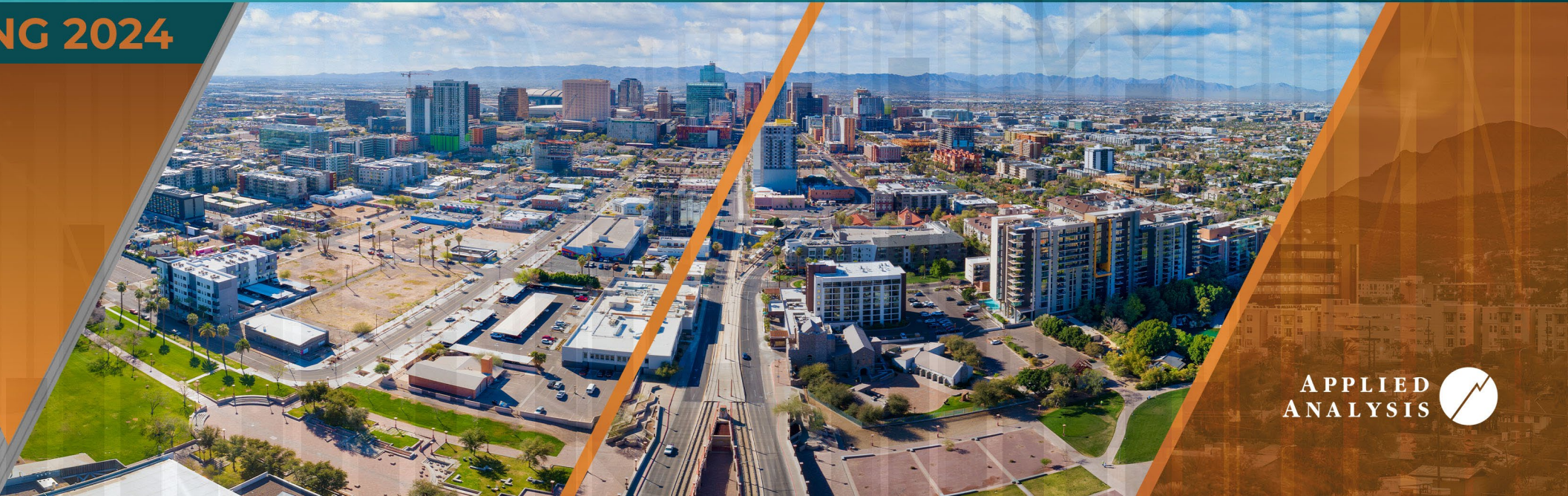




INFLATION IMPACTS

SPRING 2024





Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



NATIONAL BANK OF ARIZONA

INFLATION IMPACTS

SPRING 2024





Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



