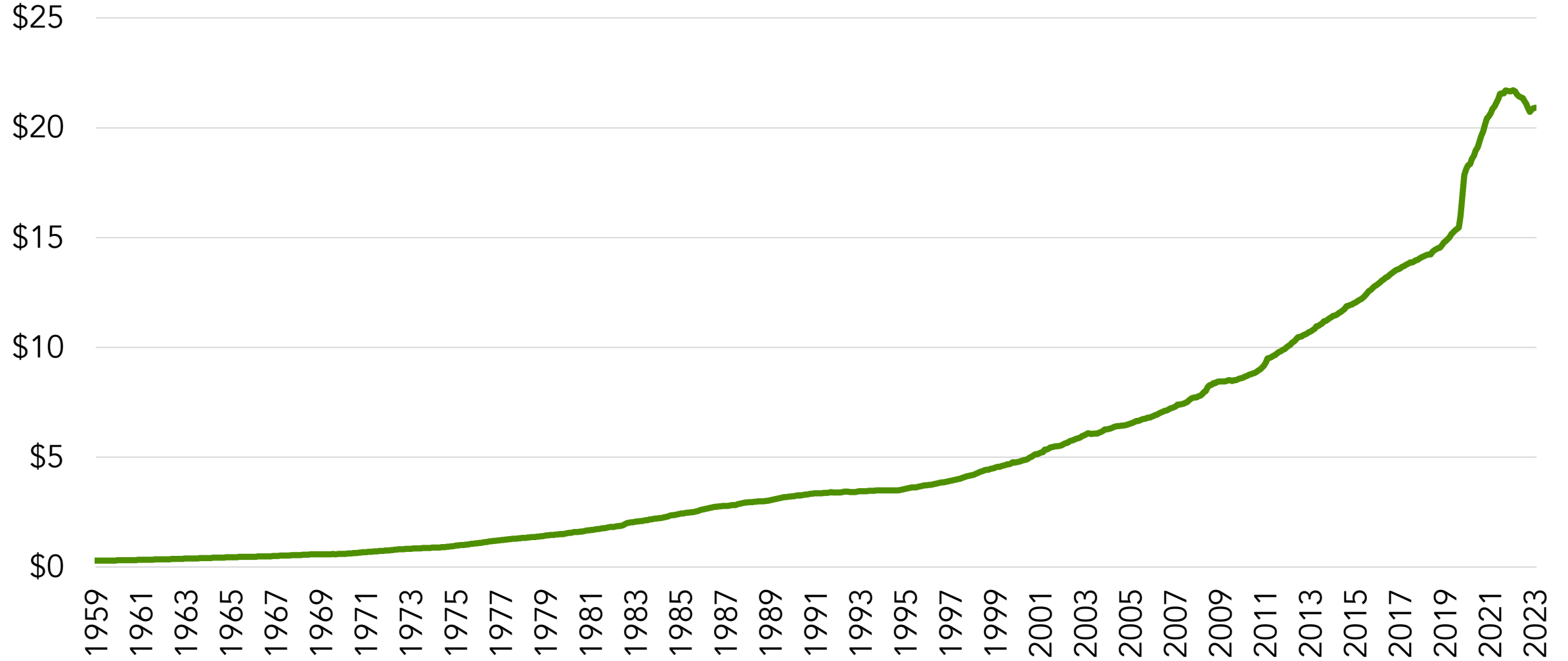
August 31, 2023



The Color of Money

U.S. Money Supply, 1959 – July 2023

\$ Trillions



Source: Federal Reserve

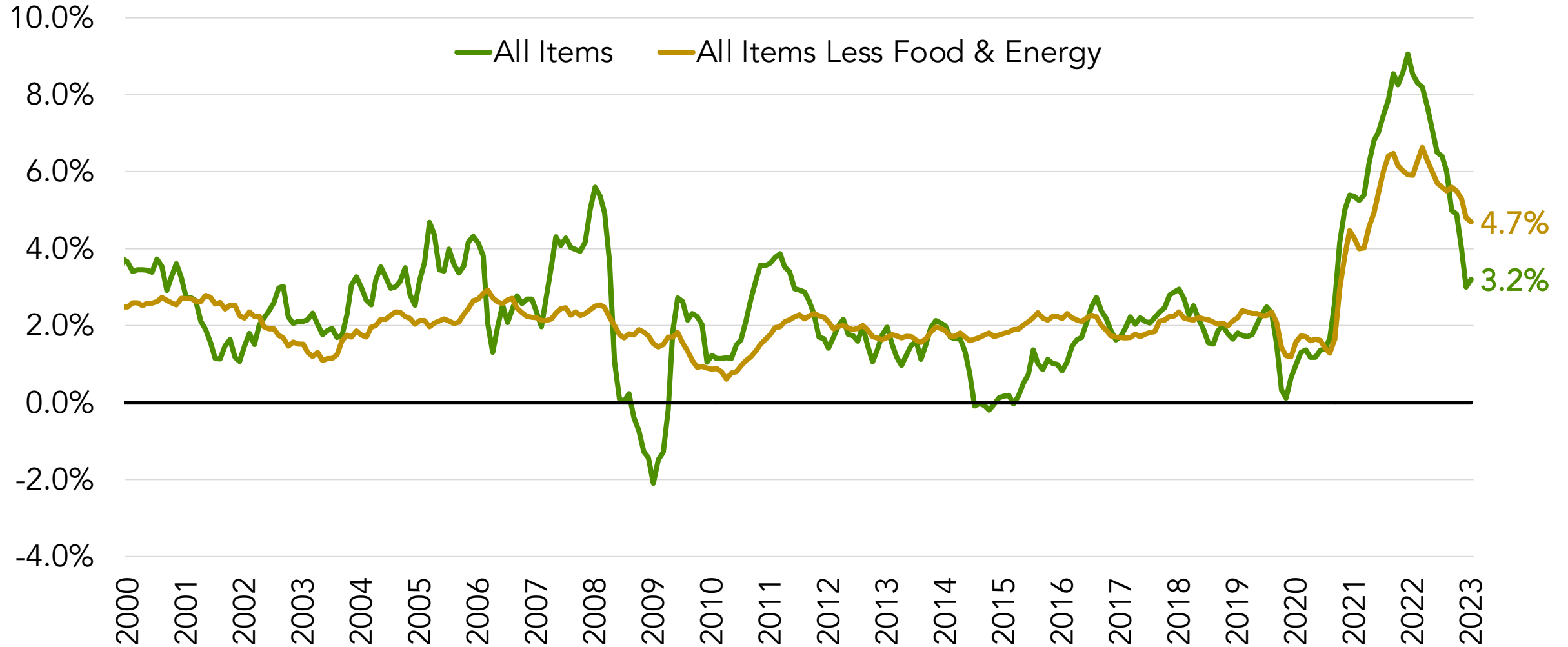


Risky Business

(1983)

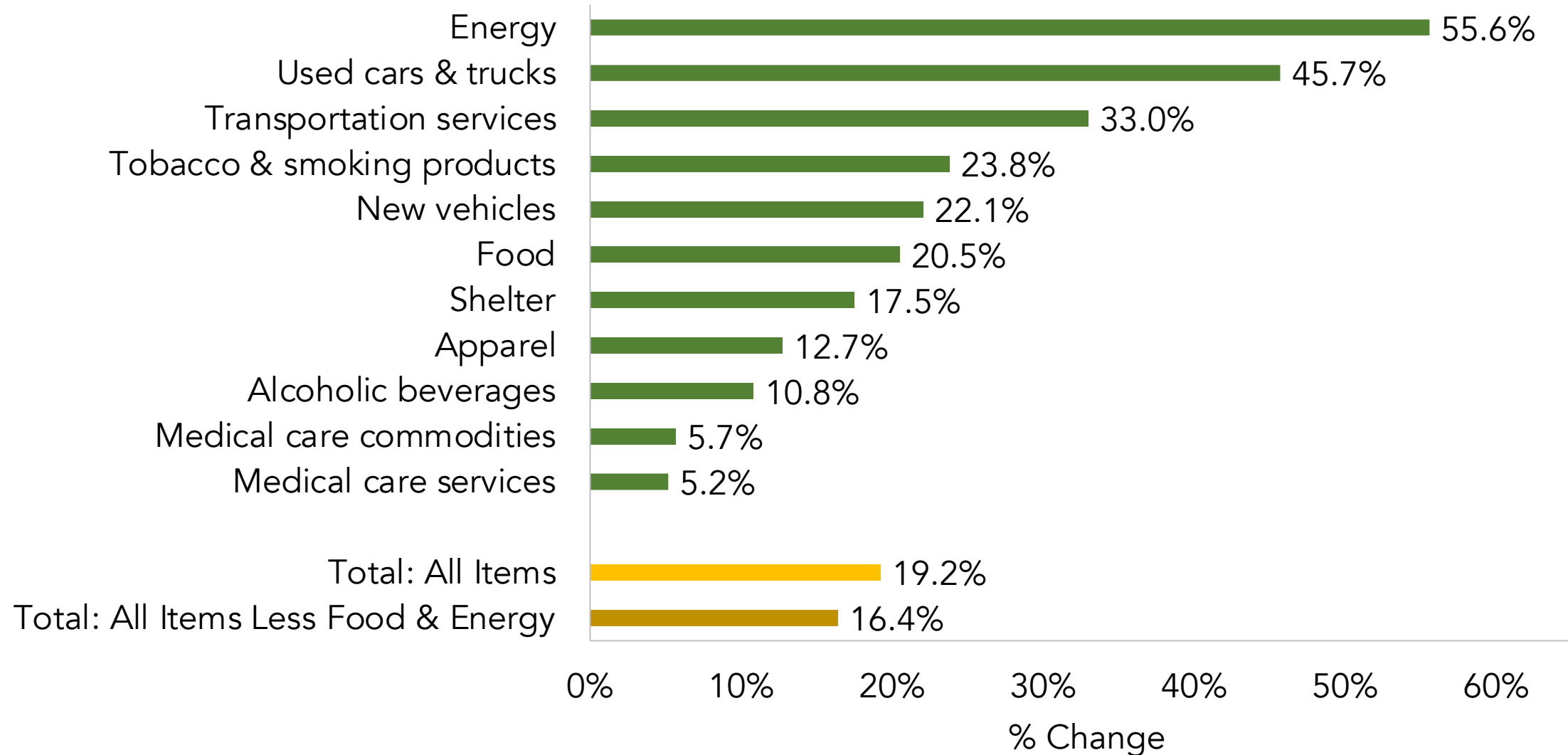
U.S. Consumer Price Index (NSA)

12-Month % Change, 2000 – July 2023



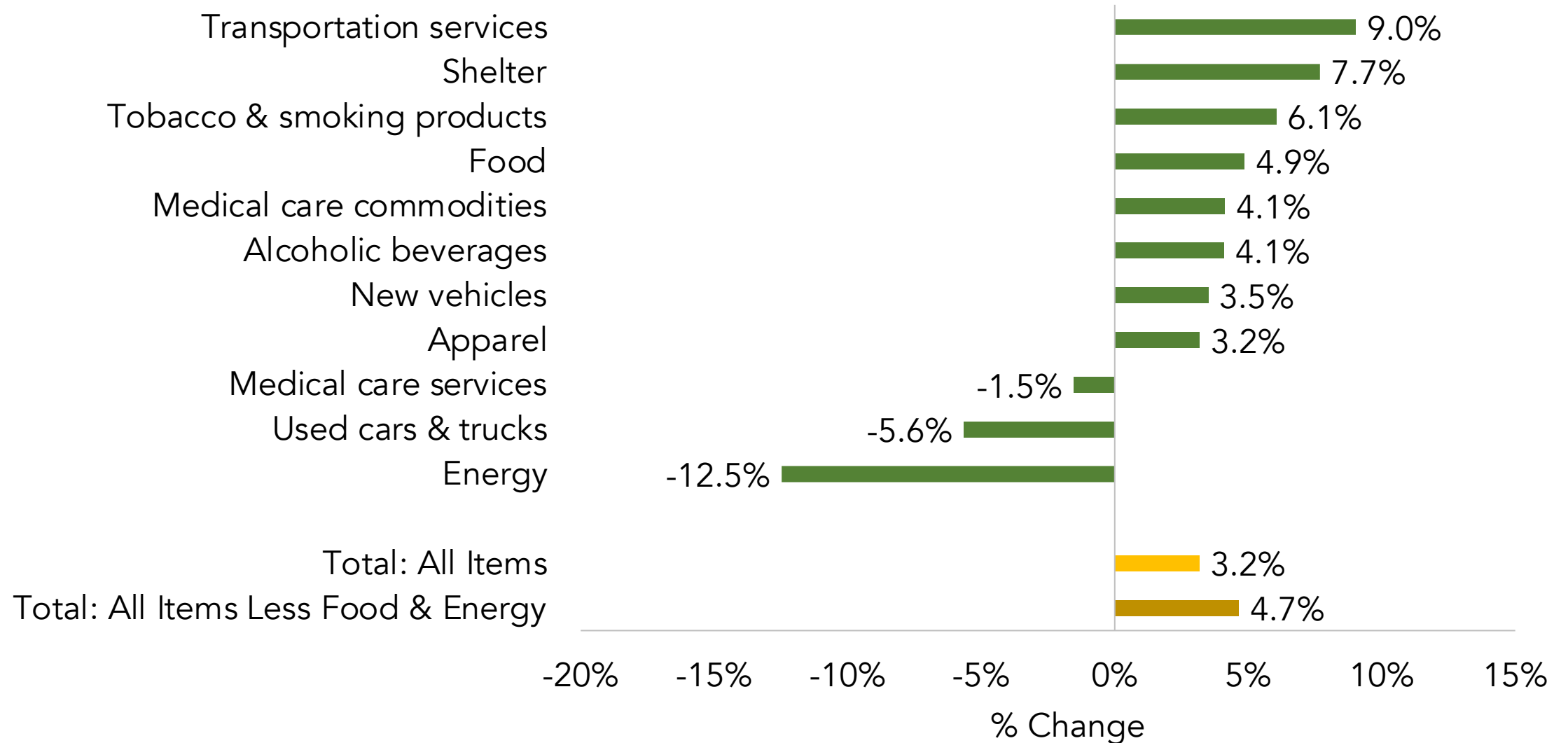
U.S. Consumer Price Index, Select Categories (NSA)

