

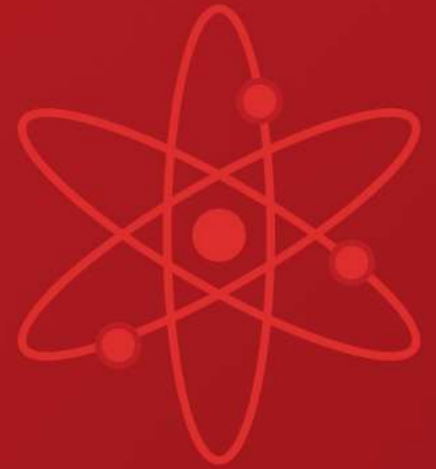
Show Me the Money (Supply)!

Presented by:



Anirban Basu

Chairman & Chief Executive Officer
Sage Policy Group, Inc.



Show Me the Money (Supply)



By: Anirban Basu

MPP, MA, JD, PHD

Sage Policy Group, Inc.

On Behalf of

Society of Independent Show
Organizers (SISO)

SISO CEO Summit

March 21, 2023



The Color of Money

U.S. Money Supply, 1959 – January 2023

\$ Trillions

\$25

\$20

\$15

\$10

\$5

\$0

1959 1961 1963 1965 1967 1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021 2023

Source: Federal Reserve

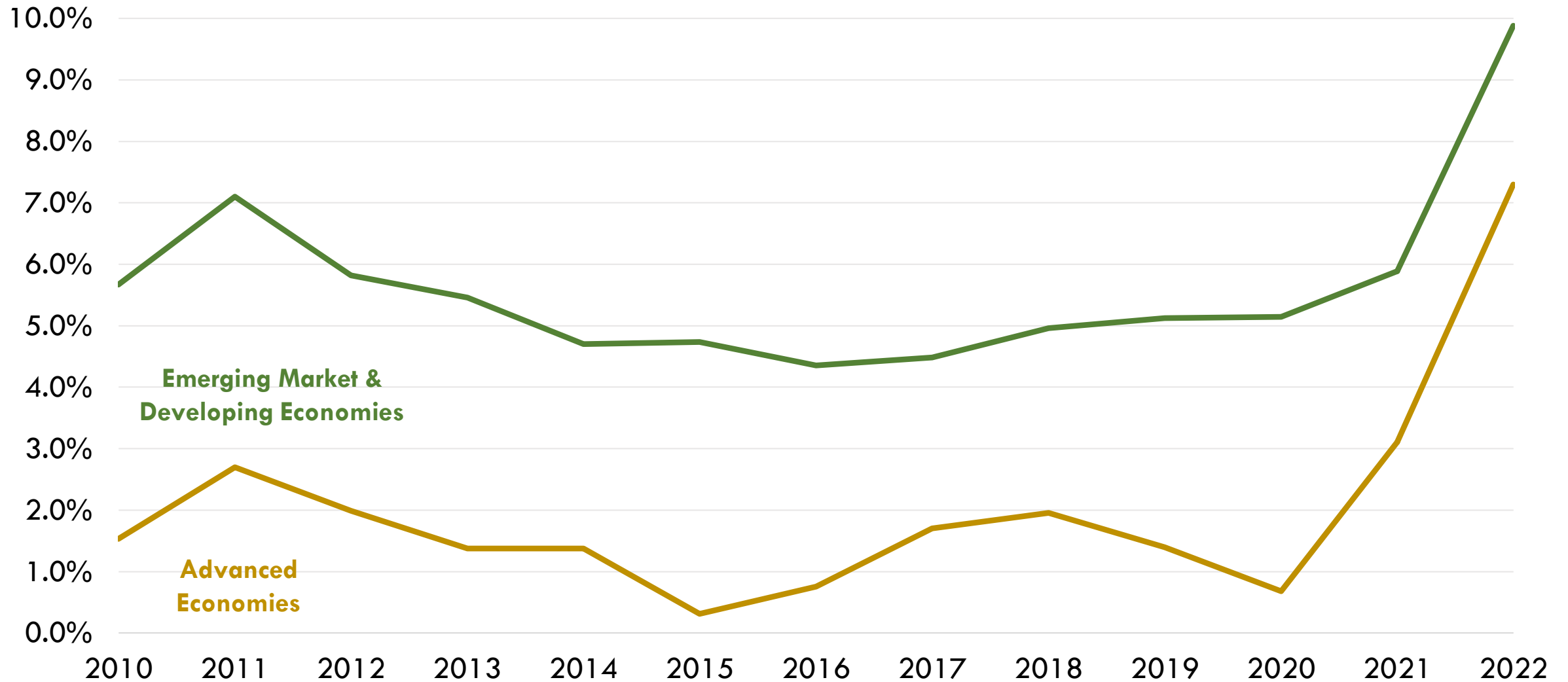


Risky Business

(1983)

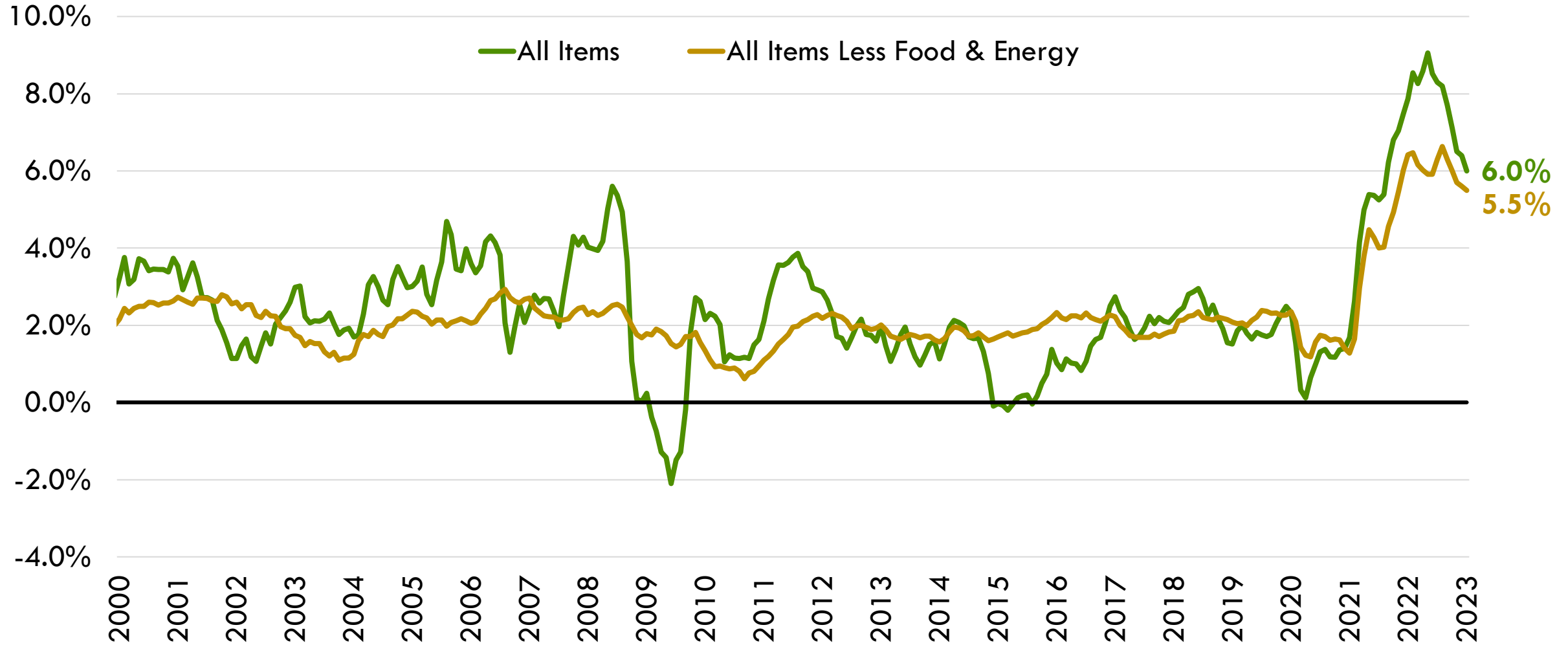
Global Inflation, 2010 – 2022

Annual % Change in Average Consumer Prices



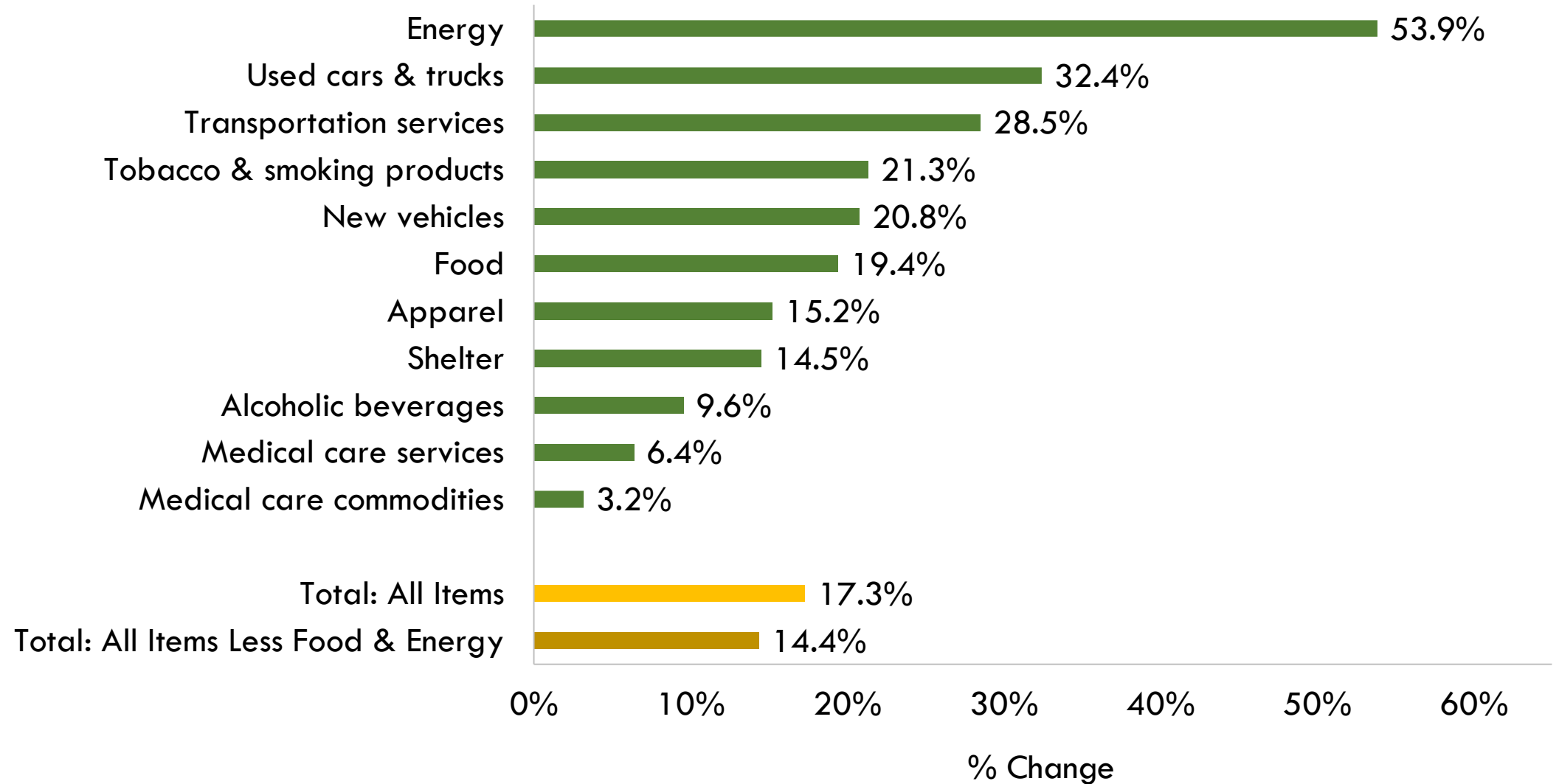
U.S. Consumer Price Index (NSA)