NATIONAL BANK OF ARIZONA

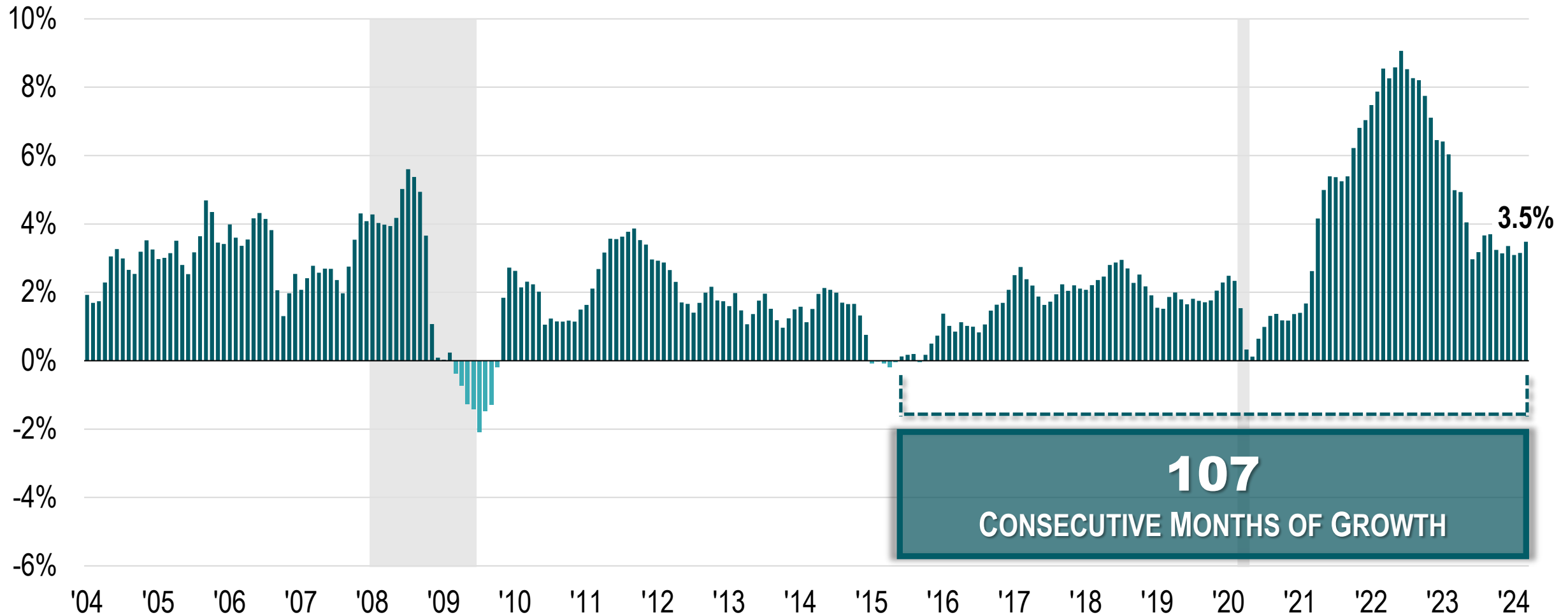
INFLATION IMPACTS

SPRING 2024



Inflation Rate

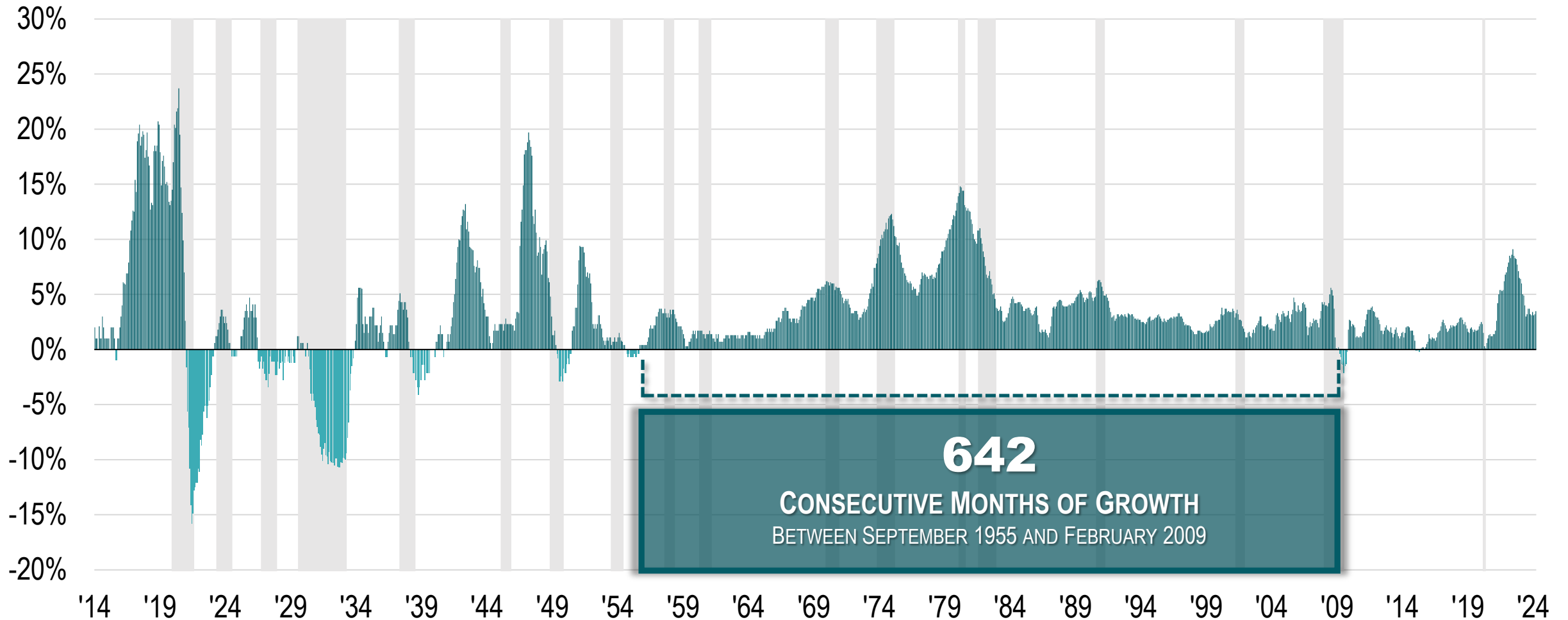
Consumer Price Index: All Items in U.S. City Average