May 2020 v. July 2023 % Change

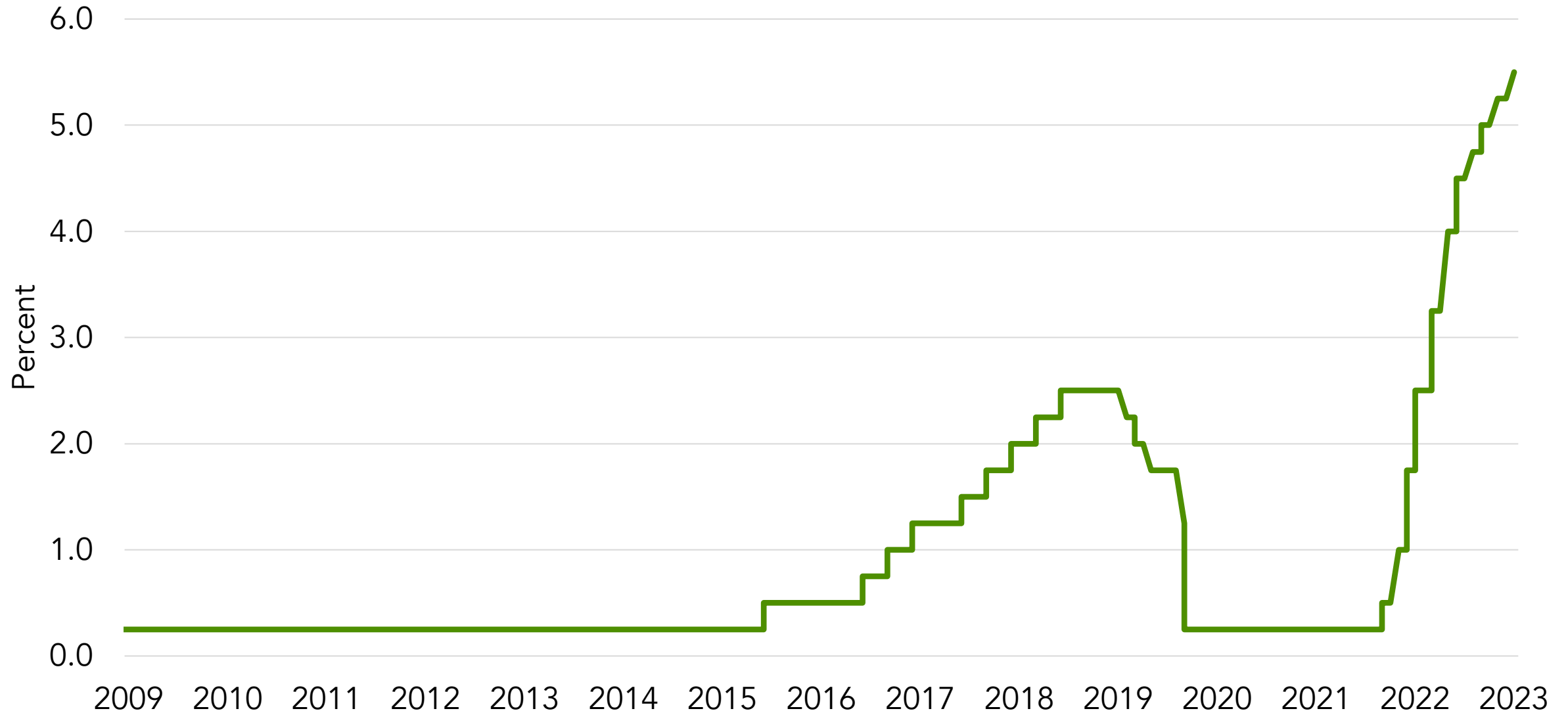


U.S. Consumer Price Index, Select Categories (NSA)

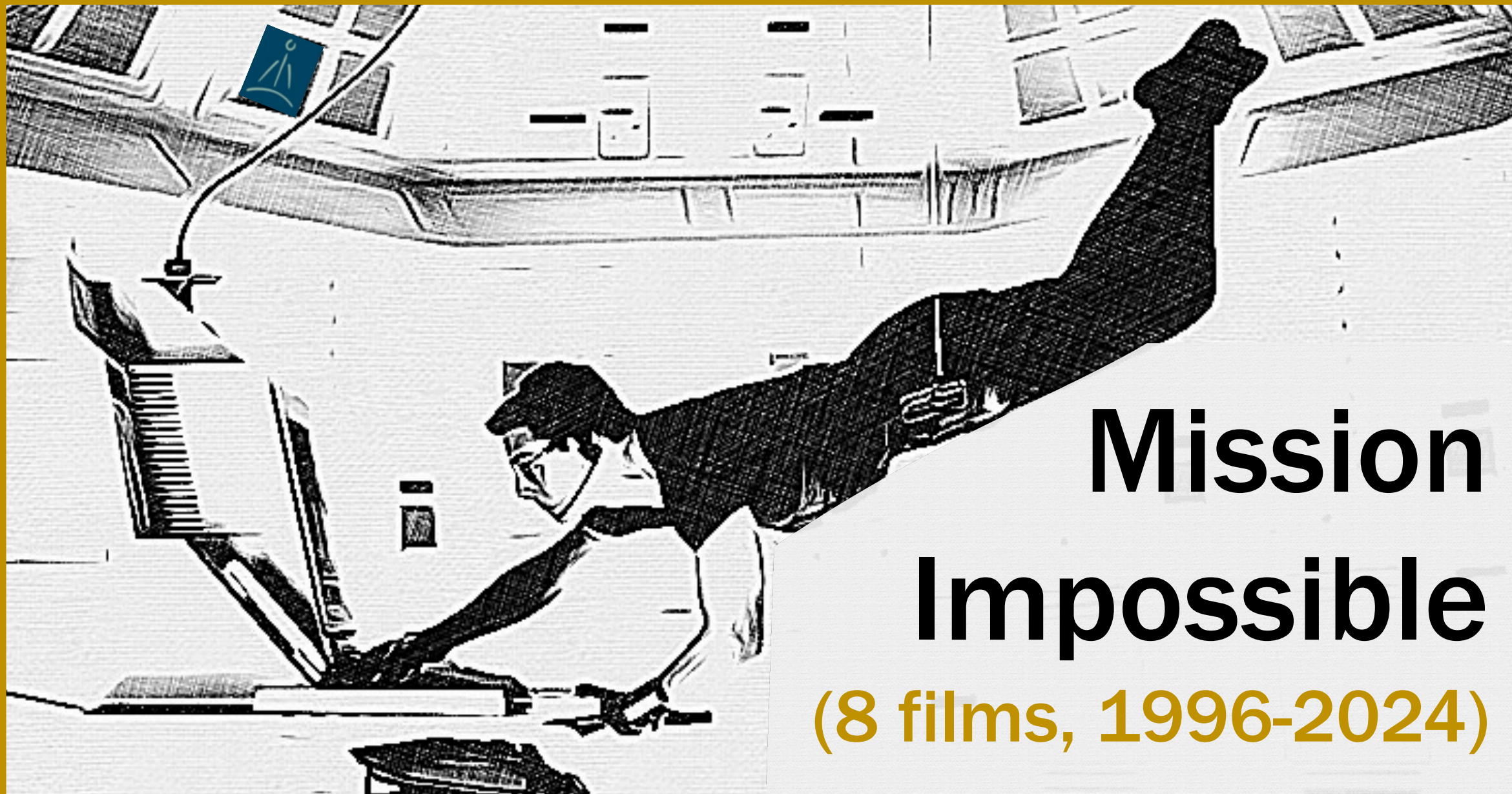
Year-over-year % Change [July 2022 v. July 2023]



Federal Funds Target Range, Upper Limit, 2009 – 2023



Source: Board of Governors of the Federal Reserve System



Mission Impossible

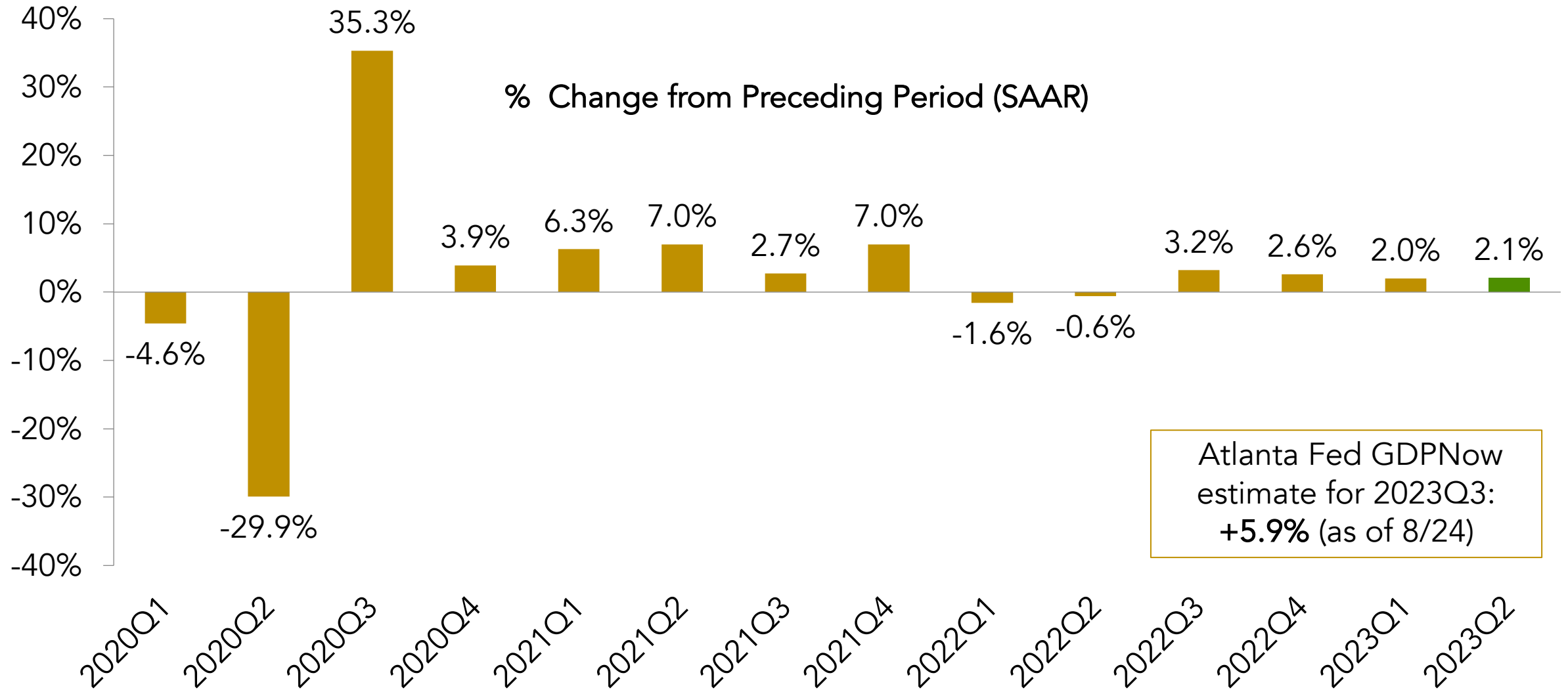
(8 films, 1996-2024)