12-Month % Change, 2000 – February 2023



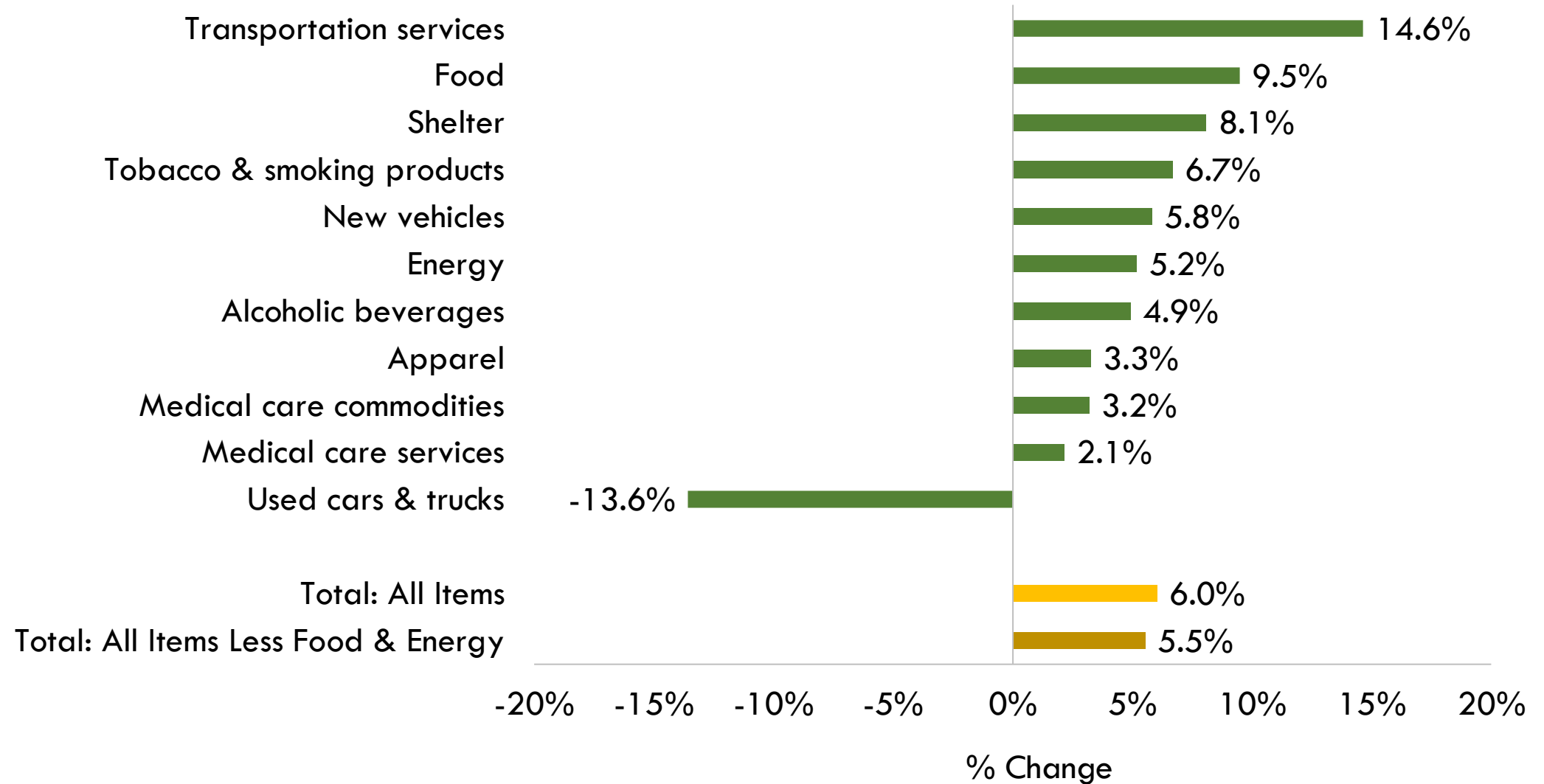
U.S. Consumer Price Index, Select Categories (NSA)

May 2020 v. February 2023 % Change

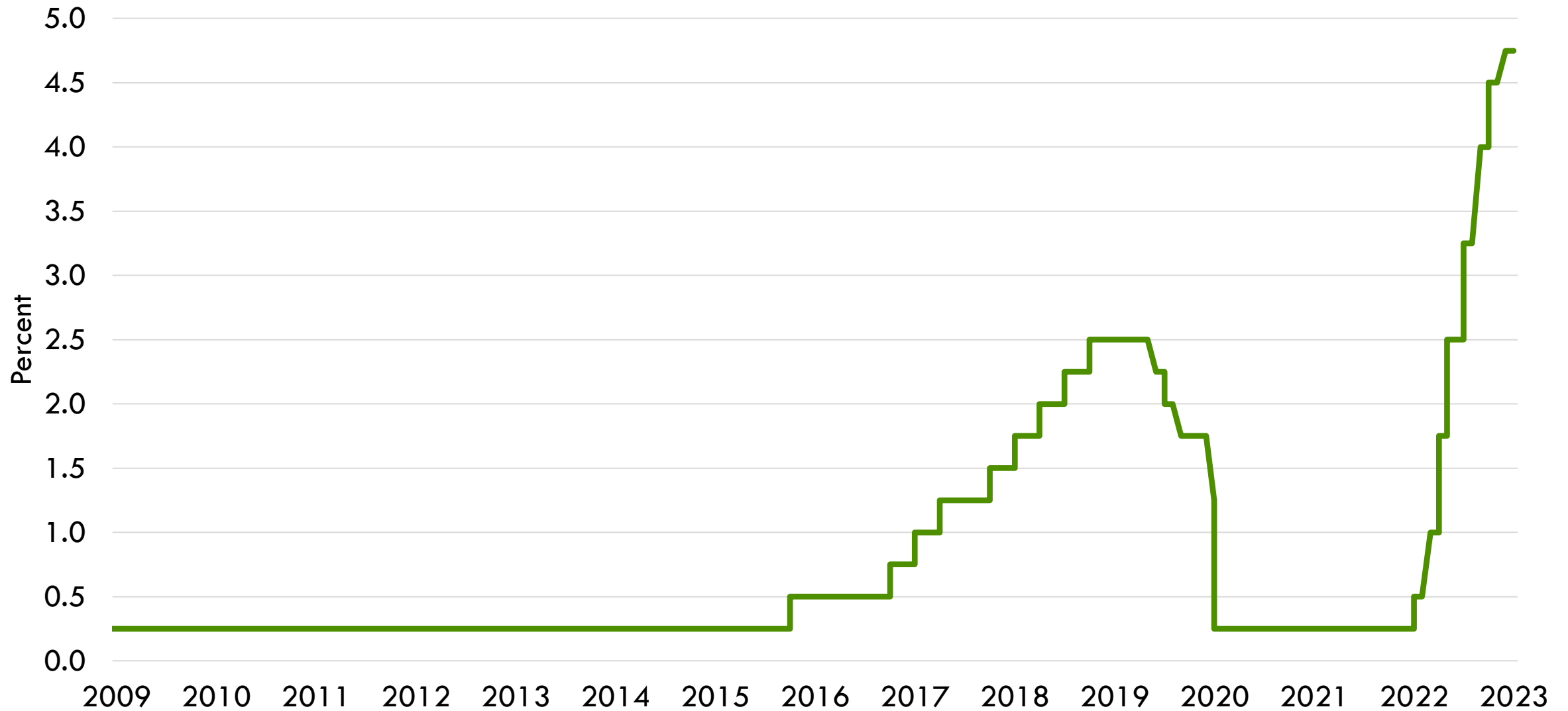


U.S. Consumer Price Index, Select Categories (NSA)