Monetary Policy Lags

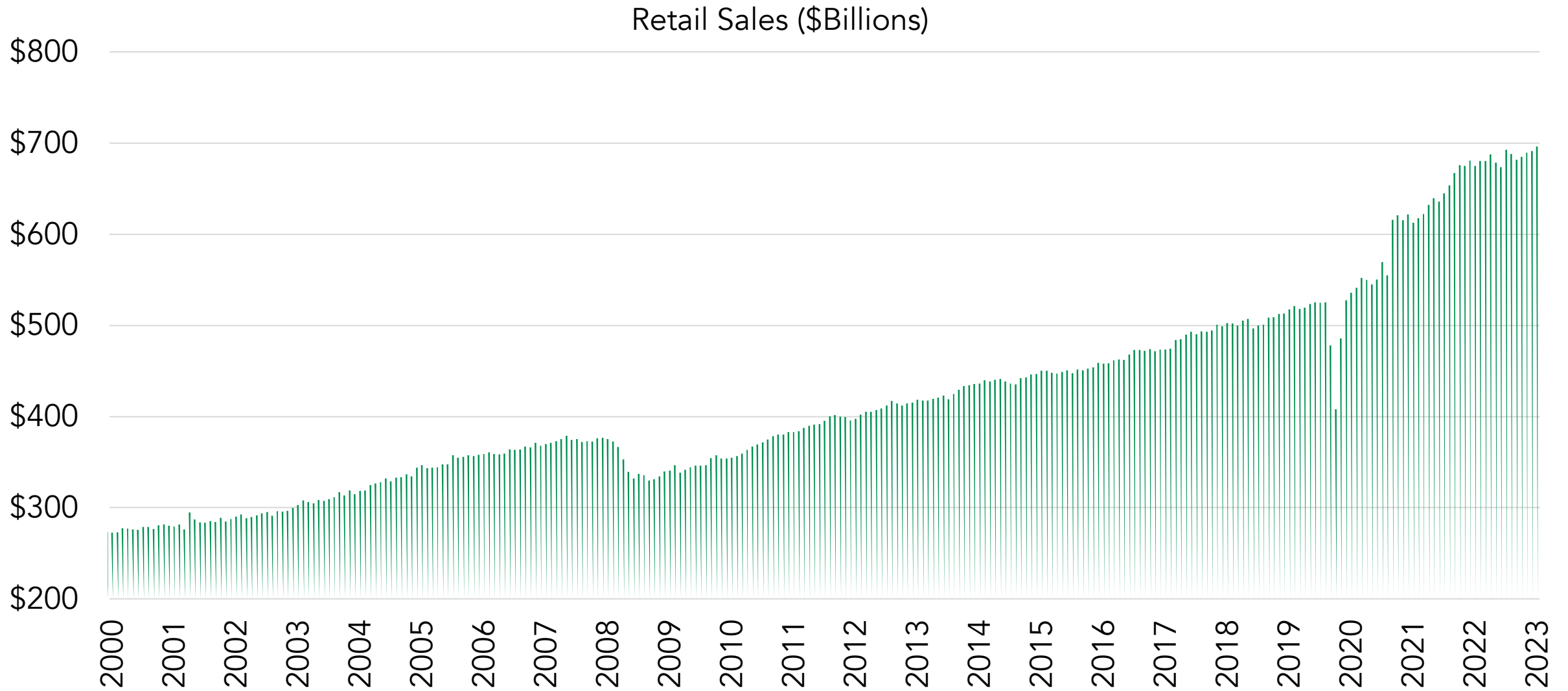
- “A large body of research tells us it can take 18 months to two years or more for tighter monetary policy to materially affect inflation.” - Raphael Bostic, President and Chief Executive Officer, Federal Reserve Bank of Atlanta
- Some reasons for the lag: how fixed people's expectations are; the gradual response of investment (both business investment and consumer investment in durables/dwellings); long-term contracts (rent); gradual transmission from sectors of the economy immediately affected (ex. lending) to other sectors.
- In the meantime, higher rates reduce investment, slow hiring and wage growth, and eventually increase unemployment.

Born on the 4th of July

U.S. Gross Domestic Product Growth, 2020 – 2023Q2



U.S. Retail Sales, 2000 – July 2023

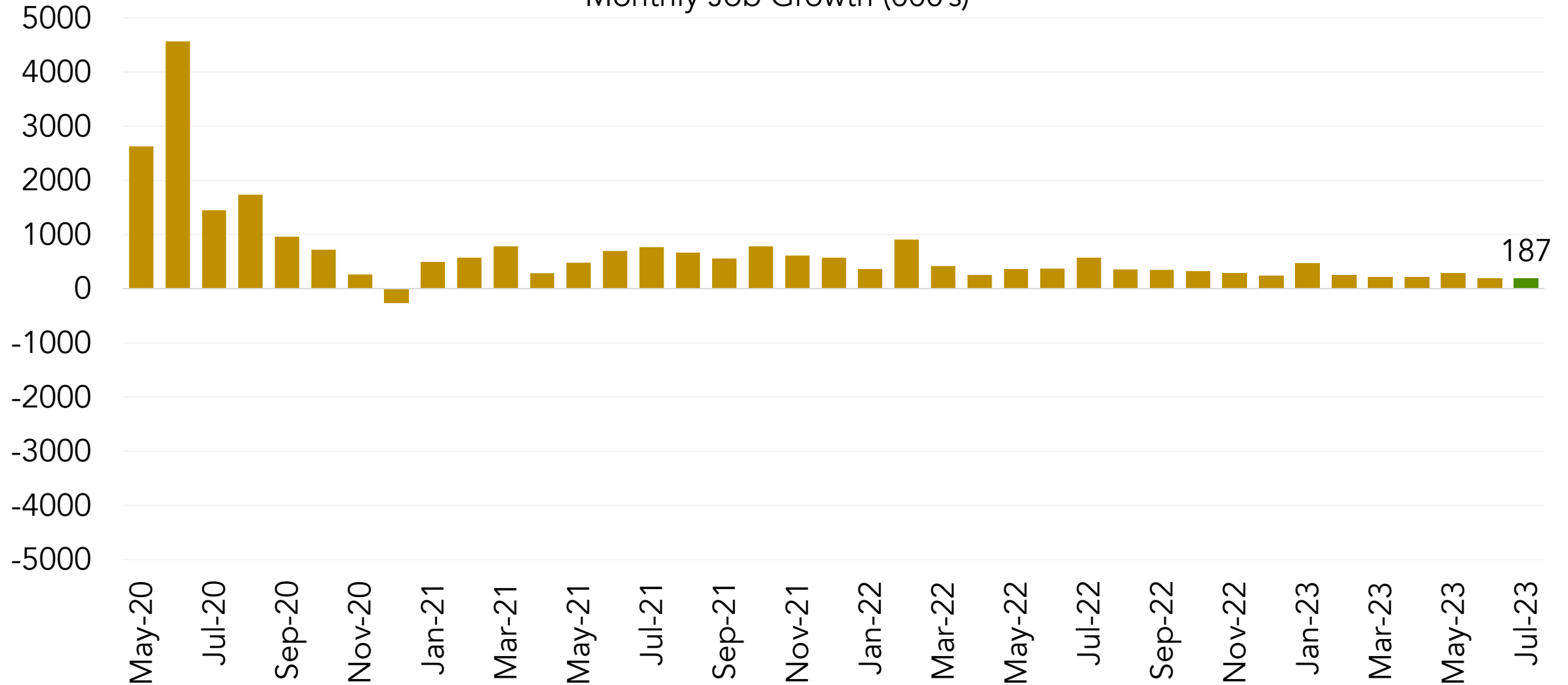


Source: U.S. Census Bureau

Net Change in U.S. Jobs

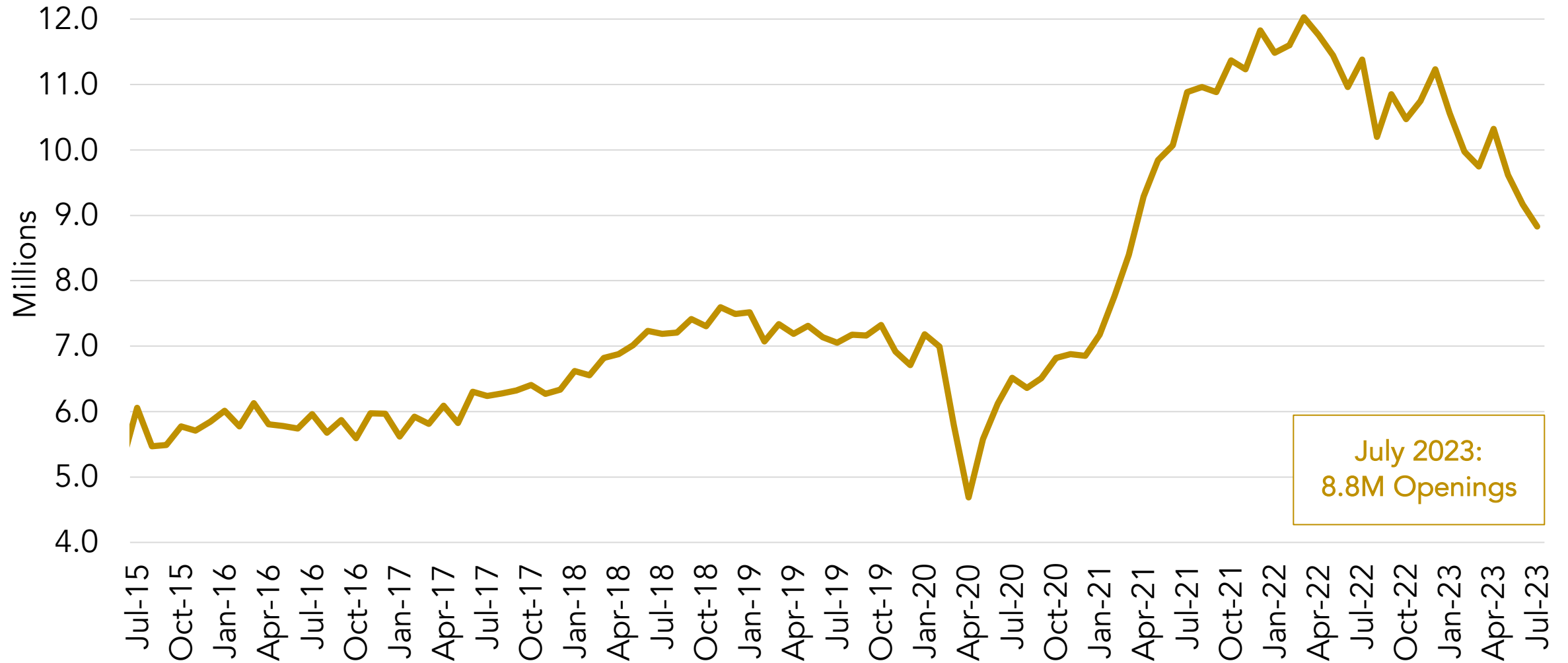
May 2020 – July 2023

Monthly Job Growth (000's)



Source: U.S. Bureau of Labor Statistics

U.S. Job Openings, 2015 – July 2023



July 2023:
8.8M Openings

Change in LF Participation Rate by Age, Gender 1980 v. 2023



Change in LF Participation Rate, 1980 v. 2023 (percentage points)

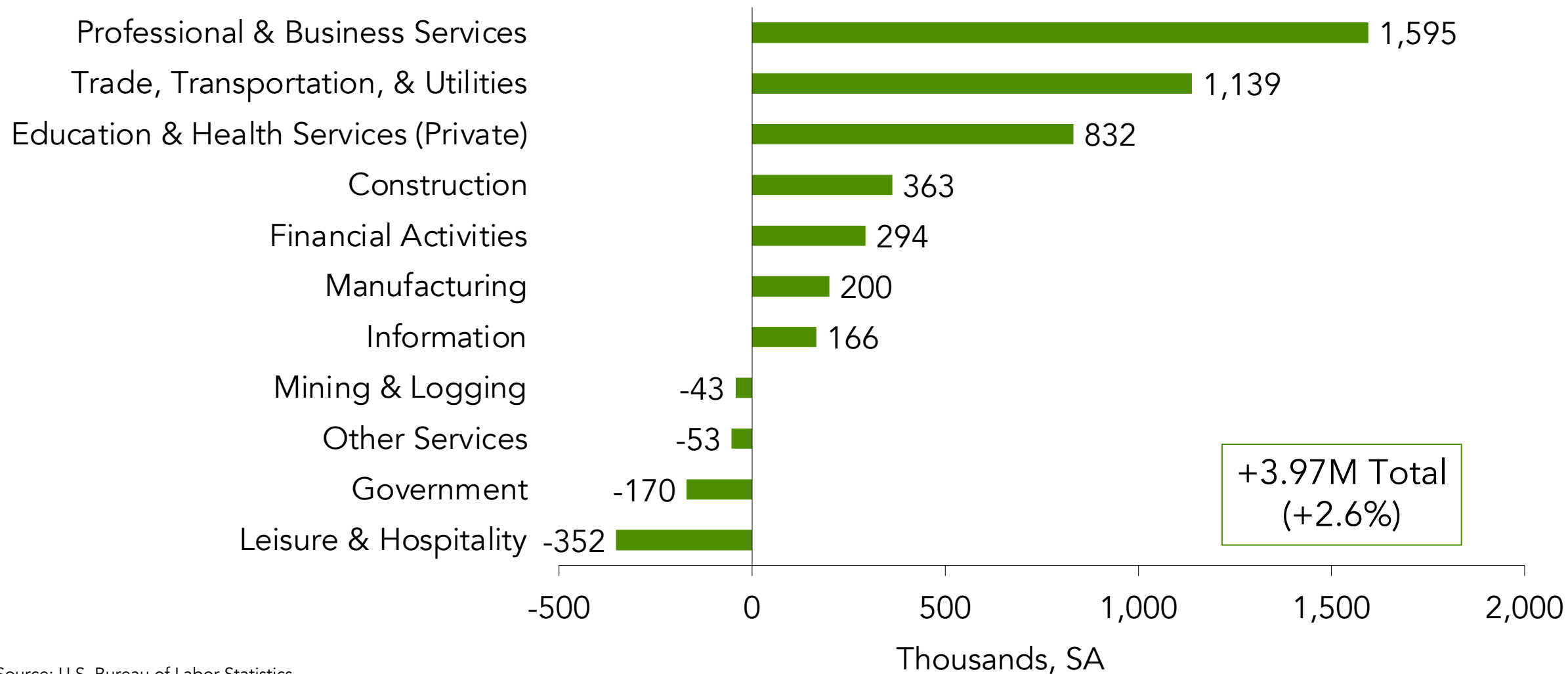
| Age Group | Total | Men | Women |
|------------------|-------------|-------------|-------------|
| 16+ years | -1.2 | -9.4 | +5.8 |
| 16-19 years | -19.8 | -24.1 | -15.6 |
| 20-24 years | -5.9 | -13.2 | +0.9 |
| 25-34 years | +3.7 | -5.9 | +12.6 |
| 35-44 years | +3.8 | -5.3 | +11.9 |
| 45-54 years | +7.1 | -3.8 | +16.8 |
| 55-64 years | +9.8 | -0.7 | +18.5 |

If the labor force participation rate were what it was in 1980, there would be 12.2 million more men and 7.8 million fewer women in the labor force (ages 16+).

U.S. Jobs Recovered Since February 2020



Nonfarm Employment by Industry Sector, February 2020 v. July 2023



Employment Growth, 25 Largest Metros

February 2020 v. July 2023 Percent Change

| Rank | MSA | % | Rank | MSA | % |
|------|--|-------|------|--|------|
| 1 | Dallas-Fort Worth-Arlington, TX | 11.5% | 14 | Miami-Fort Lauderdale-West Palm Beach, FL | 3.4% |
| 2 | Charlotte-Concord-Gastonia, NC-SC | 8.1% | 15 | Portland-Vancouver-Hillsboro, OR-WA | 2.7% |
| 3 | Tampa-St. Petersburg-Clearwater, FL | 8.0% | 16 | Chicago-Naperville-Elgin, IL-IN-WI | 2.6% |
| 4 | San Antonio-New Braunfels, TX | 6.9% | 17 | Boston-Cambridge-Nashua, MA-NH | 2.4% |
| 5 | Orlando-Kissimmee-Sanford, FL | 6.1% | 18 | St. Louis, MO-IL | 2.3% |
| 6 | Atlanta-Sandy Springs-Roswell, GA | 5.8% | 19 | New York-Newark-Jersey City, NY-NJ-PA | 1.7% |
| 7 | Houston-The Woodlands-Sugar Land, TX | 4.9% | 20 | Minneapolis-St. Paul-Bloomington, MN-WI | 1.3% |
| 8 | Riverside-San Bernardino-Ontario, CA | 4.7% | 21 | San Francisco-Oakland-Hayward, CA | 1.1% |
| 9 | Denver-Aurora-Lakewood, CO | 4.4% | 22 | Washington-Arlington-Alexandria, DC-VA-MD-WV | 0.9% |
| 10 | Phoenix-Mesa-Scottsdale, AZ | 4.3% | 23 | Detroit-Warren-Dearborn, MI | 0.4% |
| 11 | Philadelphia-Camden-Wilm., PA-NJ-DE-MD | 4.2% | 24 | Baltimore-Columbia-Towson, MD | 0.3% |
| 12 | Seattle-Tacoma-Bellevue, WA | 3.7% | 25 | Los Angeles-Long Beach-Anaheim, CA | 0.2% |
| 13 | San Diego-Carlsbad, CA | 3.5% | | | |

Source: Bureau of Labor Statistics

Current Employment Statistics (CES) Survey. Note: data are not seasonally adjusted.

U.S. % Change 2/2020 v. 7/2023: +2.6%

Unemployment Rates, 25 Largest Metros

July 2023

| Rank | MSA | % | Rank | MSA | % |
|------|--|-----|------|--|-----|
| 1 | Baltimore-Columbia-Towson, MD | 1.7 | 11 | St. Louis, MO-IL | 3.6 |
| 2 | Washington-Arlington-Alexandria, DC-VA-MD-WV | 2.4 | 14 | San Francisco-Oakland-Hayward, CA | 3.7 |
| 3 | Miami-Fort Lauderdale-West Palm Beach, FL | 2.6 | 15 | Detroit-Warren-Dearborn, MI | 3.9 |
| 4 | Boston-Cambridge-Nashua, MA-NH | 2.7 | 15 | San Diego-Carlsbad, CA | 3.9 |
| 5 | Minneapolis-St. Paul-Bloomington, MN-WI | 3.1 | 17 | Philadelphia-Camden-Wilm., PA-NJ-DE-MD | 4.0 |
| 5 | Orlando-Kissimmee-Sanford, FL | 3.1 | 18 | Dallas-Fort Worth-Arlington, TX | 4.1 |
| 5 | Tampa-St. Petersburg-Clearwater, FL | 3.1 | 19 | Chicago-Naperville-Elgin, IL-IN-WI | 4.2 |
| 8 | Atlanta-Sandy Springs-Roswell, GA | 3.2 | 19 | Phoenix-Mesa-Scottsdale, AZ | 4.2 |
| 9 | Charlotte-Concord-Gastonia, NC-SC | 3.4 | 19 | San Antonio-New Braunfels, TX | 4.2 |
| 9 | Denver-Aurora-Lakewood, CO | 3.4 | 22 | New York-Newark-Jersey City, NY-NJ-PA | 4.6 |
| 11 | Portland-Vancouver-Hillsboro, OR-WA | 3.6 | 23 | Houston-The Woodlands-Sugar Land, TX | 4.8 |
| 11 | Seattle-Tacoma-Bellevue, WA | 3.6 | 24 | Riverside-San Bernardino-Ontario, CA | 4.9 |
| | | | 25 | Los Angeles-Long Beach-Anaheim, CA | 5.0 |

Source: Bureau of Labor Statistics

Local Area Unemployment Statistics (LAUS) program.

Note: data are not seasonally adjusted

You Had Me at Recession

(Jerry Maguire, 1996)

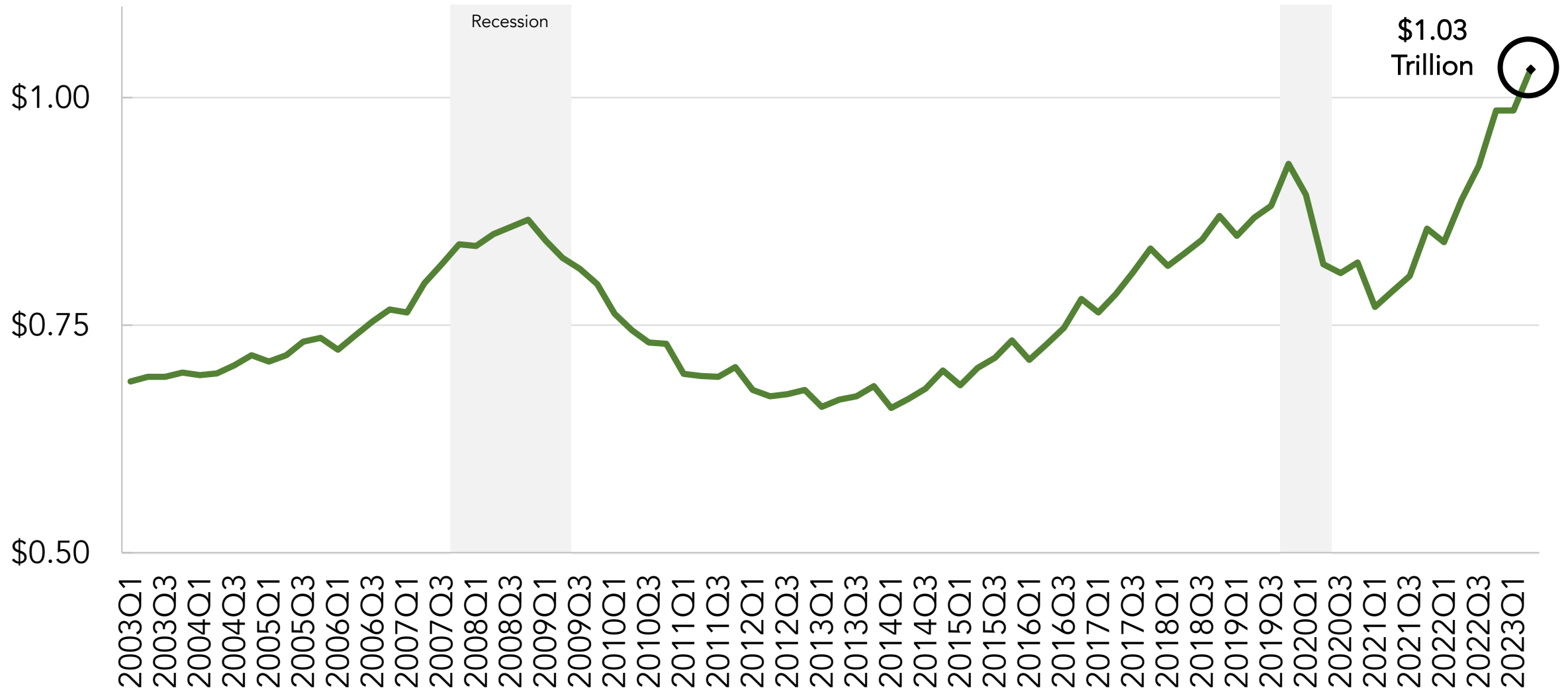


Defining Recession: Eyes Wide Shut

- The National Bureau of Economic Research (NBER)'s Business Cycle Dating Committee is the official recession scorekeeper – it maintains a chronology of U.S. business cycles.
- NBER's traditional definition of recession is "a significant decline in economic activity that is spread across the economy and that lasts more than a few months."
- There is no fixed rule about which indicators contribute information to NBER's process or how they are weighted in the determination of recession.
- Because the government statistics NBER relies on are published at various lags, the NBER Committee cannot officially designate a recession until after it starts (and often not until it's over).