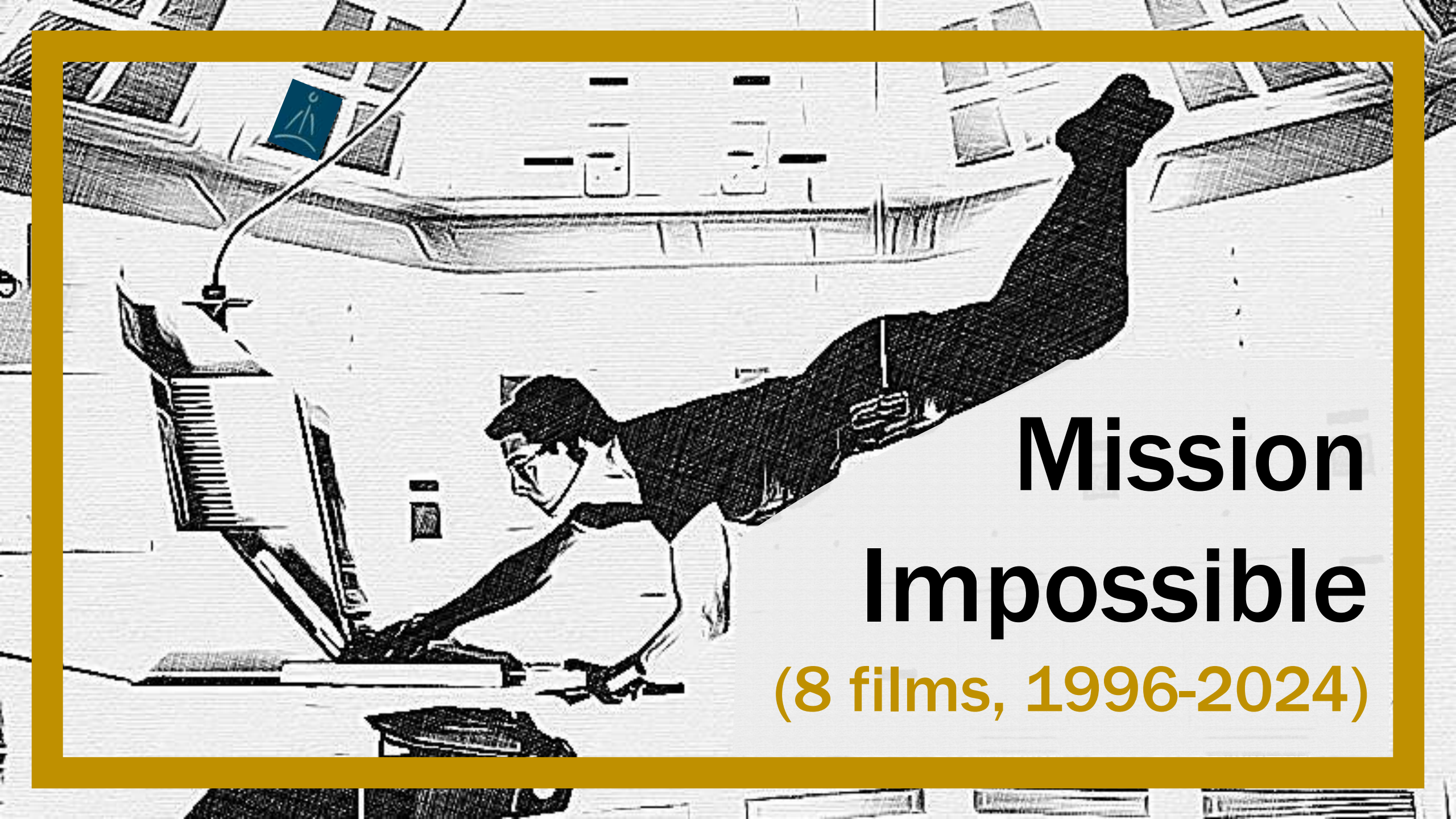
February 2022 v. February 2023 % Change



Federal Funds Target Range, Upper Limit, 2009 – 2023



Source: Board of Governors of the Federal Reserve System

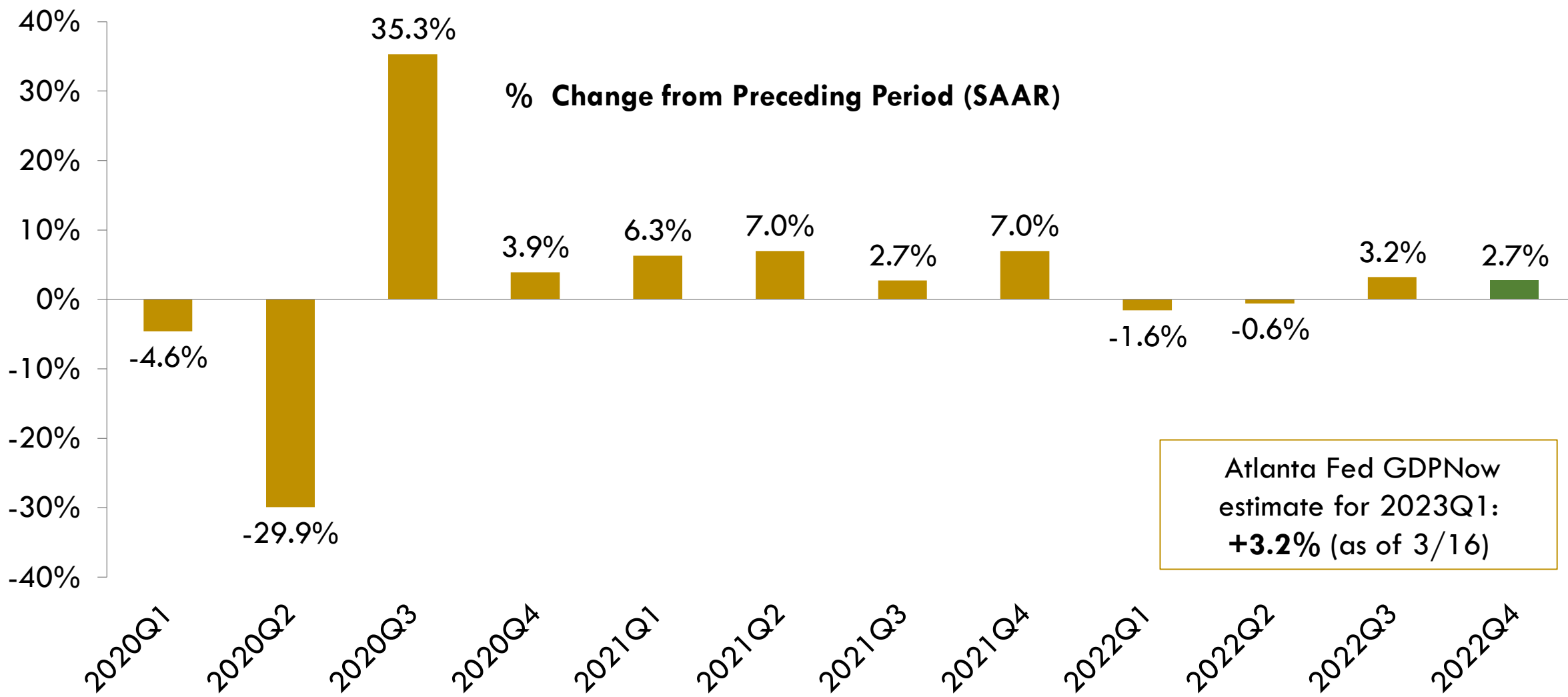


Mission Impossible

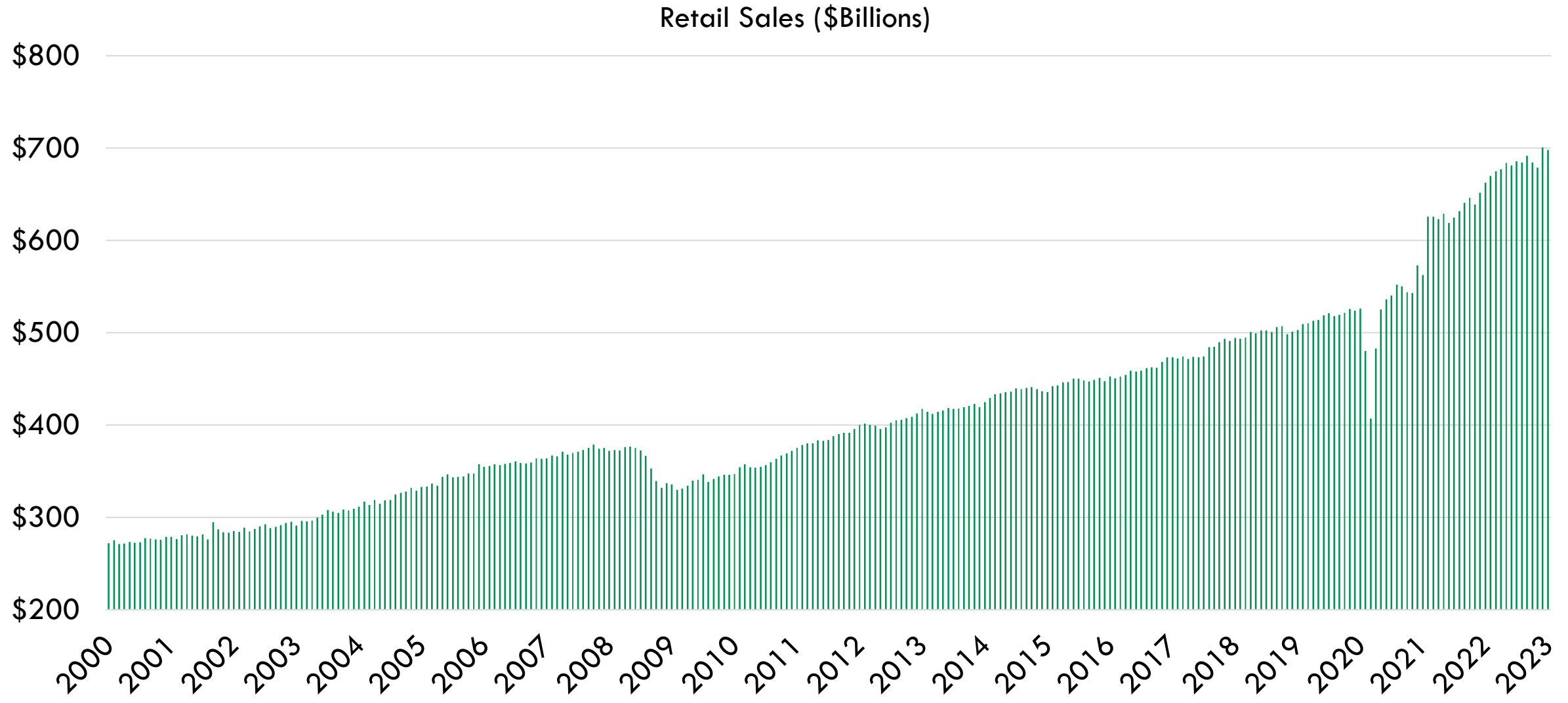
(8 films, 1996-2024)