U.S. Credit Card Debt, 2003 – 2023

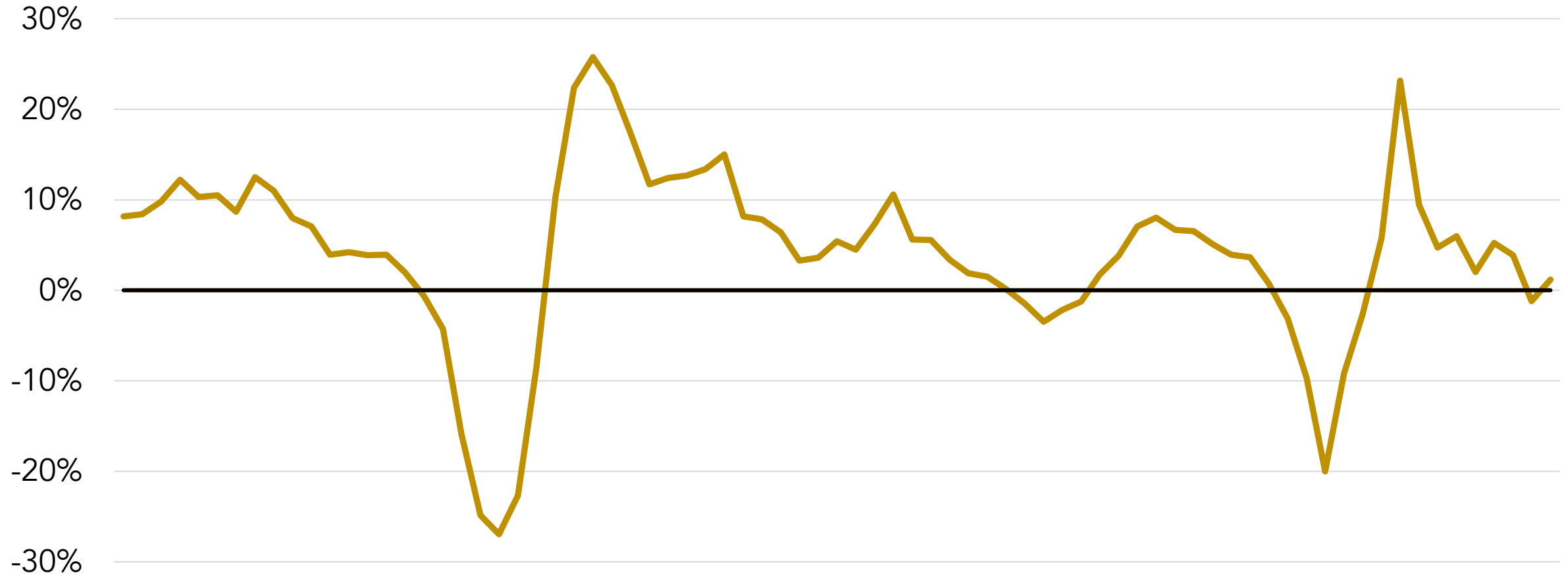
\$ Trillions



Source: FRED; New York Fed Consumer Credit Panel/Equifax

U.S. GDP: Nonresidential Fixed Investment in Equipment, 2004 – 2023Q2

YOY % Change
[\$ Billions, Chained 2012 \$, SAAR]

















The Firm

- According to a November 2022 PwC survey of U.S. executives, 26% of firms are planning to reduce the number of full-time employees over the next 12-18 months.
 - In August 2022, 50% of firms said they already had, or had a plan in place to, reduce overall headcount.
- Four out of five executives surveyed by PwC in November 2022 said a recession is coming within the next six months.

Noteworthy Layoffs in 2022-2023

Ranked by Number Laid Off

| Company | Estimated Layoffs | Workforce Before Layoffs | Percent Laid Off |
|---------------|---|--------------------------|------------------|
| Amazon |  27,000 | 1,544,000 | 1.7% |
| Meta |  21,000 | 87,314 | 24.1% |
| Accenture |  19,000 | 760,000 | 2.5% |
| Alphabet |  12,000 | 187,000 | 6.4% |
| Microsoft |  10,000 | 221,000 | 4.5% |
| 3M |  8,500 | 90,000 | 9.4% |
| Salesforce |  8,000 | 79,000 | 10.1% |
| Disney |  7,000 | 222,000 | 3.2% |
| Dell |  6,650 | 133,000 | 5.0% |
| Twitter |  3,700 | 7,500 | 49.3% |
| Goldman Sachs |  3,200 | 49,000 | 6.5% |
| Indeed |  2,200 | 14,600 | 15.1% |
| PayPal |  2,000 | 29,000 | 6.9% |
| Dow |  2,000 | 38,000 | 5.3% |
| Boeing |  2,000 | 156,000 | 1.3% |

Source: Company announcements & government filings; news reports



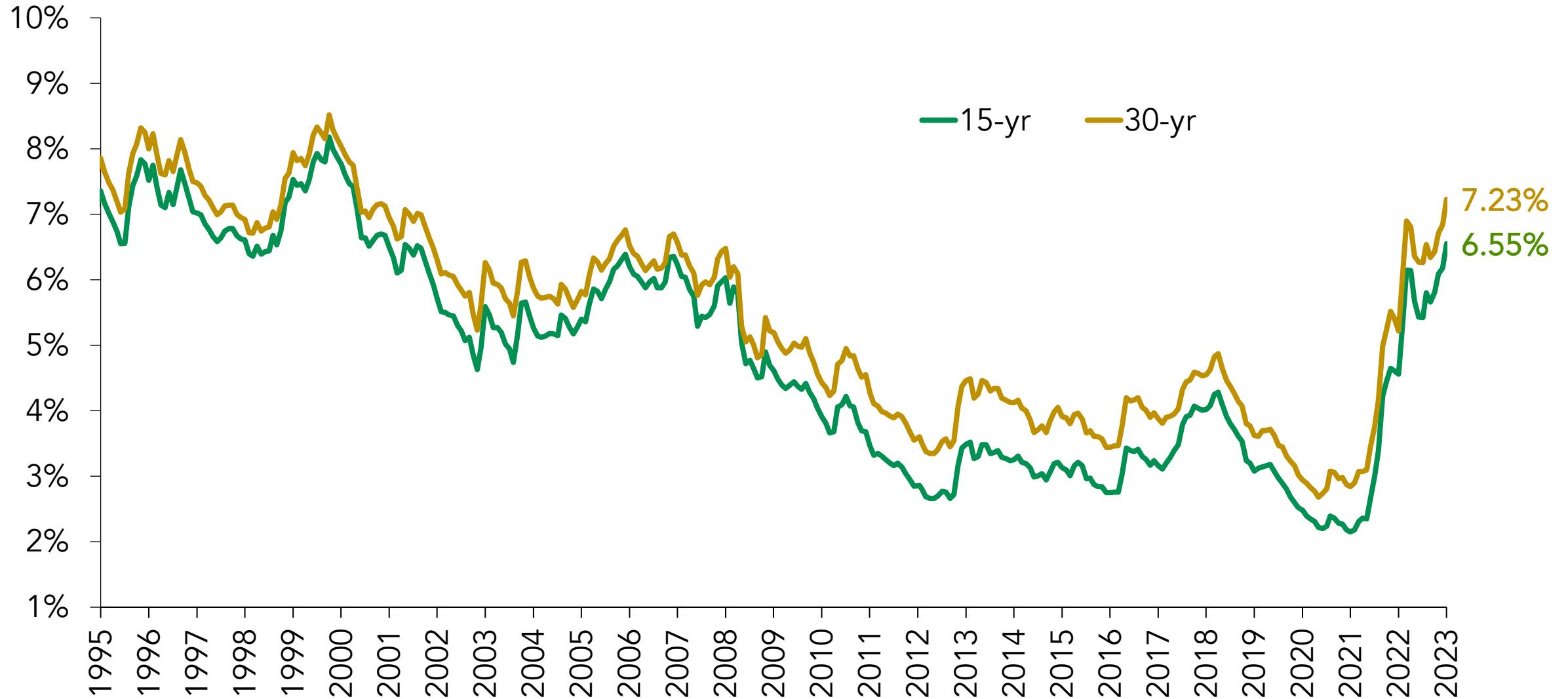
A Few Good Properties

(A Few Good Men, 1992)



U.S. 15-Year & 30-Year Fixed Mortgage Rates

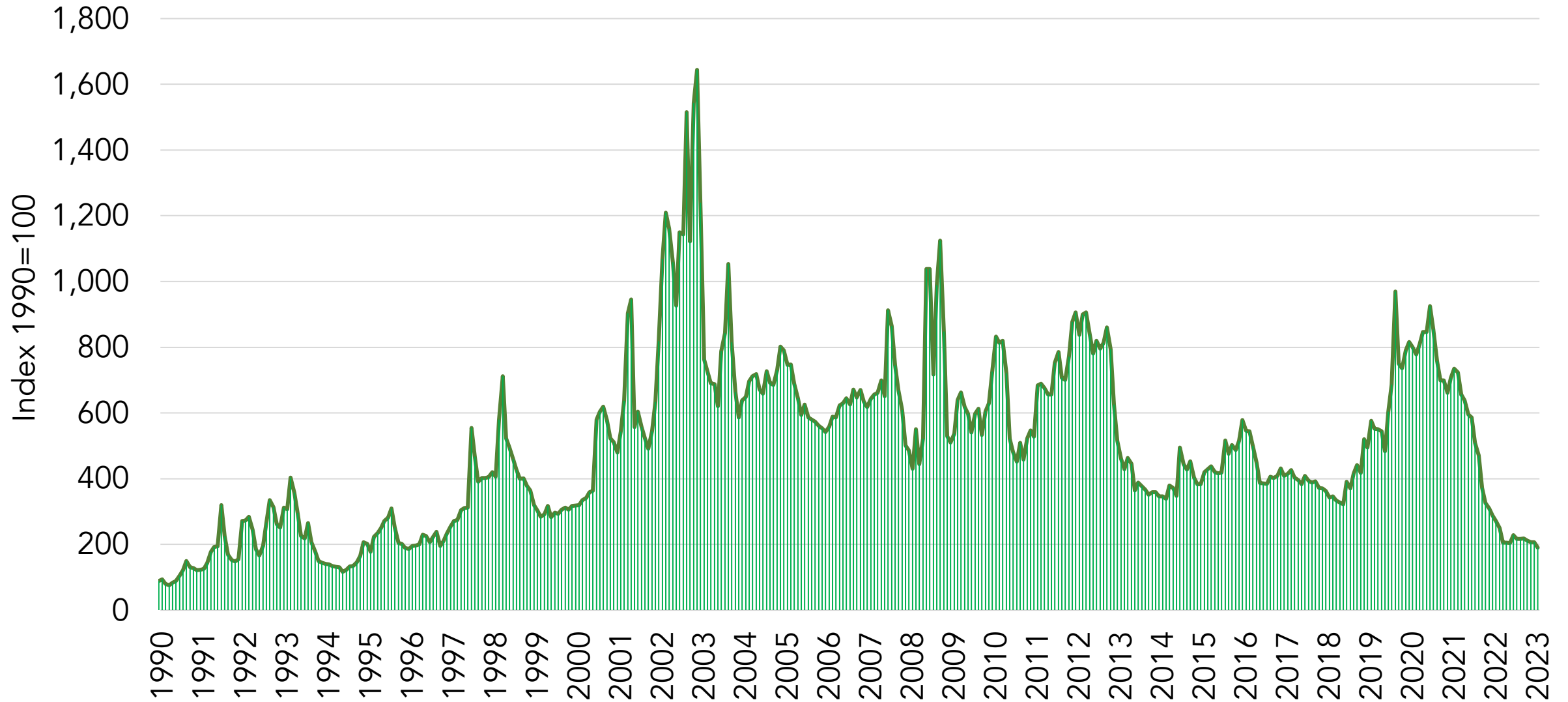
1995 – August 2023*



Source: Freddie Mac *Week ending 8/24/2023

U.S. Mortgage Loan Applications Composite Index

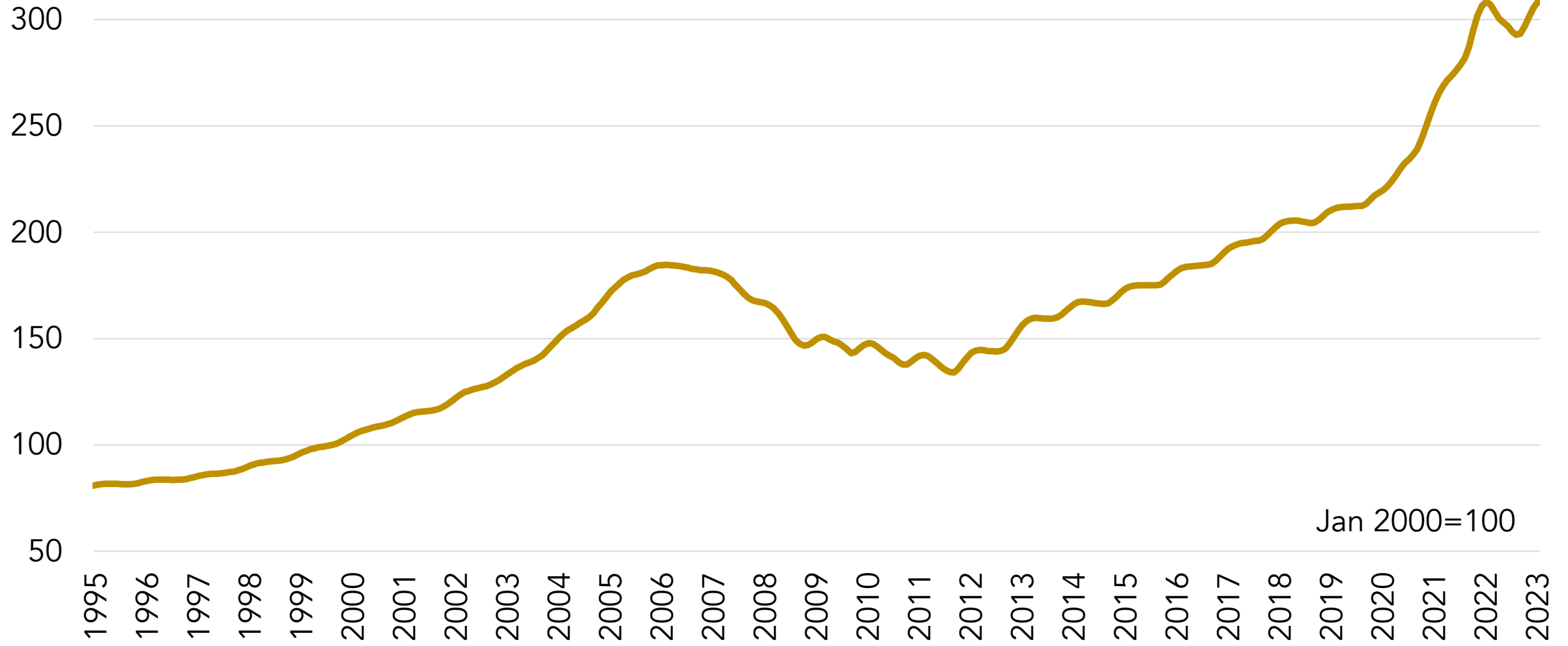
1990 – August 2023



Source: Mortgage Bankers Association (MBA)