Born on the 4th of July

U.S. Gross Domestic Product Growth, 2020 – 2022Q4



U.S. Retail Sales, 2000 – February 2023

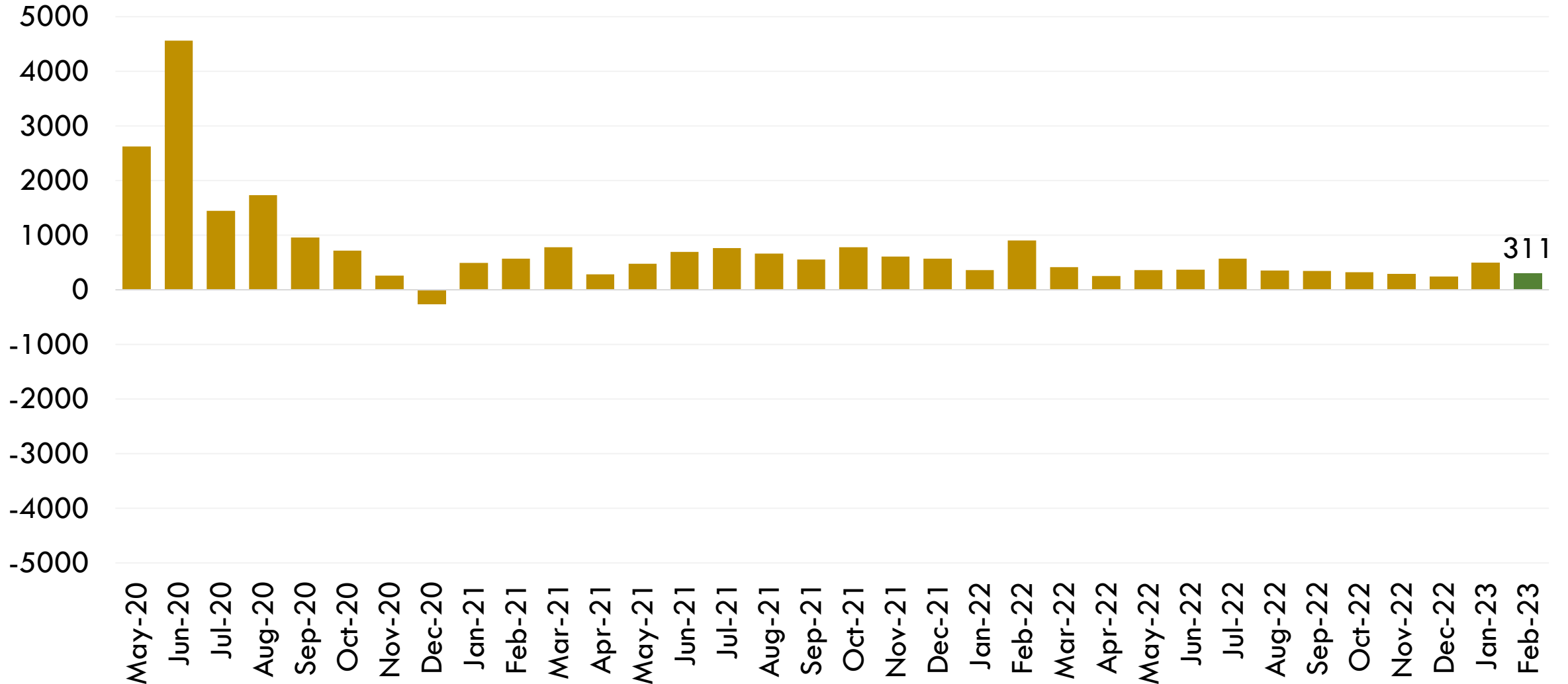


Source: U.S. Census Bureau

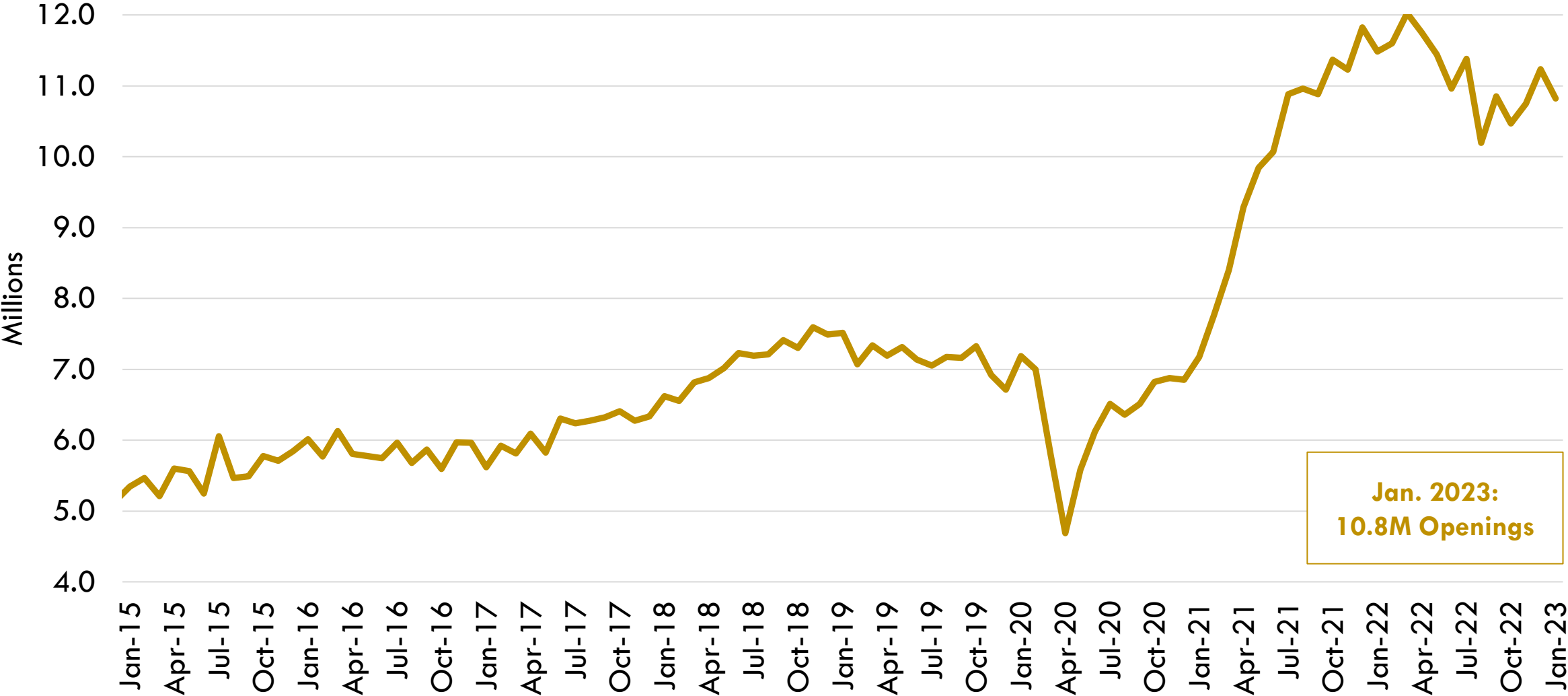
Net Change in U.S. Jobs

May 2020 – February 2023

Monthly Job Growth (000's)



U.S. Job Openings, 2015 – January 2023



Jan. 2023:
10.8M Openings

Source: U.S. Bureau of Labor Statistics

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



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

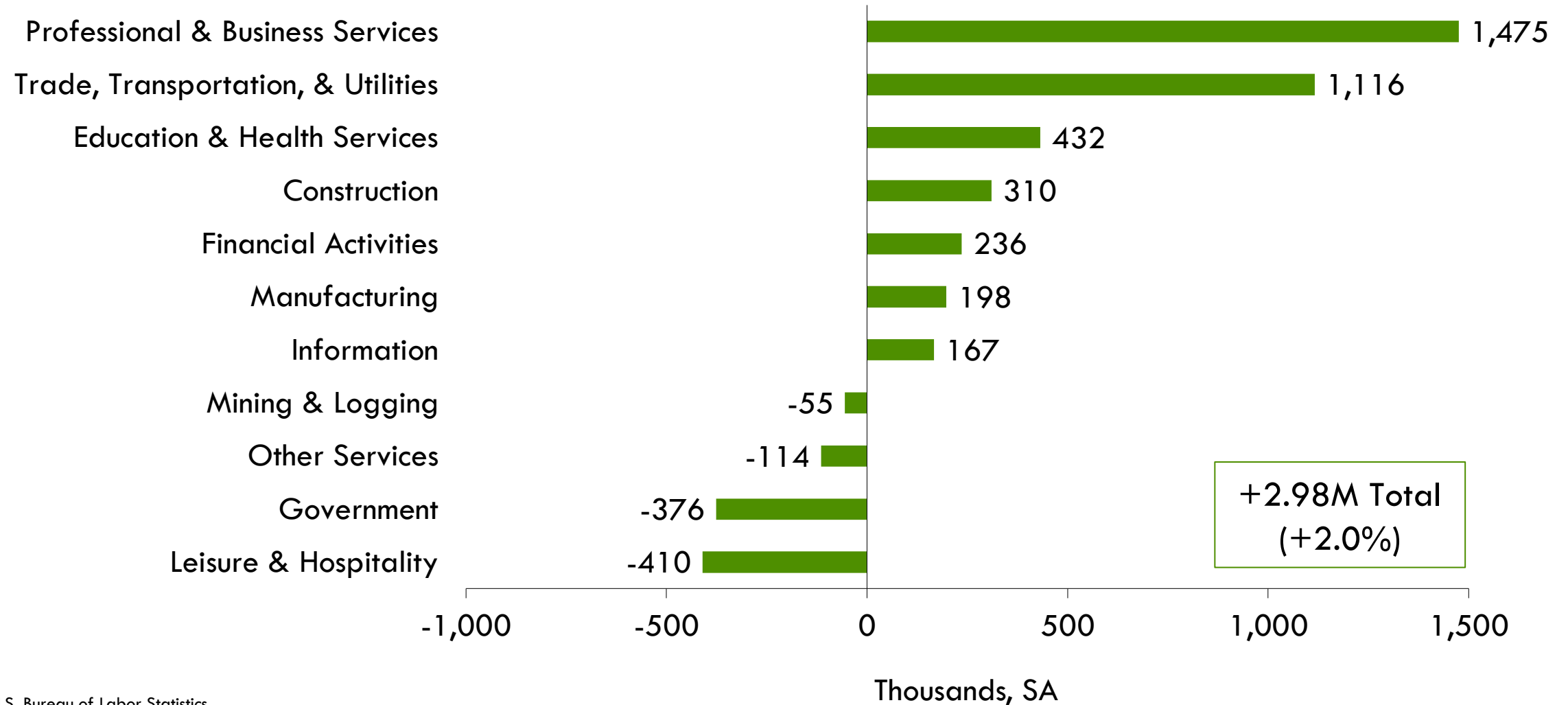
Age Group	Total	Men	Women
16+ years	-1.3	-9.5	+5.6
16-19 years	-19.3	-23.2	-15.5
20-24 years	-5.5	-13.4	+2.0
25-34 years	+3.5	-6.2	+12.5
35-44 years	+3.4	-5.6	+11.5
45-54 years	+6.5	-4.3	+16.3
55-64 years	+9.7	-0.7	+18.3

If the labor force participation rate were what it was in 1980, there would be 12.3 million more men and 7.6 million fewer women in the labor force (ages 16+).

U.S. Jobs Recovered Since February 2020



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



Employment Growth, 25 Largest Metros

February 2020 v. January 2023 Percent Change

Rank	MSA	%	Rank	MSA	%
1	Dallas-Fort Worth-Arlington, TX	8.9%	14	Seattle-Tacoma-Bellevue, WA	0.9%
2	Tampa-St. Petersburg-Clearwater, FL	7.6%	15	Portland-Vancouver-Hillsboro, OR-WA	0.4%
3	Phoenix-Mesa-Scottsdale, AZ	5.6%	16	St. Louis, MO-IL	-0.2%
4	Orlando-Kissimmee-Sanford, FL	5.5%	17	Chicago-Naperville-Elgin, IL-IN-WI	-0.6%
5	San Antonio-New Braunfels, TX	5.3%	18	Los Angeles-Long Beach-Anaheim, CA	-0.8%
6	Atlanta-Sandy Springs-Roswell, GA	4.7%	19	New York-Newark-Jersey City, NY-NJ-PA	-0.9%
6	Riverside-San Bernardino-Ontario, CA	4.7%	20	Boston-Cambridge-Nashua, MA-NH	-1.2%
8	Charlotte-Concord-Gastonia, NC-SC	4.4%	20	San Francisco-Oakland-Hayward, CA	-1.2%
9	Houston-The Woodlands-Sugar Land, TX	2.9%	22	Washington-Arlington-Alexandria, DC-VA-MD-WV	-1.3%
9	Miami-Fort Lauderdale-West Palm Beach, FL	2.9%	23	Detroit-Warren-Dearborn, MI	-1.9%
11	San Diego-Carlsbad, CA	2.4%	24	Minneapolis-St. Paul-Bloomington, MN-WI	-2.1%
12	Denver-Aurora-Lakewood, CO	1.9%	25	Baltimore-Columbia-Towson, MD	-2.2%
13	Philadelphia-Camden-Wilm., PA-NJ-DE-MD	1.5%			

Source: Bureau of Labor Statistics

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

U.S. % Change 2/2020 v. 1/2023: +1.8%

Unemployment Rates, 25 Largest Metros

January 2023

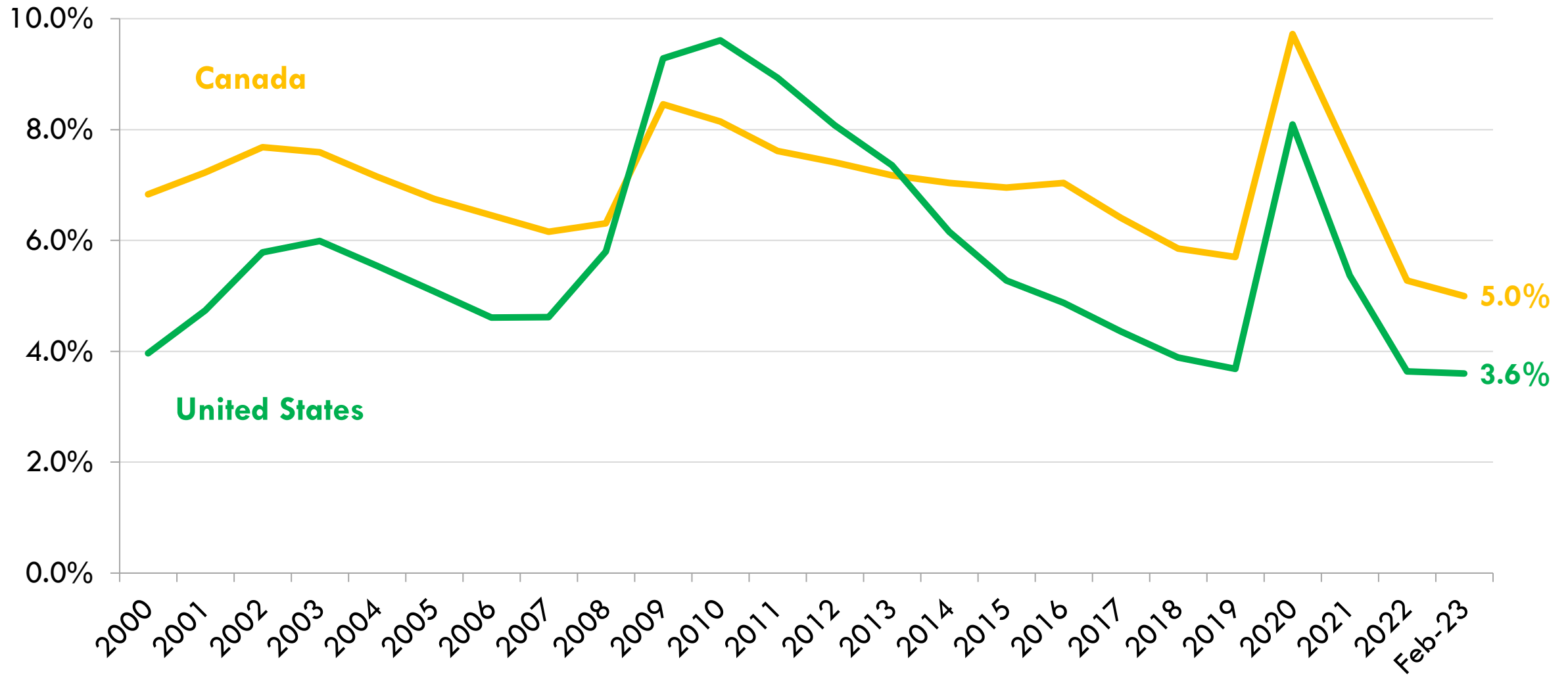
Rank	MSA	%	Rank	MSA	%
1	Miami-Fort Lauderdale-West Palm Beach, FL	2.3	13	Boston-Cambridge-Nashua, MA-NH	3.6
2	Orlando-Kissimmee-Sanford, FL	2.6	14	San Diego-Carlsbad, CA	3.7
2	Tampa-St. Petersburg-Clearwater, FL	2.6	15	Dallas-Fort Worth-Arlington, TX	3.8
4	Denver-Aurora-Lakewood, CO	2.9	16	San Antonio-New Braunfels, TX	3.9
4	Minneapolis-St. Paul-Bloomington, MN-WI	2.9	16	Seattle-Tacoma-Bellevue, WA	3.9
4	Phoenix-Mesa-Scottsdale, AZ	2.9	18	Philadelphia-Camden-Wilm., PA-NJ-DE-MD	4.1
7	Baltimore-Columbia-Towson, MD	3.0	19	Detroit-Warren-Dearborn, MI	4.2
7	St. Louis, MO-IL	3.0	20	New York-Newark-Jersey City, NY-NJ-PA	4.4
7	Washington-Arlington-Alexandria, DC-VA-MD-WV	3.0	20	Riverside-San Bernardino-Ontario, CA	4.4
10	Atlanta-Sandy Springs-Roswell, GA	3.2	22	Houston-The Woodlands-Sugar Land, TX	4.5
11	San Francisco-Oakland-Hayward, CA	3.3	22	Portland-Vancouver-Hillsboro, OR-WA	4.5
12	Charlotte-Concord-Gastonia, NC-SC	3.5	24	Los Angeles-Long Beach-Anaheim, CA	4.6
			25	Chicago-Naperville-Elgin, IL-IN-WI	4.7