S&P Case-Shiller U.S. National Home Price Index

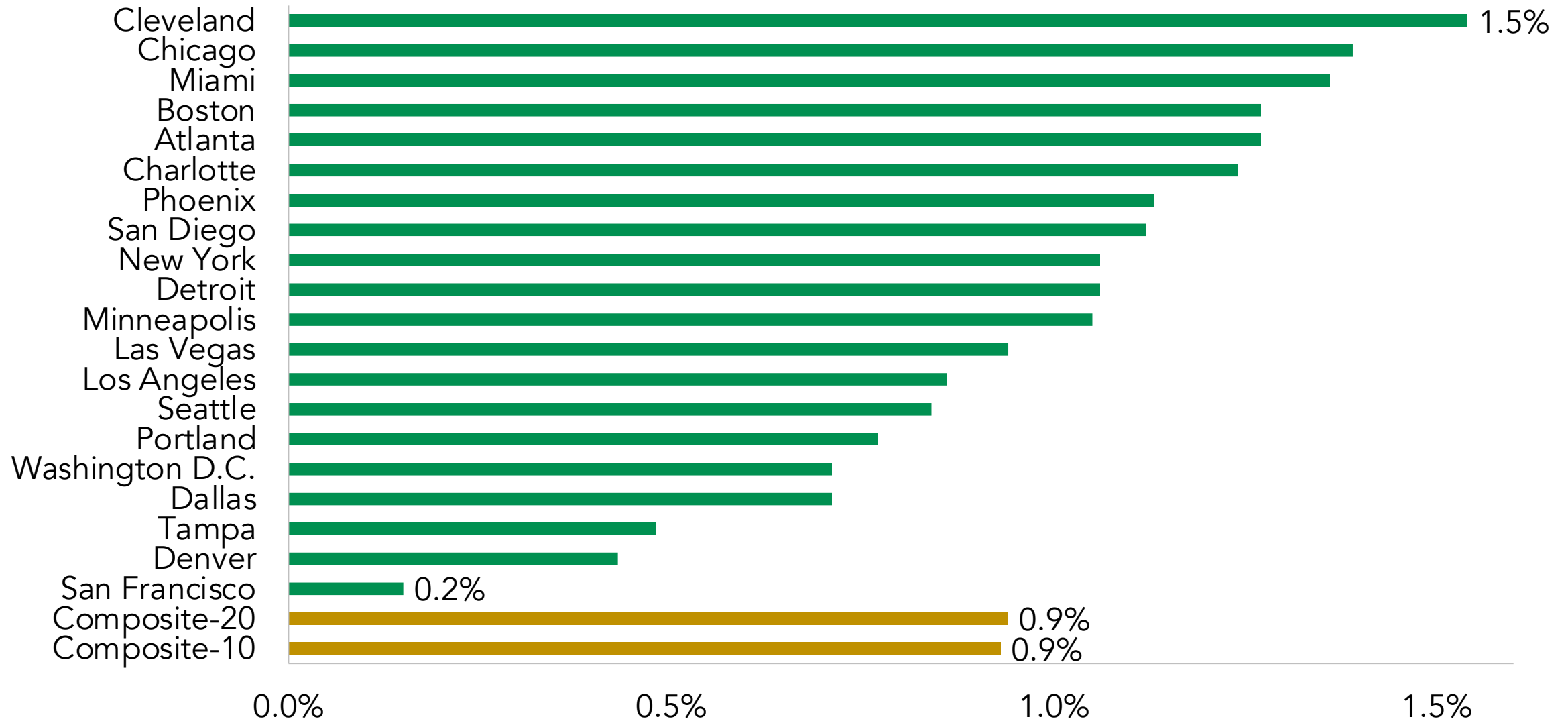
1995 – June 2023



Source: Standard & Poor's

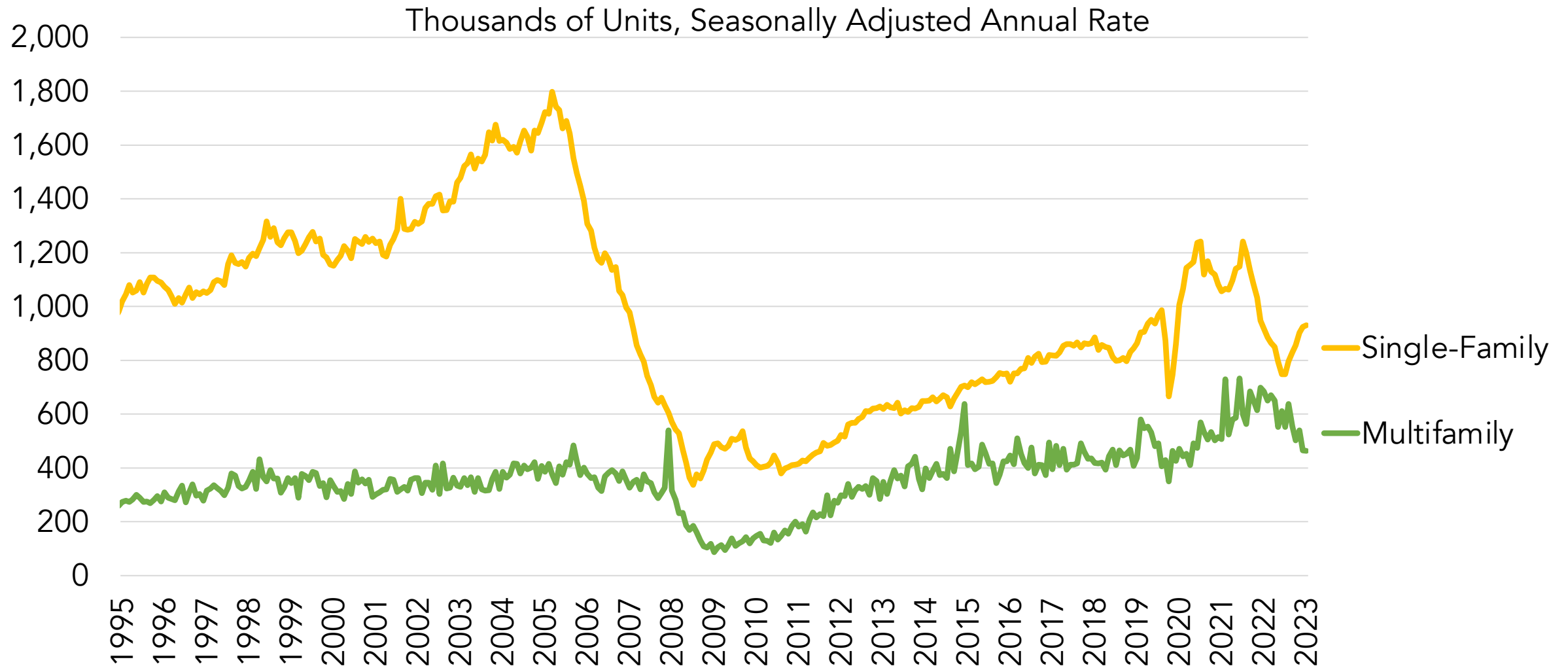
S&P Case-Shiller Home Price Index by Metro Area