Source: Bureau of Labor Statistics

Local Area Unemployment Statistics (LAUS) program. Note: data are not seasonally adjusted

Unemployment Rate, United States & Canada

2000 – February 2023



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

Unemployment Rate by Canadian Province/Territory

February 2023

Province/Territory	Unemployment Rate
Quebec	4.1%
Saskatchewan	4.3%
Manitoba	4.7%
Ontario	5.1%
British Columbia	5.1%
Nova Scotia	5.7%
Alberta	5.8%
New Brunswick	6.3%
Prince Edward Island	7.3%
Newfoundland and Labrador	9.9%
Canada	5.0%

Source: Statistics Canada
Note: data are seasonally adjusted

You Had Me at Recession

(Jerry Maguire, 1996)

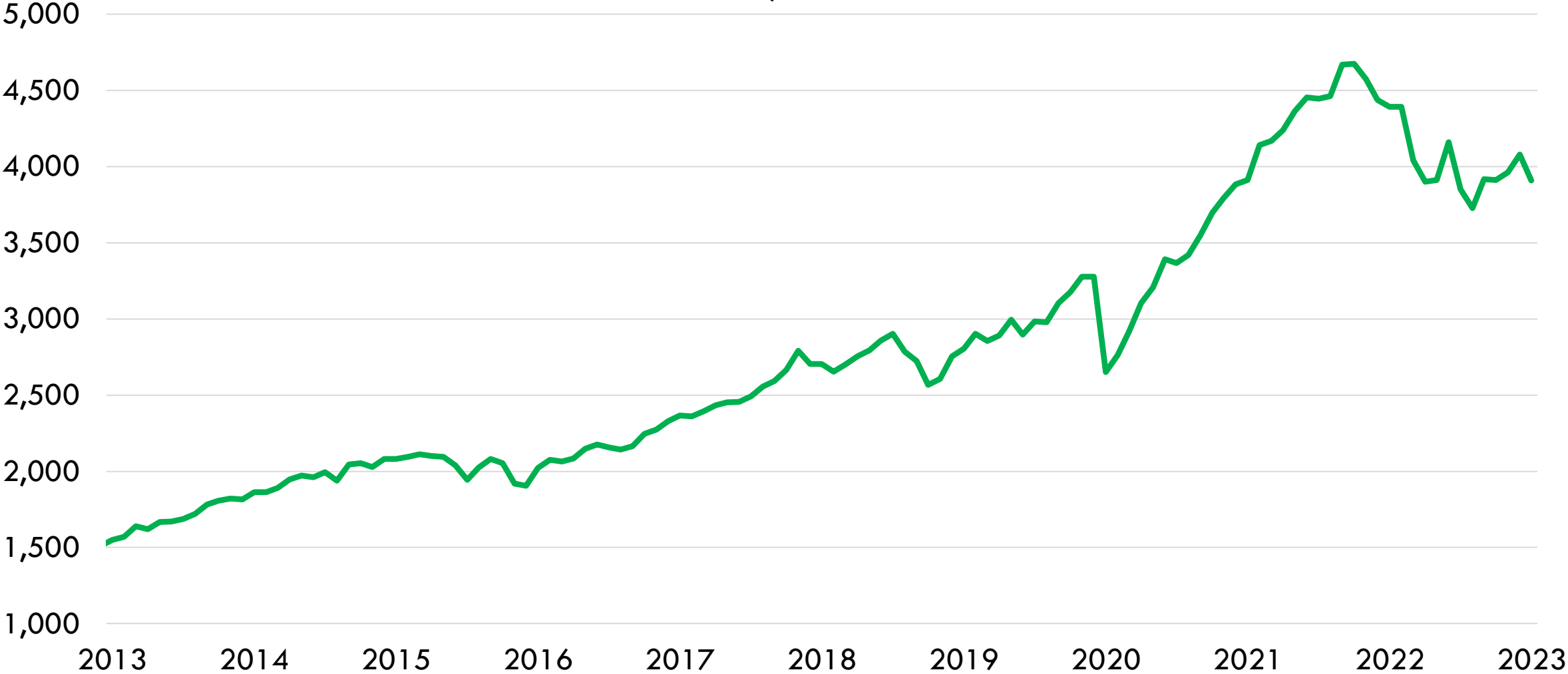


Defining Recession: Eyes Wide Shut

- 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 the 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).

S&P 500 Index, 2013 – March 2023

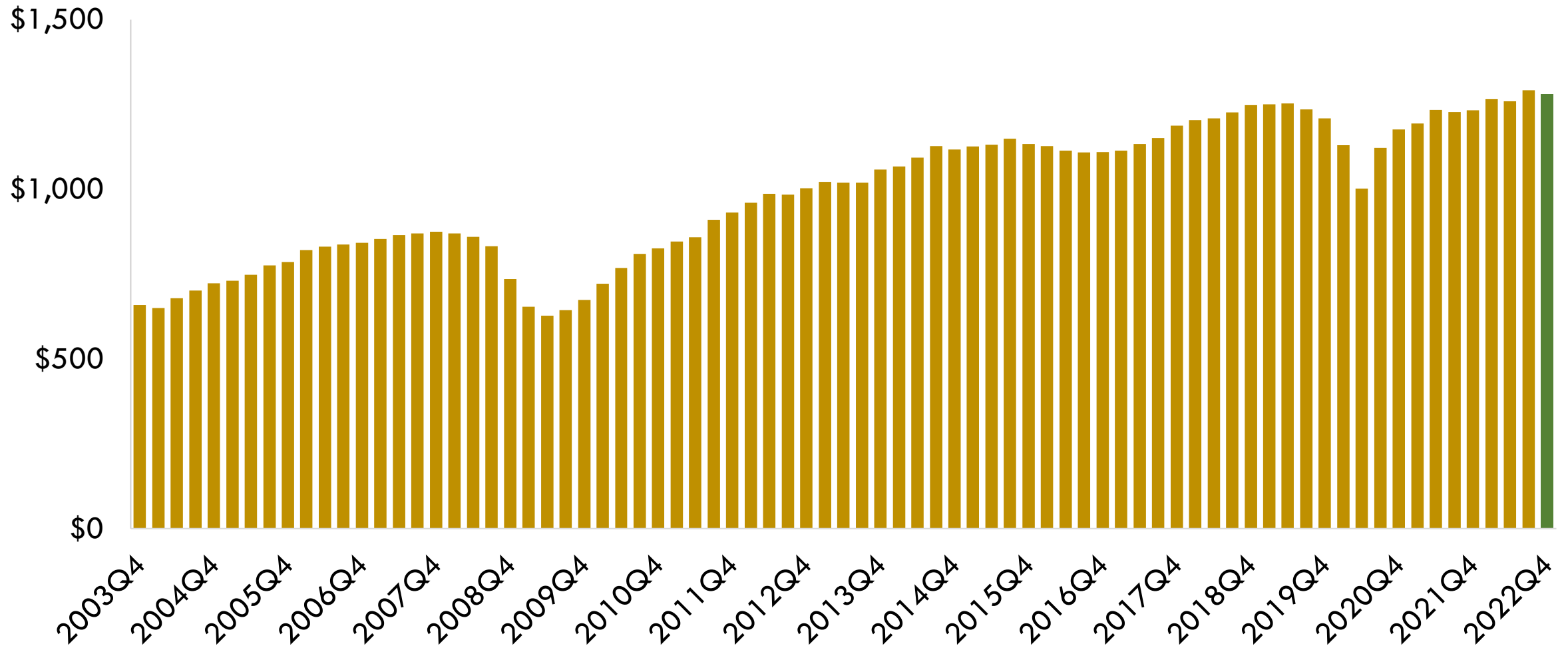
S&P 500 Index, Market Close



Source: S&P Dow Jones Indices LLC, S&P 500 [SP500], retrieved from FRED, Federal Reserve Bank of St. Louis

U.S. GDP: Nonresidential Fixed Investment in Equipment, 2003 – 2022Q4

\$ Billions of chained 2012 dollars, seasonally adjusted annual rate



The Firm

- Facing economic headwinds, many large companies have missed earnings estimates recently.
- 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 Since May 2022

Company	Workforce Before Layoffs	Estimated Layoffs	Percent Laid Off
Twitter	7,500	3,700	49.3%
Kraken	3,600	1,100	30.6%
Snap	6,446	1,300	20.2%
Yahoo	8,000	1,600	20.0%
Zoom	8,700	1,300	14.9%
Hasbro	6,700	1,000	14.9%
Lyft	5,064	700	13.8%
Stripe	8,100	1,100	13.6%
Meta	87,314	11,000	12.6%
Vimeo	1,270	140	11.0%
Salesforce	79,000	8,000	10.1%
NPR	1,000	100	10.0%
Shopify	10,000	1,000	10.0%
PayPal	29,000	2,000	6.9%
Goldman Sachs	49,000	3,200	6.5%

Source: Washington Post; company announcements & government filings



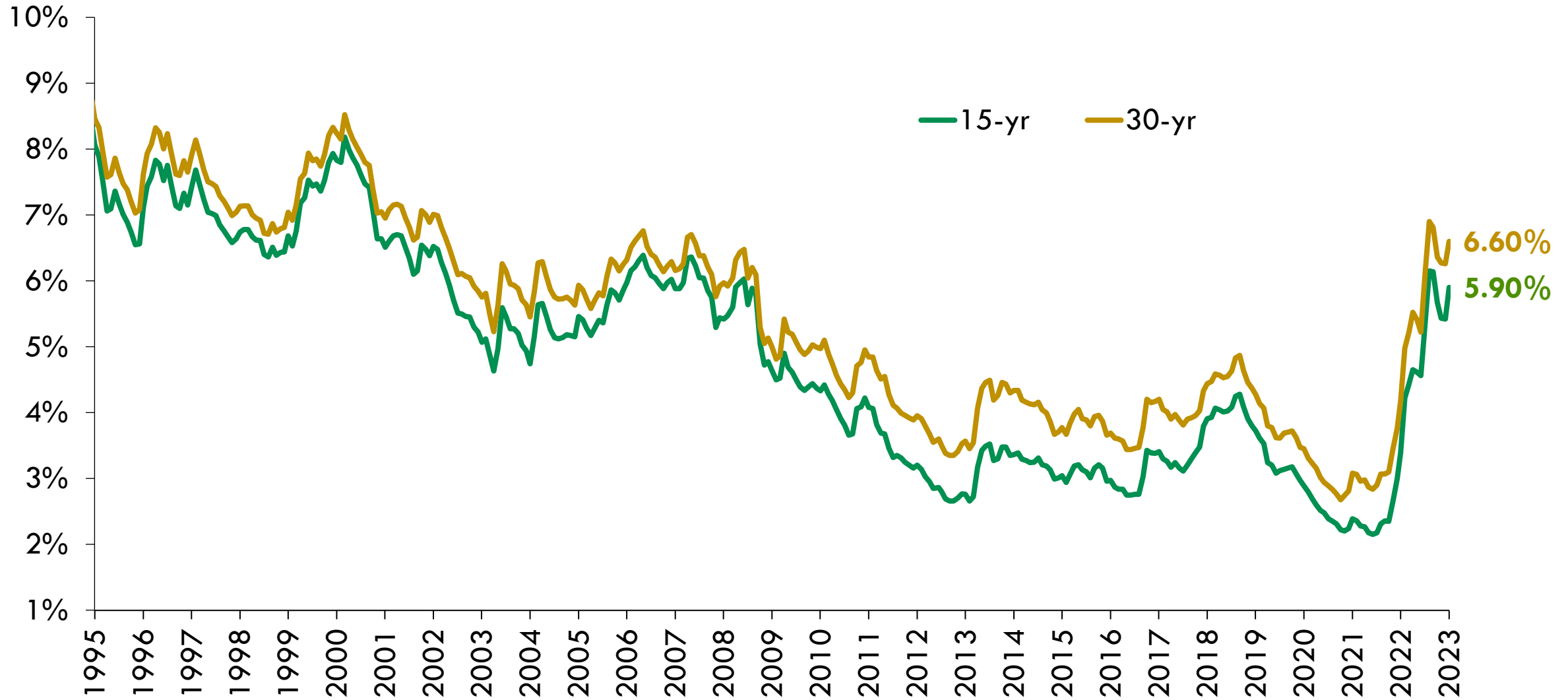
A Few Good Properties

(A Few Good Men, 1992)



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

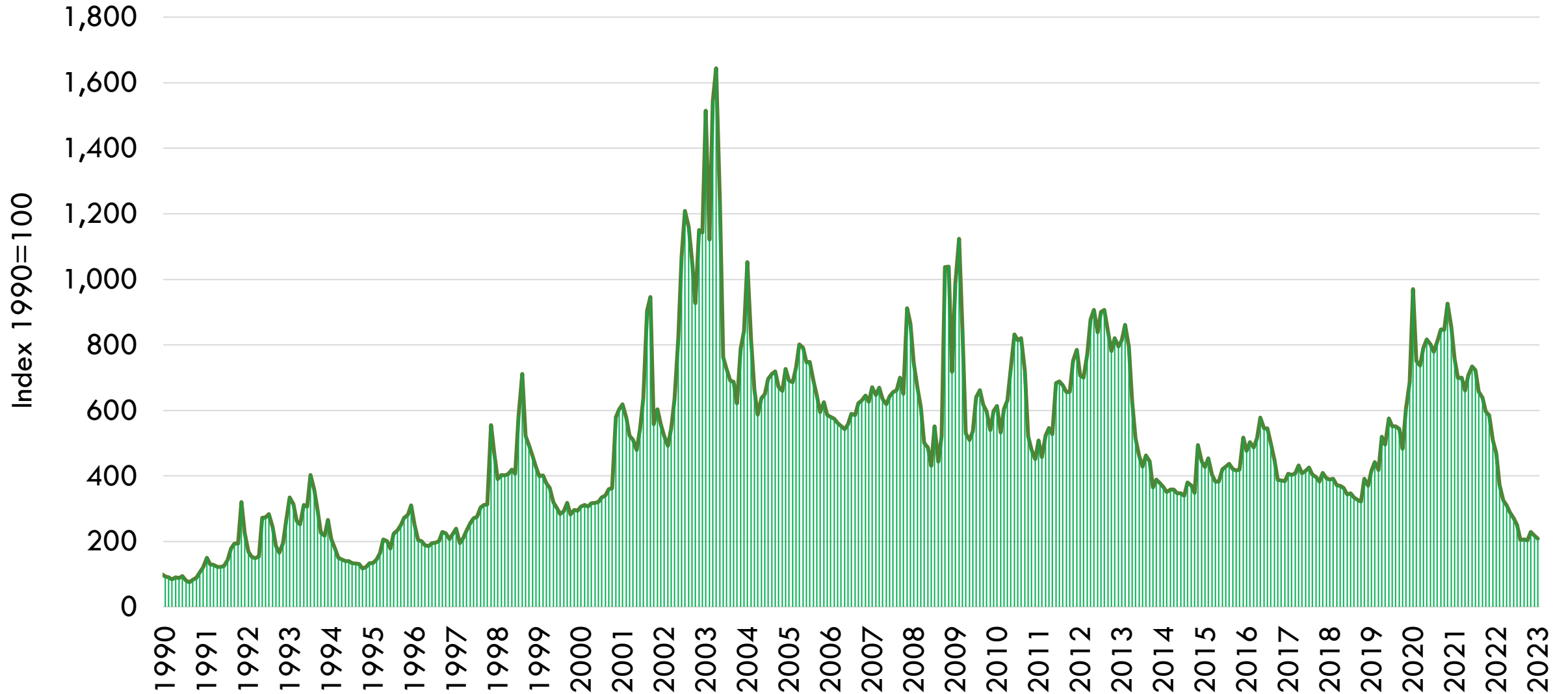
1995 – March 2023*



Source: Freddie Mac *Week ending 3/16/2023

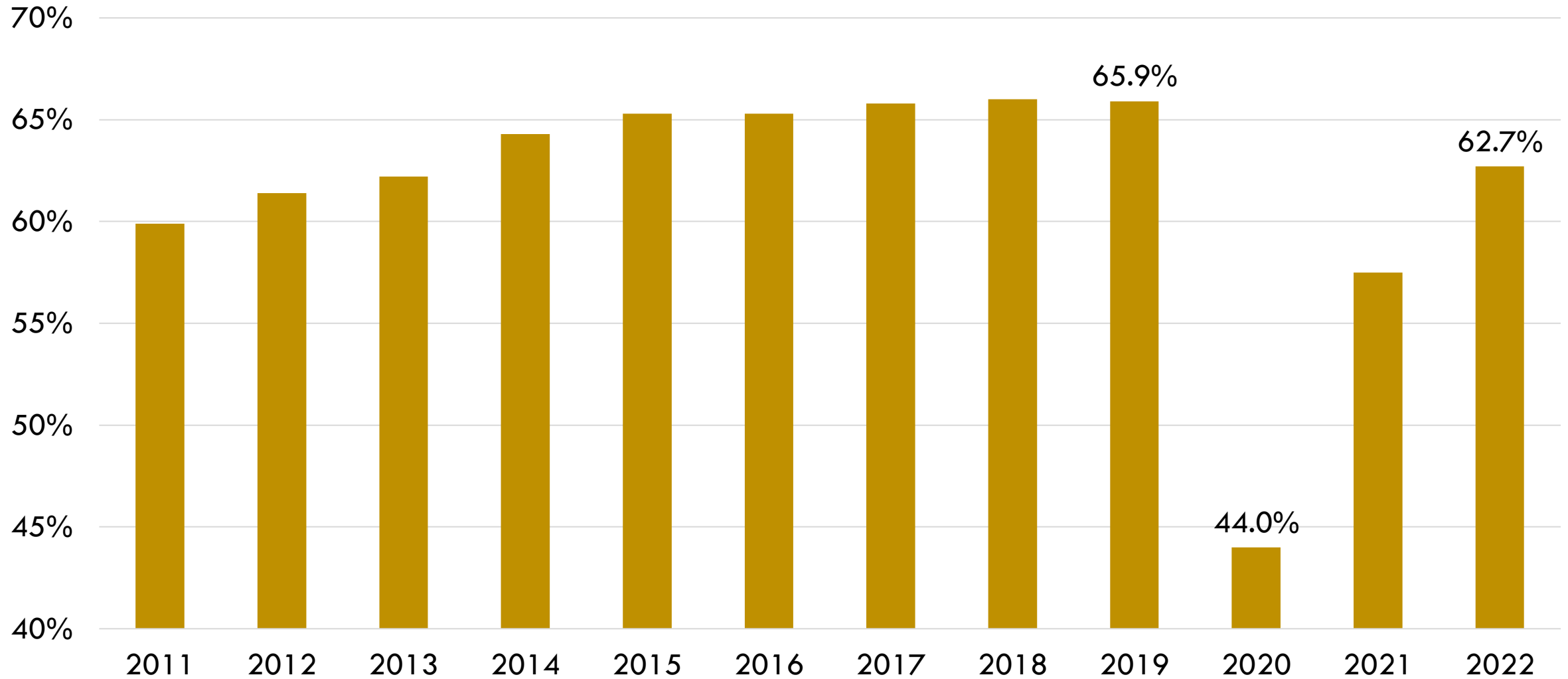
U.S. Mortgage Loan Applications Composite Index

1990 – March 2023



Source: Mortgage Bankers Association (MBA)