1-Month % Change, June 2023



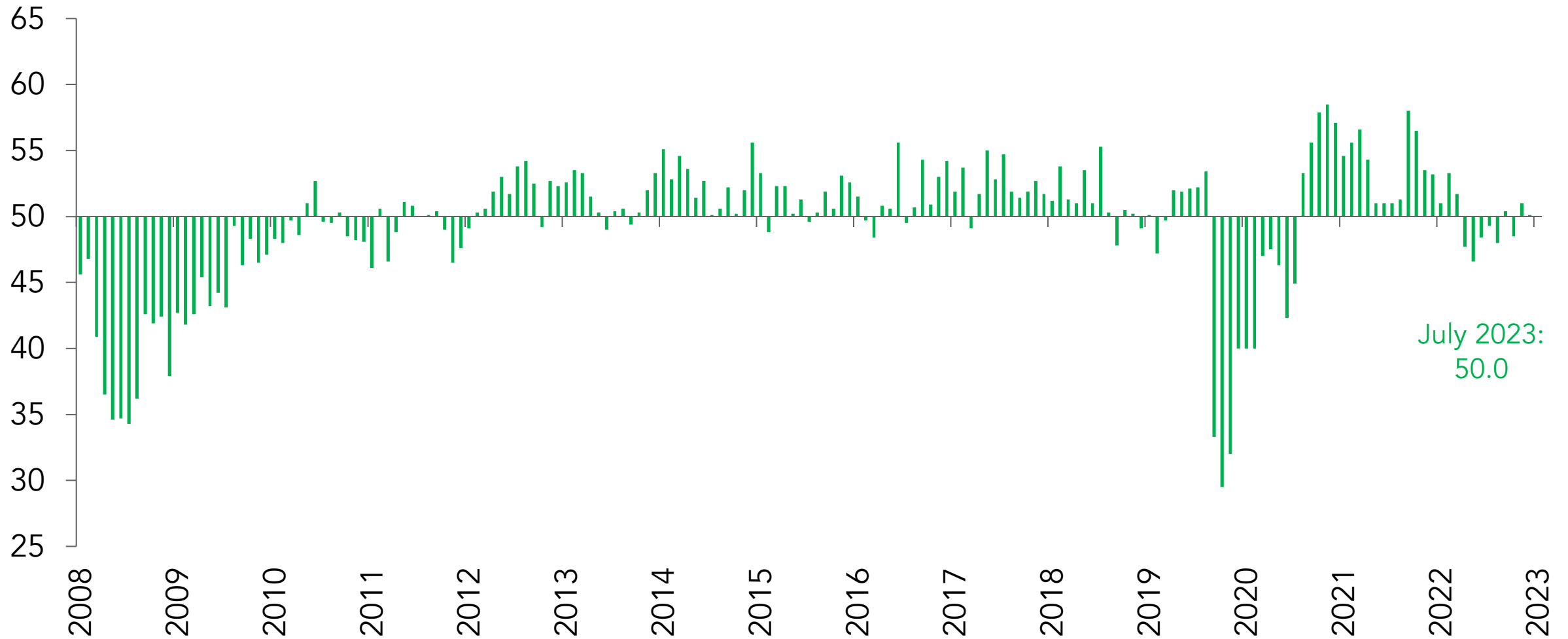
U.S. Residential Building Permits

1995 – July 2023



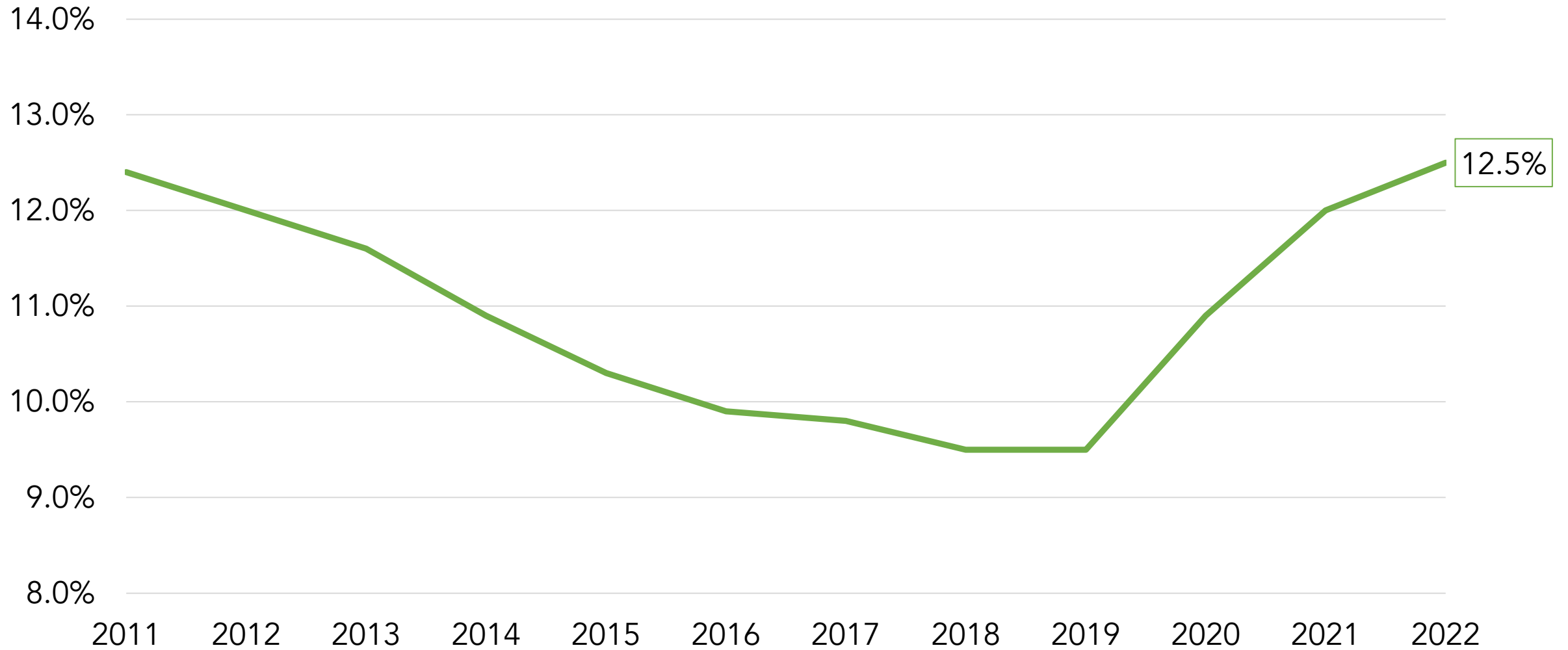
Architecture Billings Index

2008 – July 2023



Source: The American Institute of Architects

U.S. Office Vacancy, 2011 – 2022



Source: Costar

Total Nonresidential Construction Spending

Current/Constant Dollars, 2006 – June 2023

\$ Billions, Seasonally Adjusted Annual Rate

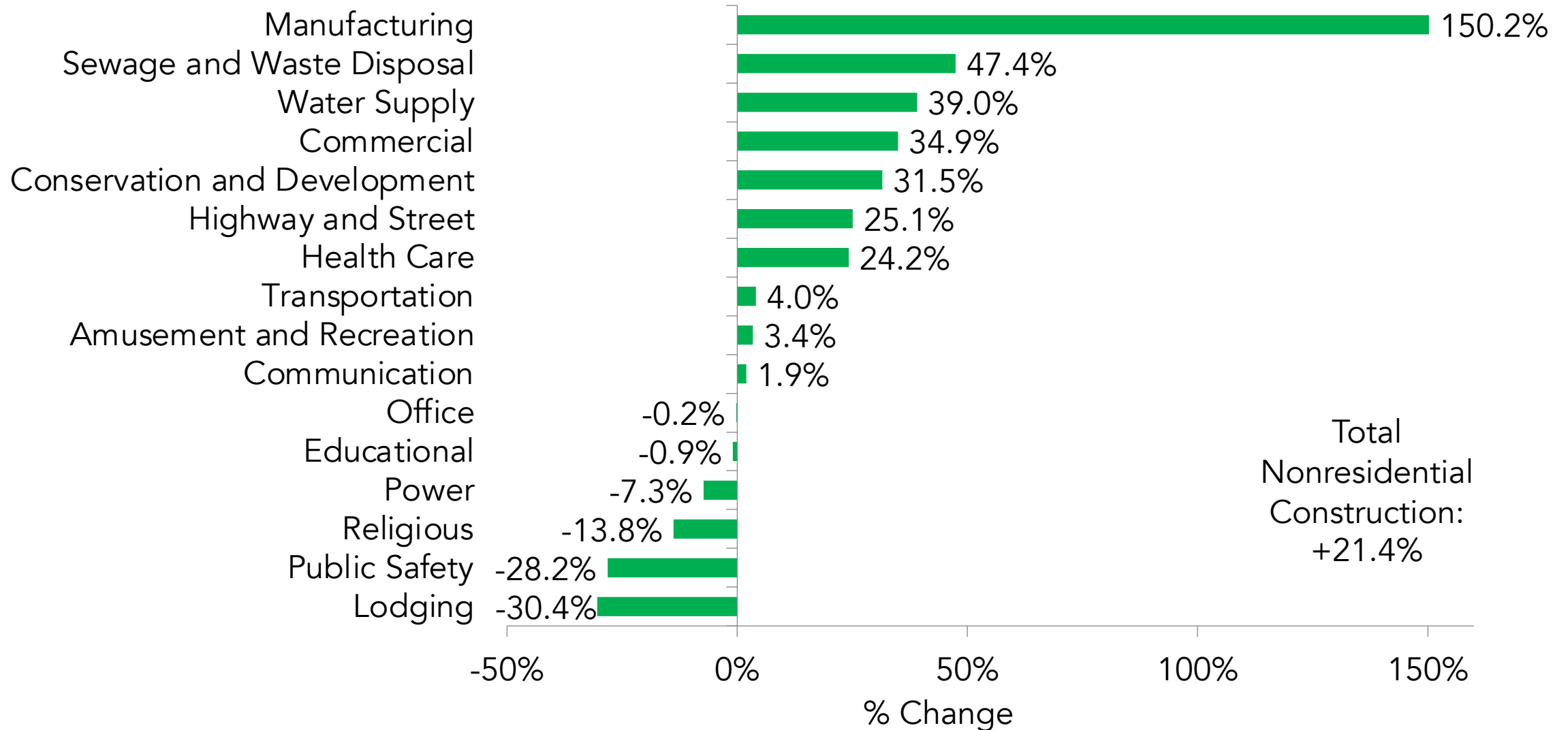


Source: U.S. Census Bureau; U.S. Bureau of Labor Statistics

*Adjusted with U.S. Bureau of Labor Statistics Consumer Price Index, All Urban Consumers, U.S. City Average

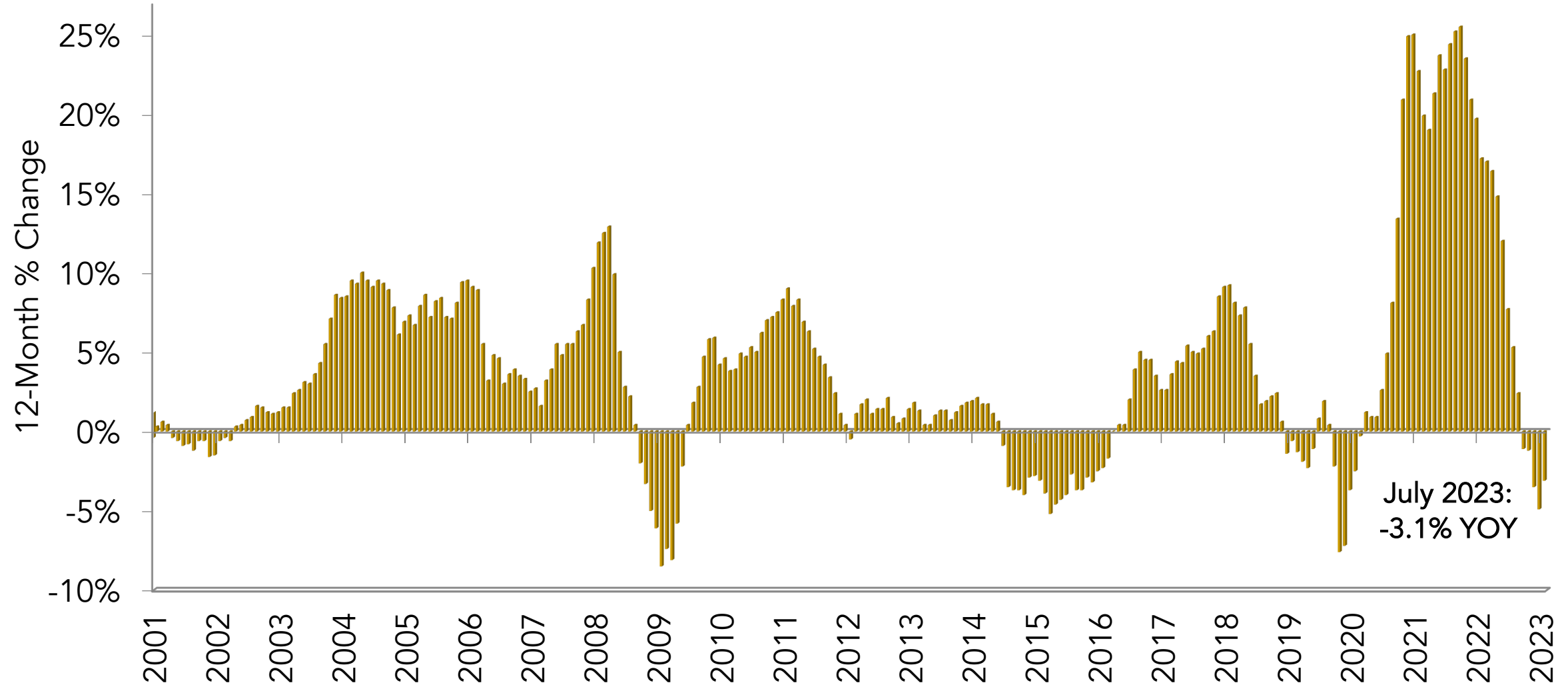
Nonresidential Construction Spending by Subsector

February 2020 v. June 2023 (Current \$)