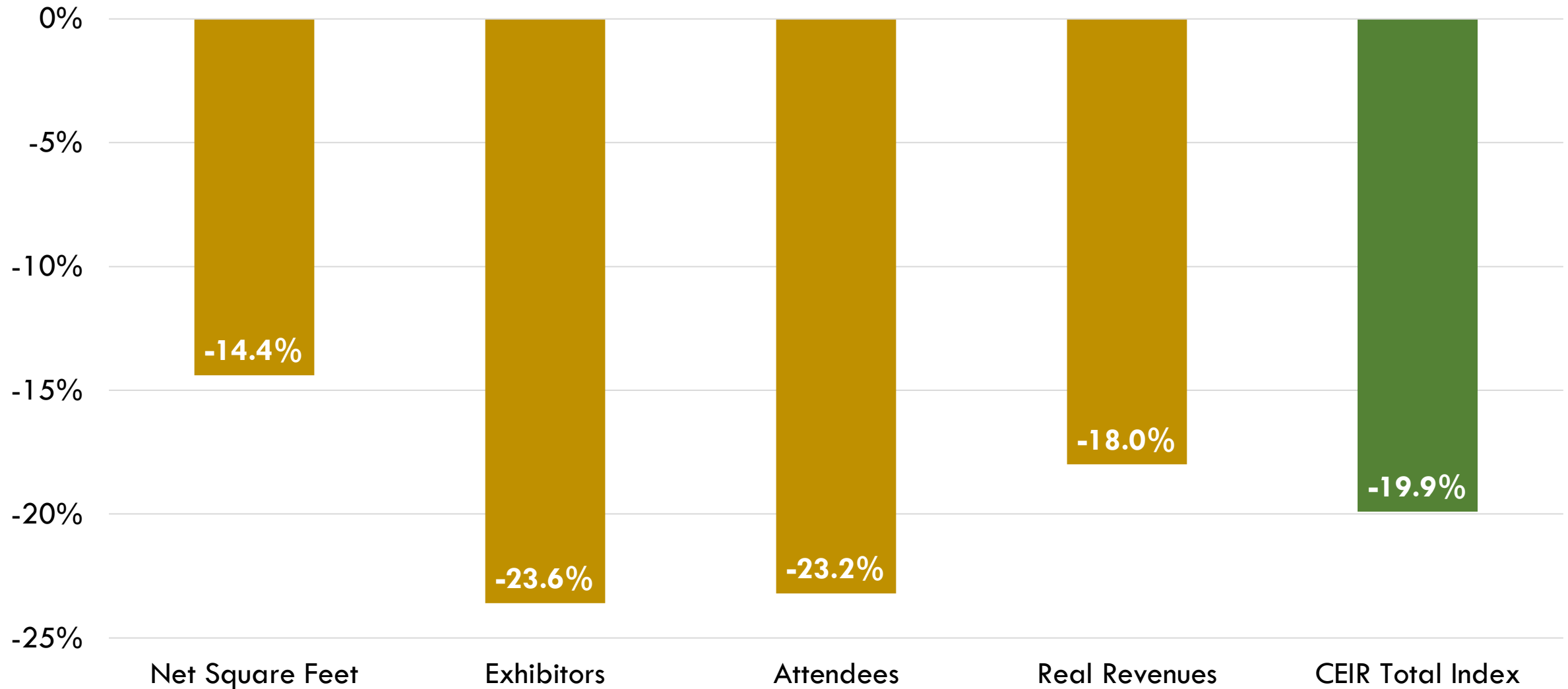
U.S. Hotel Occupancy, 2011 – 2022



Source: Costar

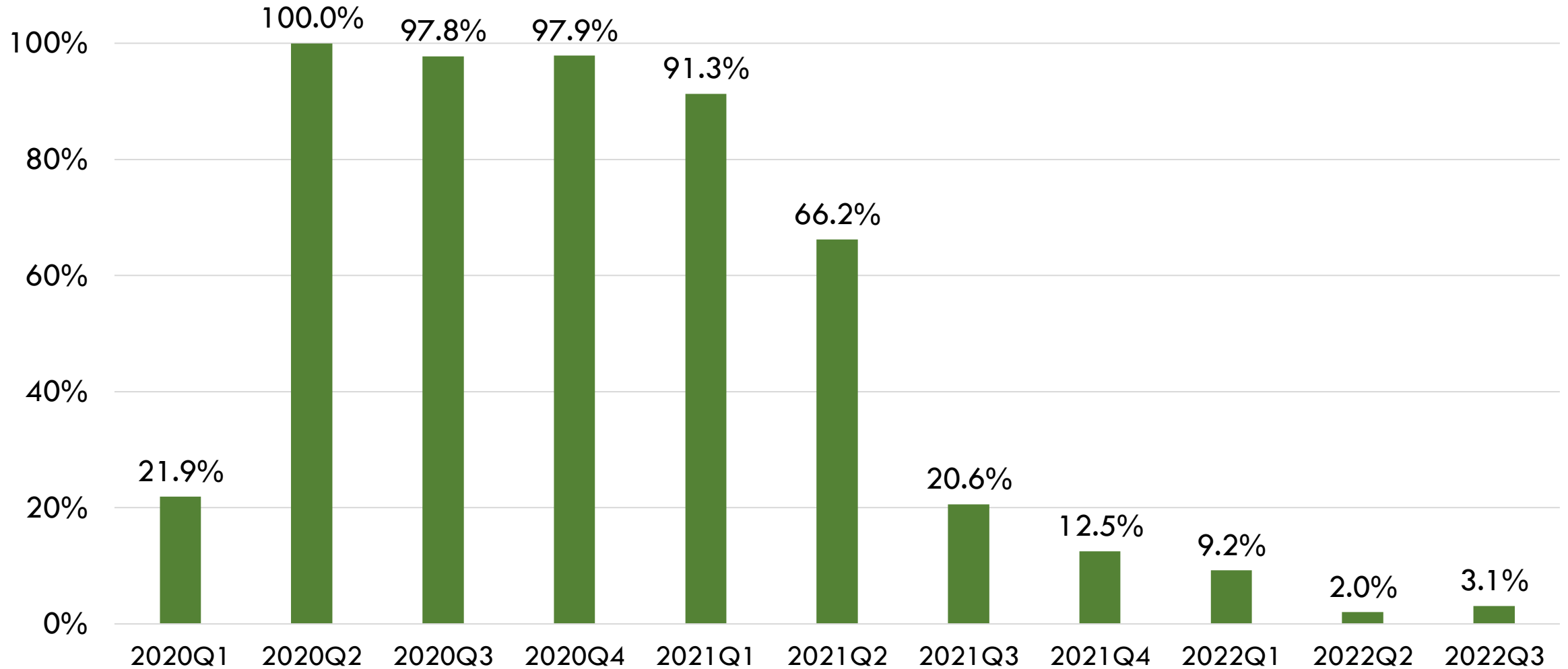
Center for Exhibition Industry Research (CEIR)

Exhibition Industry Index, 2019Q3 v. 2022Q3



Center for Exhibition Industry Research (CEIR)

Business-to-business (B2B) Exhibition Industry Cancellation Rate (%)

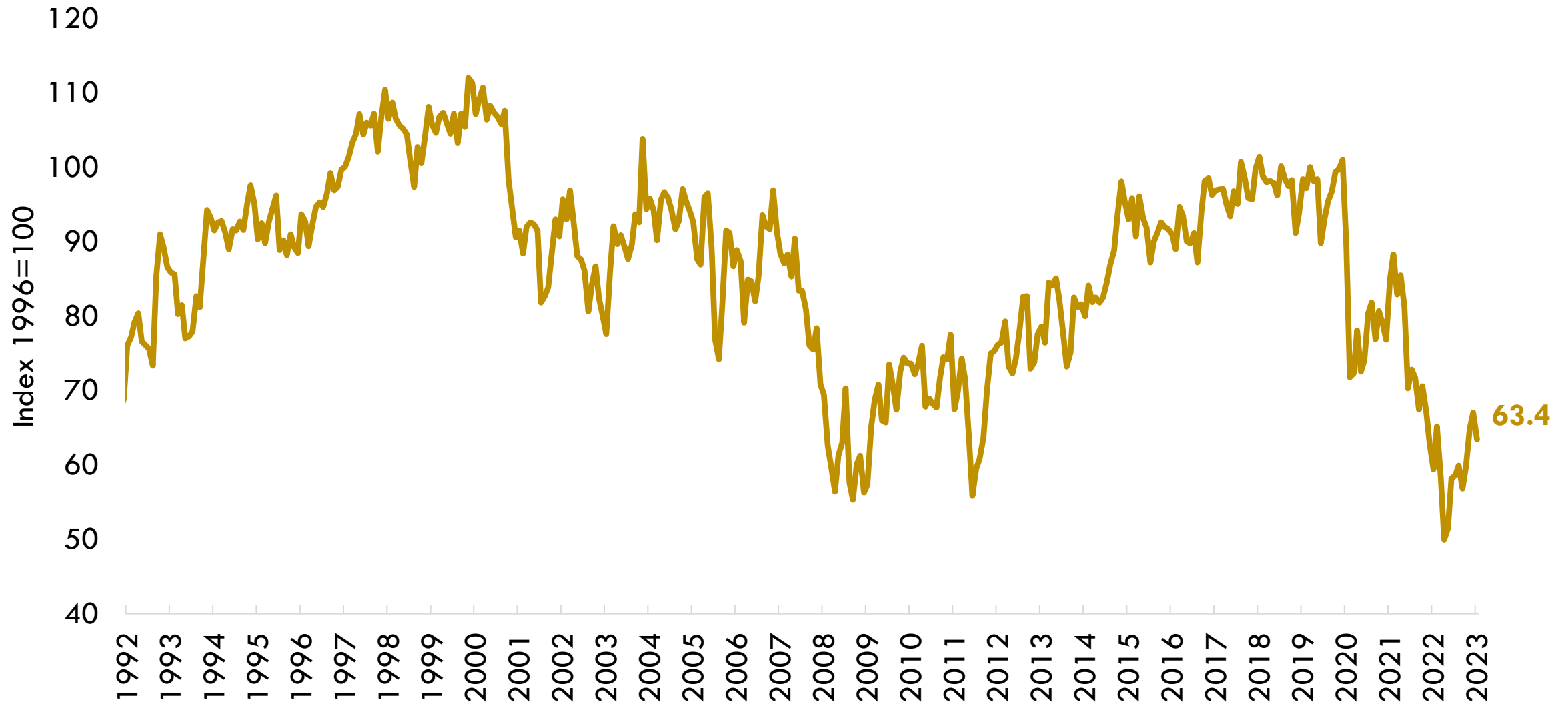


Edge of Tomorrow



University of Michigan Index of Consumer Sentiment

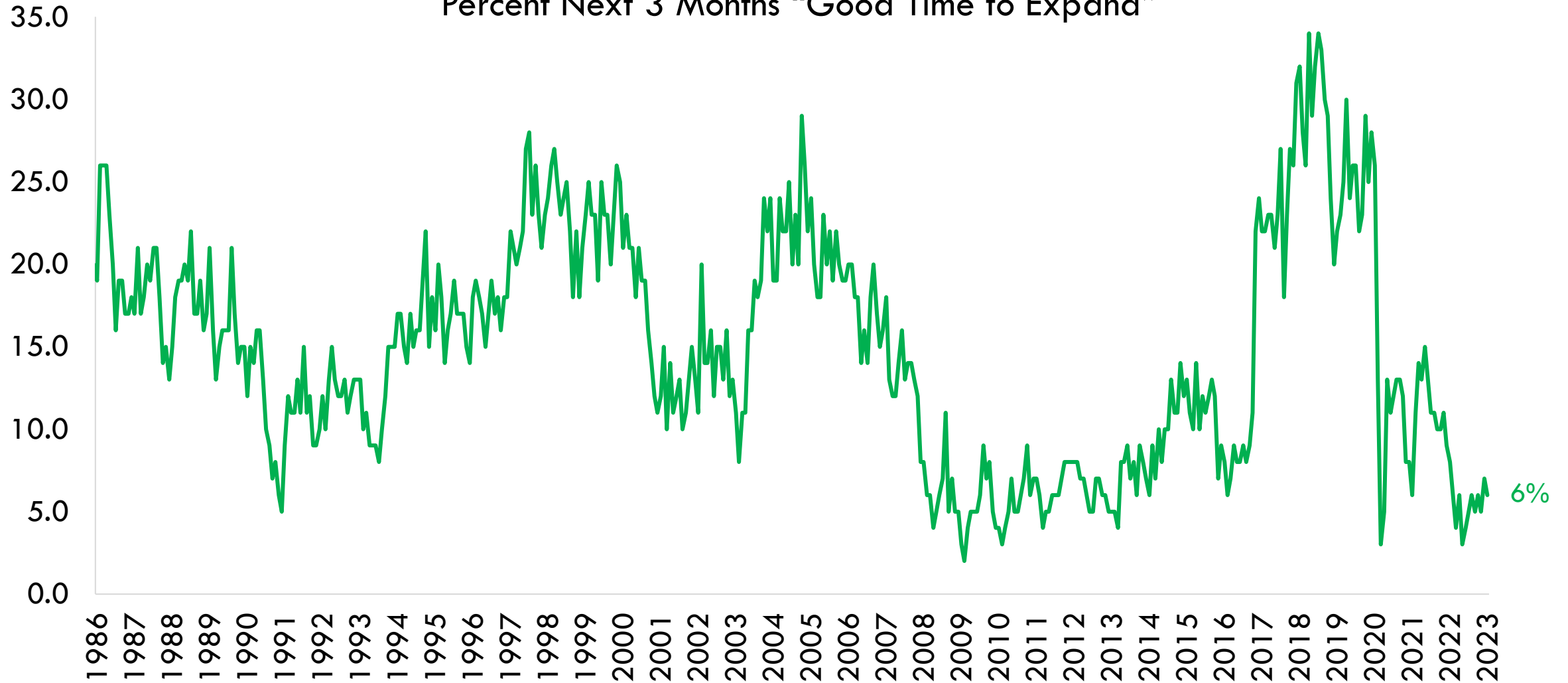
1992 – March 2023



NFIB Index of Small Business Optimism: Good Time to Expand

1986 – February 2023

Percent Next 3 Months “Good Time to Expand”

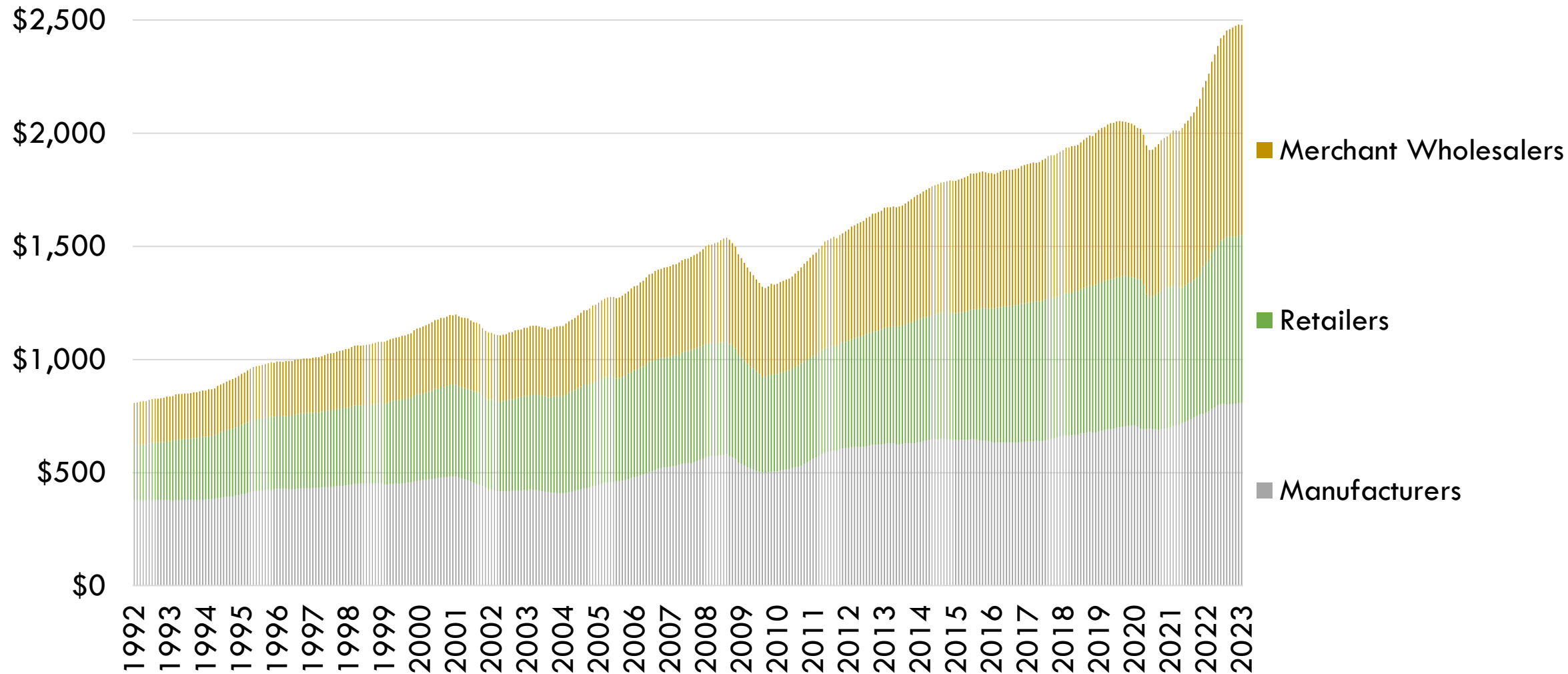


Source: National Federation of Independent Business (NFIB)

Business Inventories

1965 – January 2023

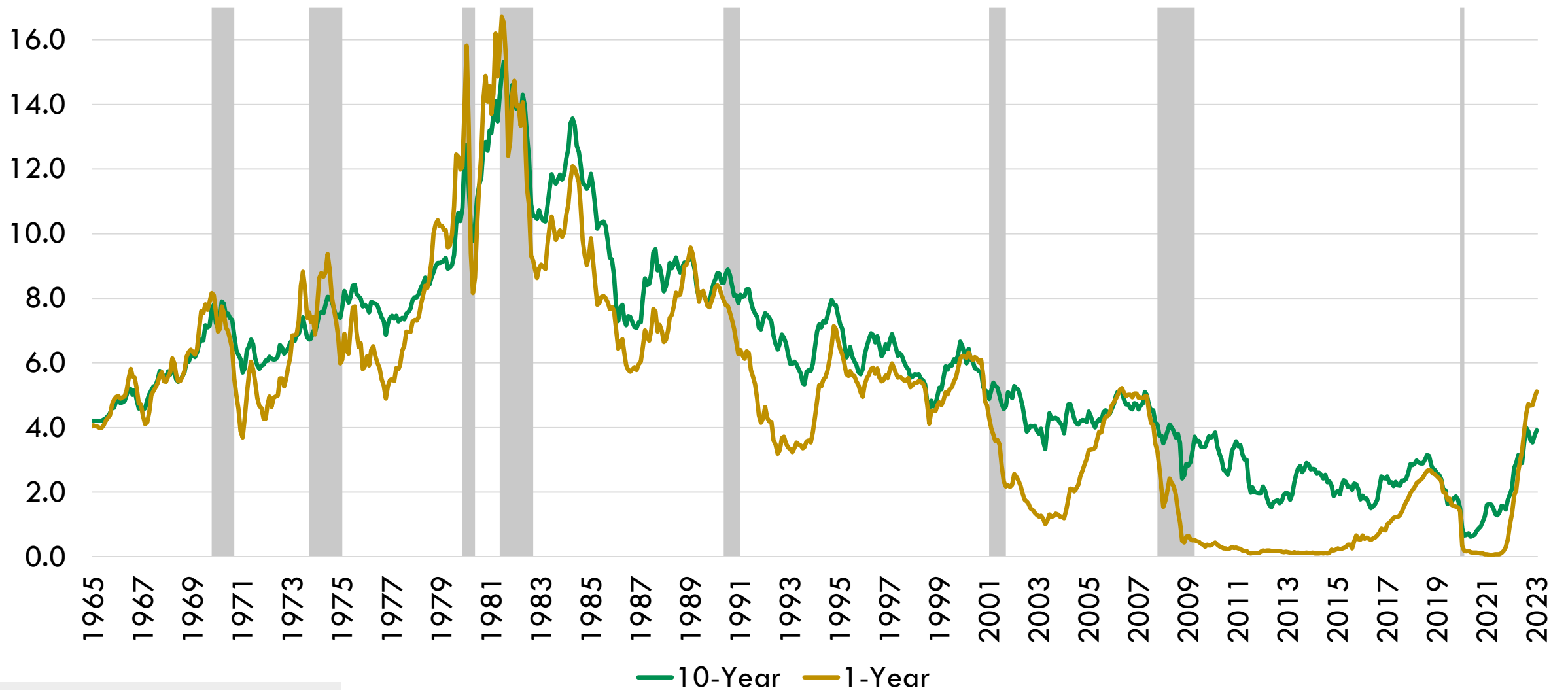
\$ Billions



Source: U.S. Census Bureau

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

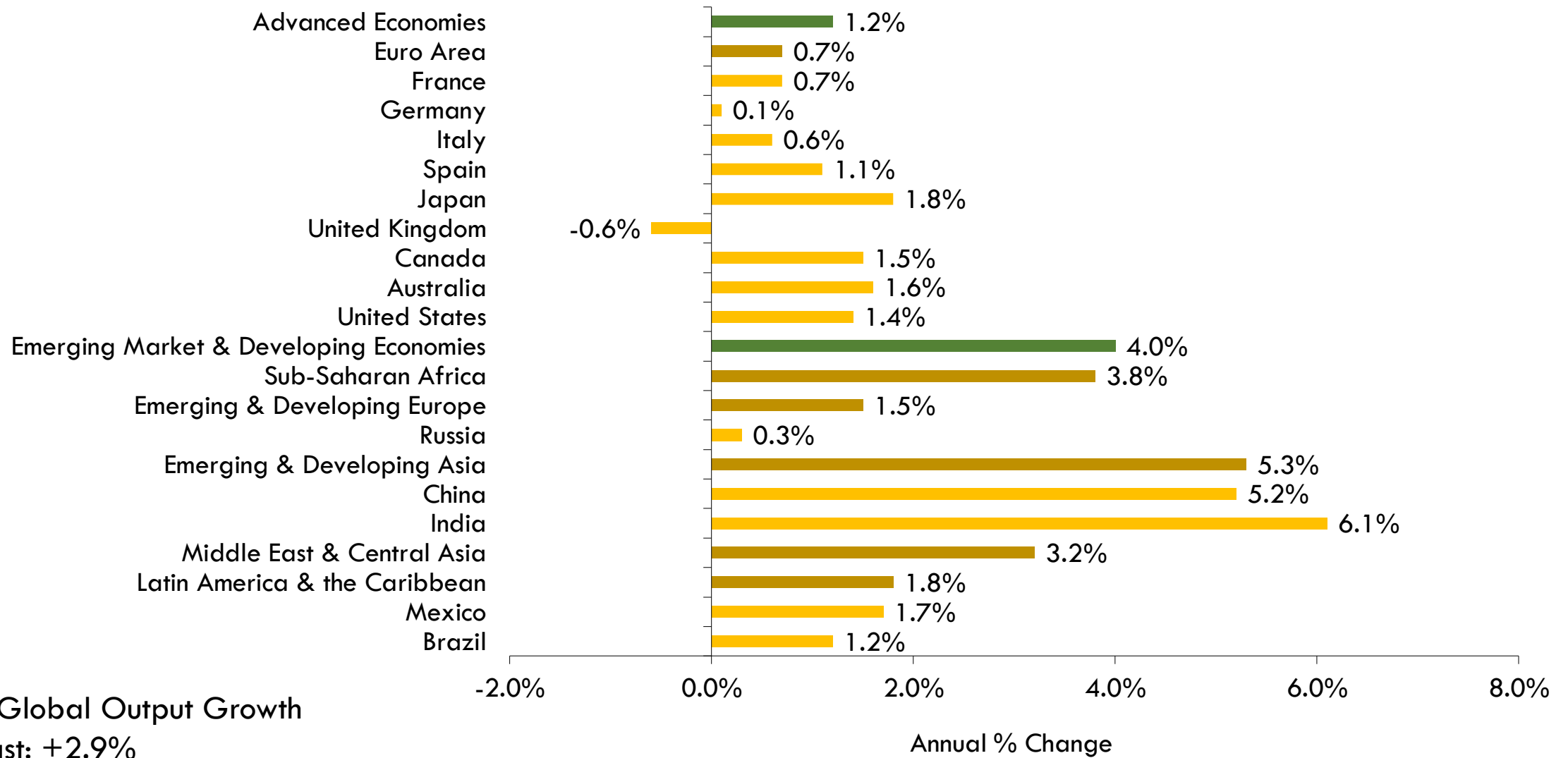
1965 – March 2023



Shaded areas indicate U.S. recessions

Source: Federal Reserve Bank of St. Louis

Projected Growth in Output by Select Global Areas, 2023



2023 Global Output Growth
Forecast: +2.9%

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 in North America – situation will worsen .

Thank You

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