Inputs to Construction PPI

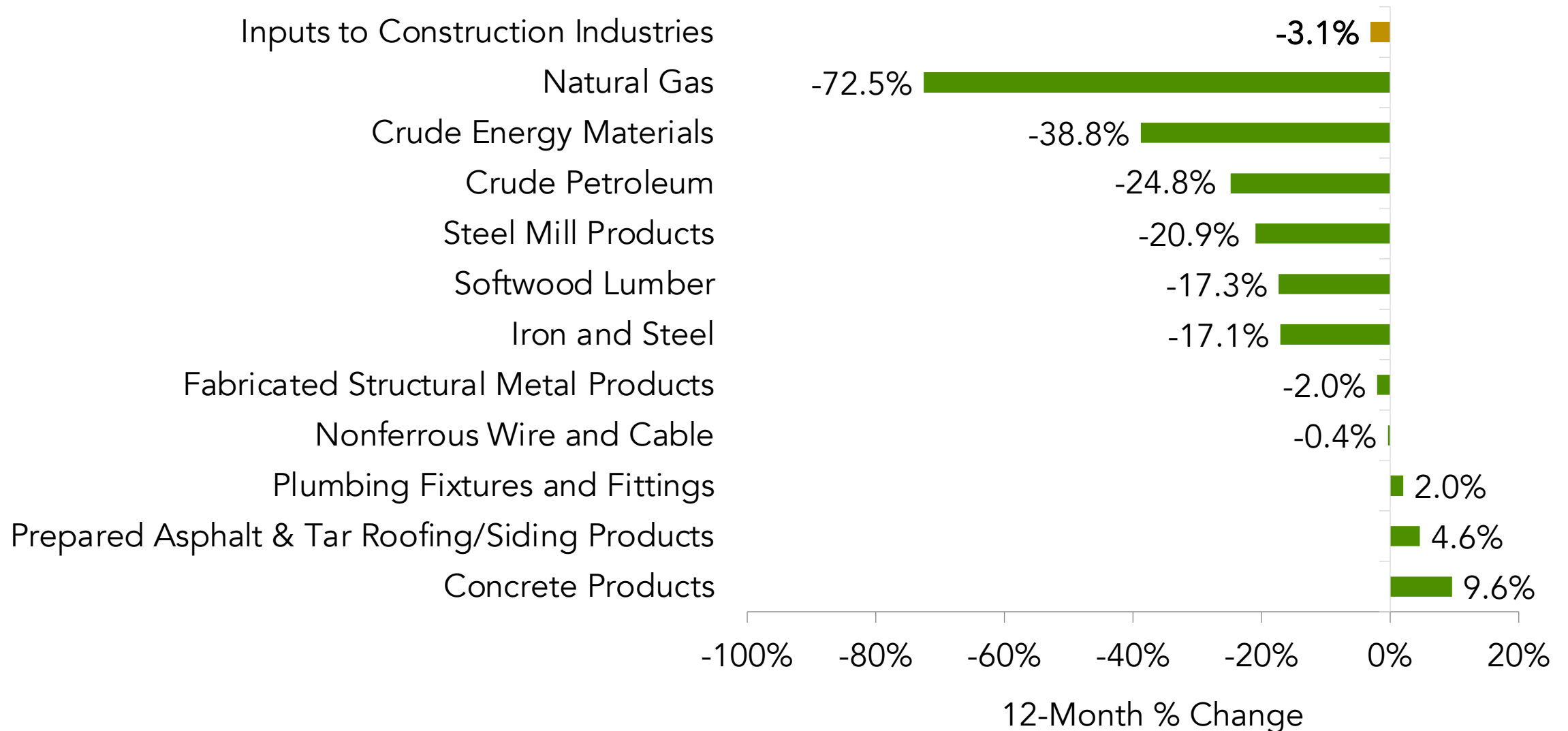
12-Month % Change, 2001 – July 2023



Source: U.S. Bureau of Labor Statistics. Note: Data are not seasonally adjusted

Construction Materials PPI

12-Month % Change as of July 2023



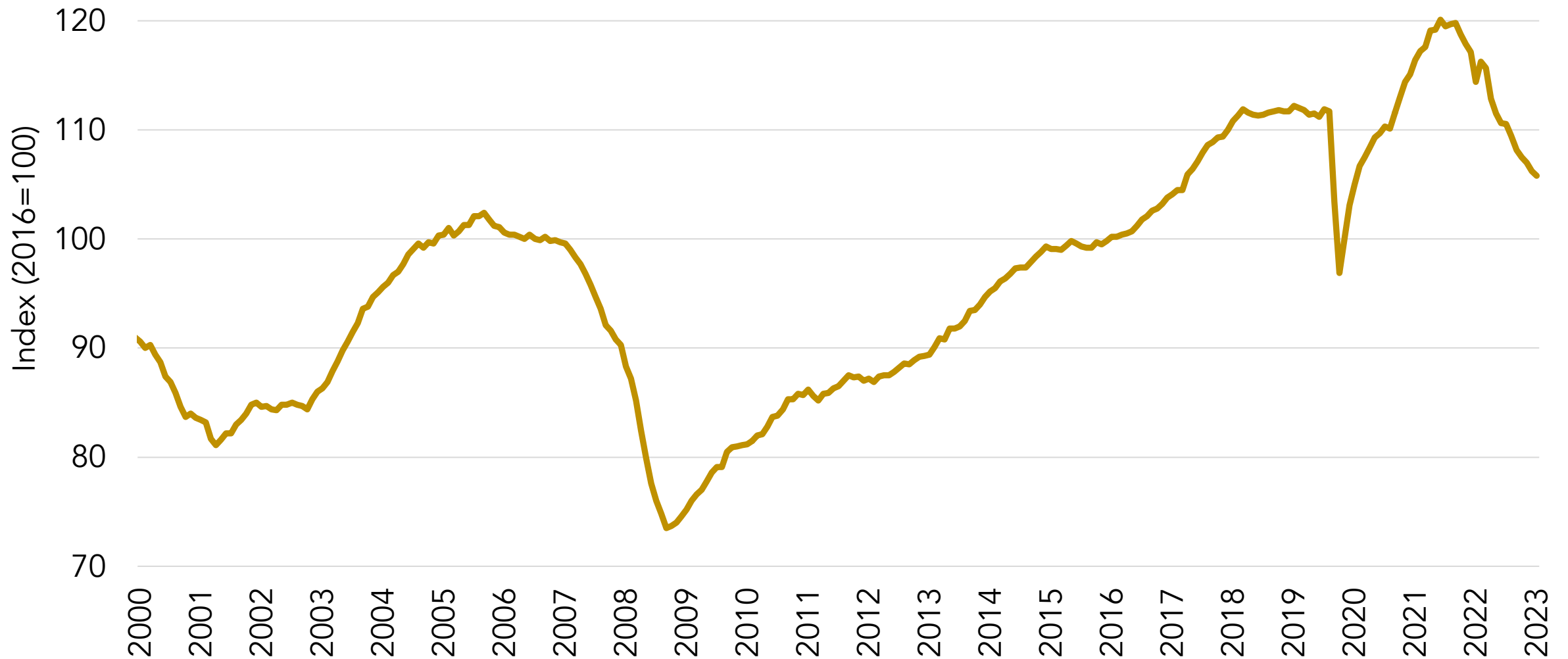
Source: U.S. Bureau of Labor Statistics. Note: Data are not seasonally adjusted

Edge of Tomorrow



Conference Board: U.S. Leading Economic Index

2000 – July 2023

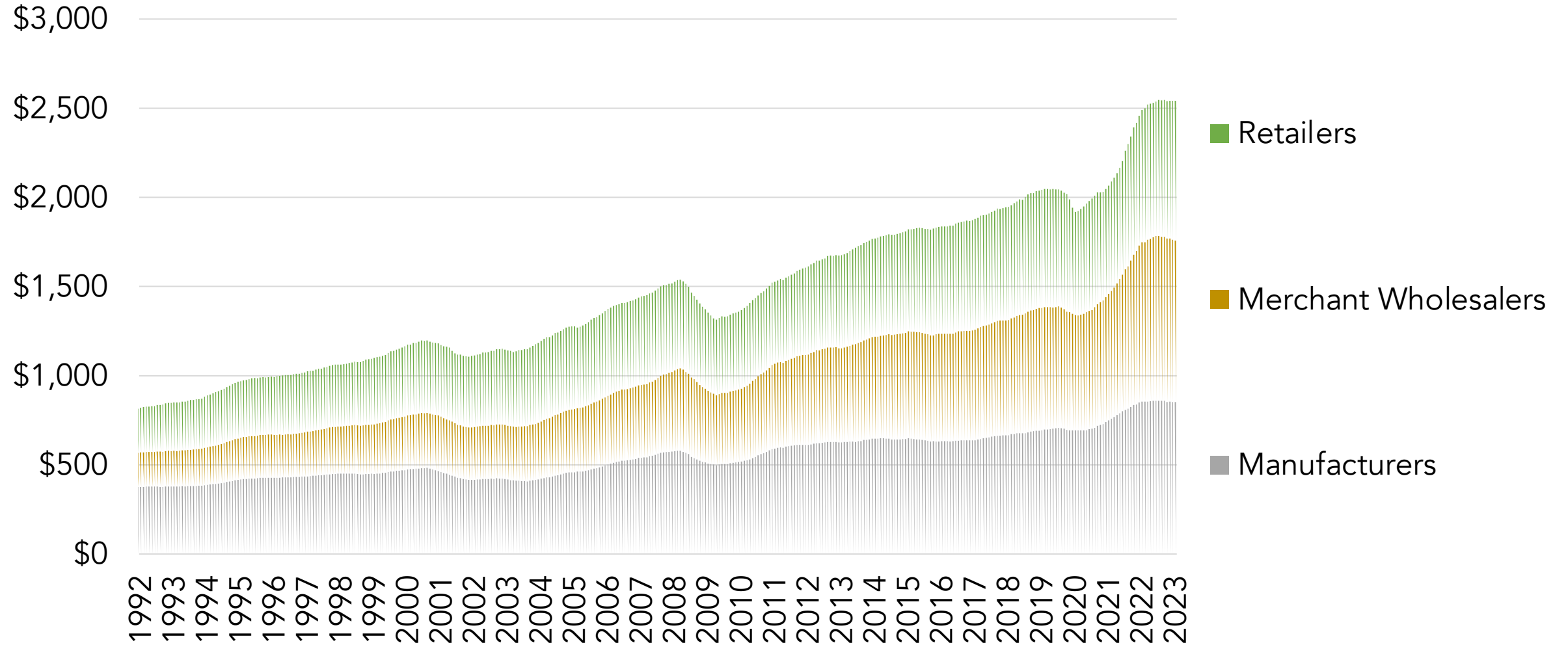


Source: The Conference Board

Business Inventories

1965 – June 2023

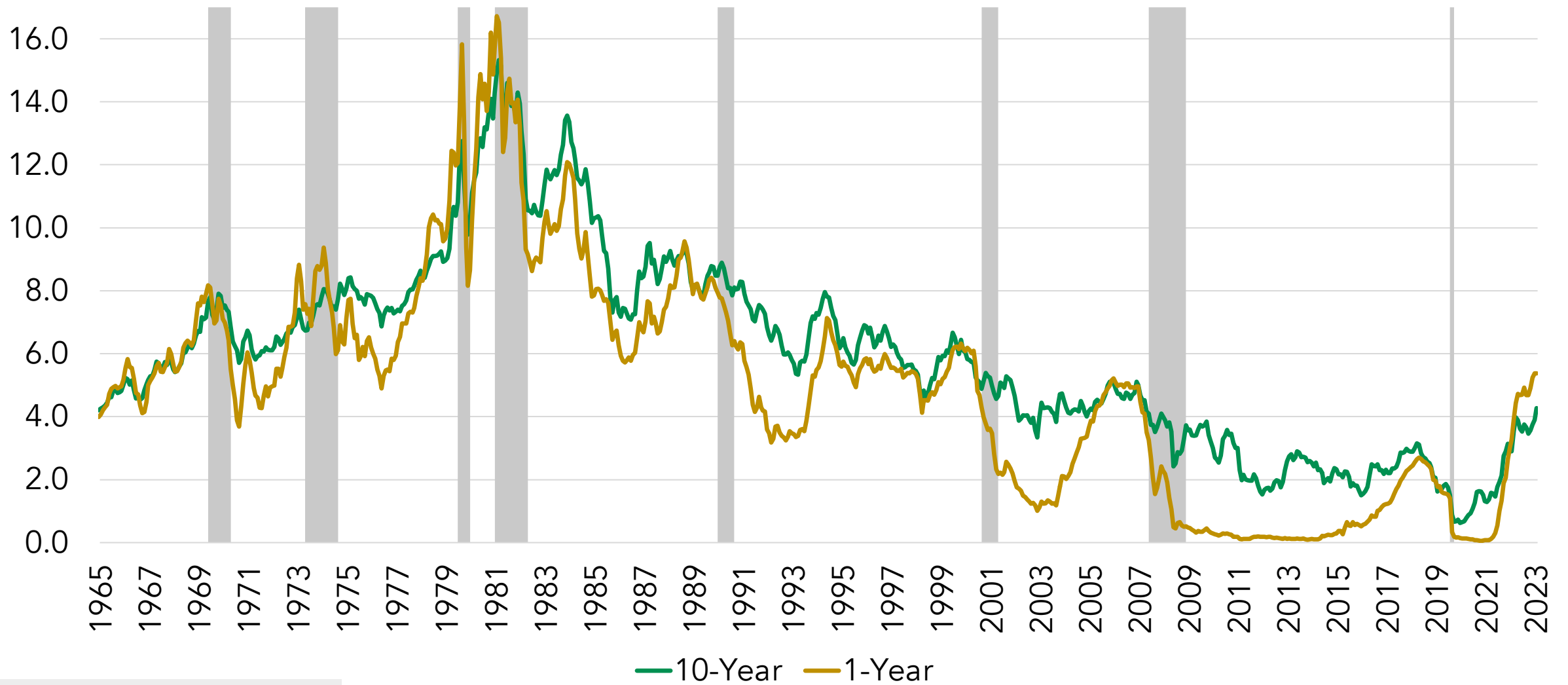
\$ Billions



Source: U.S. Census Bureau

U.S. Treasury Yields : 10-Year v. 1-Year

1965 – August 2023



Shaded areas indicate U.S. recessions

Source: Federal Reserve Bank of St. Louis

You Can't Handle the Truth!

- It's going to get worse before it gets better.
- The global economy is weakening, the national economy is weakening, borrowing costs are higher, and excess inflation persists.
- Some segments stand to hold up better than others, including public construction, grocery stores, and multifamily housing.
- At some point, the Federal Reserve will stop raising rates – that will represent a key inflection point for the economy.
- Recessionary conditions will prevail at some point over the next 12 months.

Thank You

Please contact us when you require economic research & policy analysis: www.sagepolicy.com



Sign up for our newsletter at www.SageEcon.com

Free subscribers get:

- An overview of the jobs report on the first Friday of every month
- Occasional posts on specific economic & policy related subjects

Paid subscribers get:

- A "Week in Review" post every Friday covering all the economic data releases, the best things I read, and, of course, my absence of humor
- A monthly Q&A session
- Scan the QR code or visit www.SageEcon.com/ABLive30 for 30% a discount on an annual paid membership

Q&A