Source: U.S. Bureau of Labor Statistics. Note: The inflation rate reflects year-over-year change in the consumer price index, not seasonally adjusted.

Inflation Rate

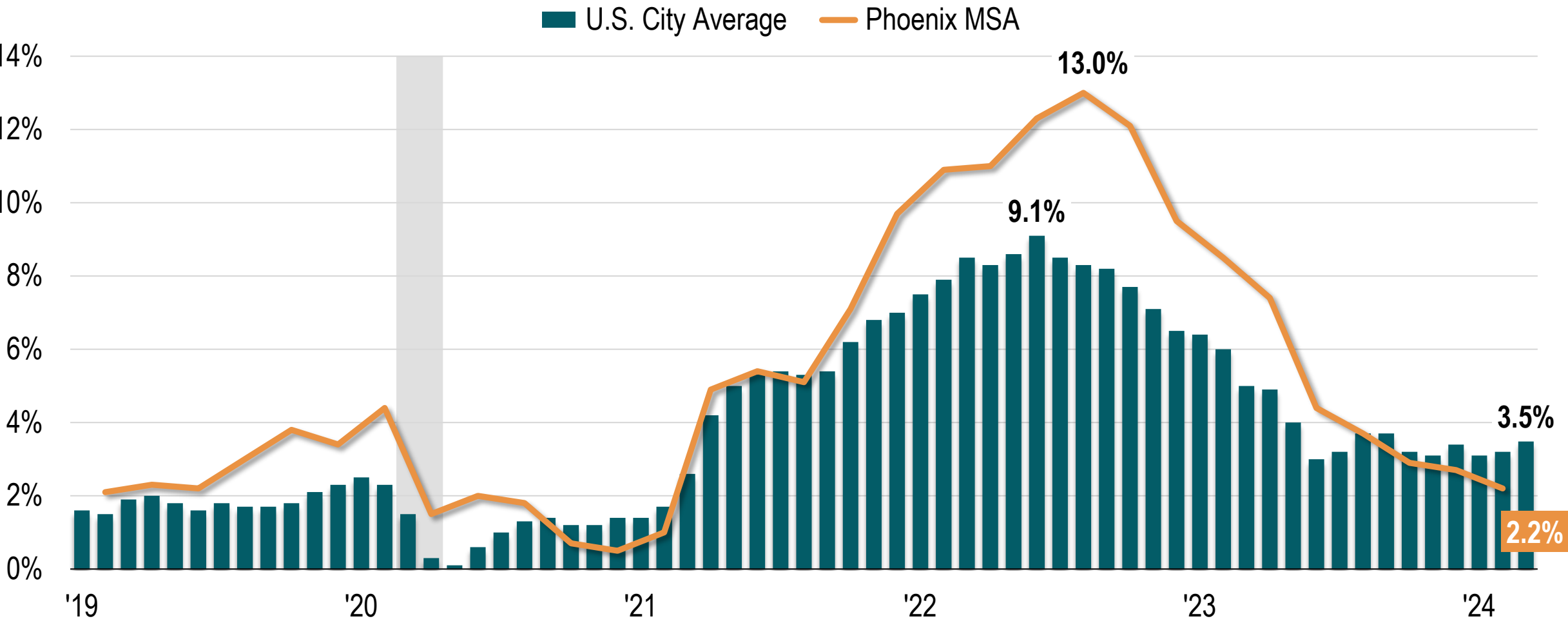
Consumer Price Index: All Items in U.S. City Average



Source: U.S. Bureau of Labor Statistics. Note: The inflation rate reflects year-over-year change in the consumer price index, not seasonally adjusted.

Inflation Rate

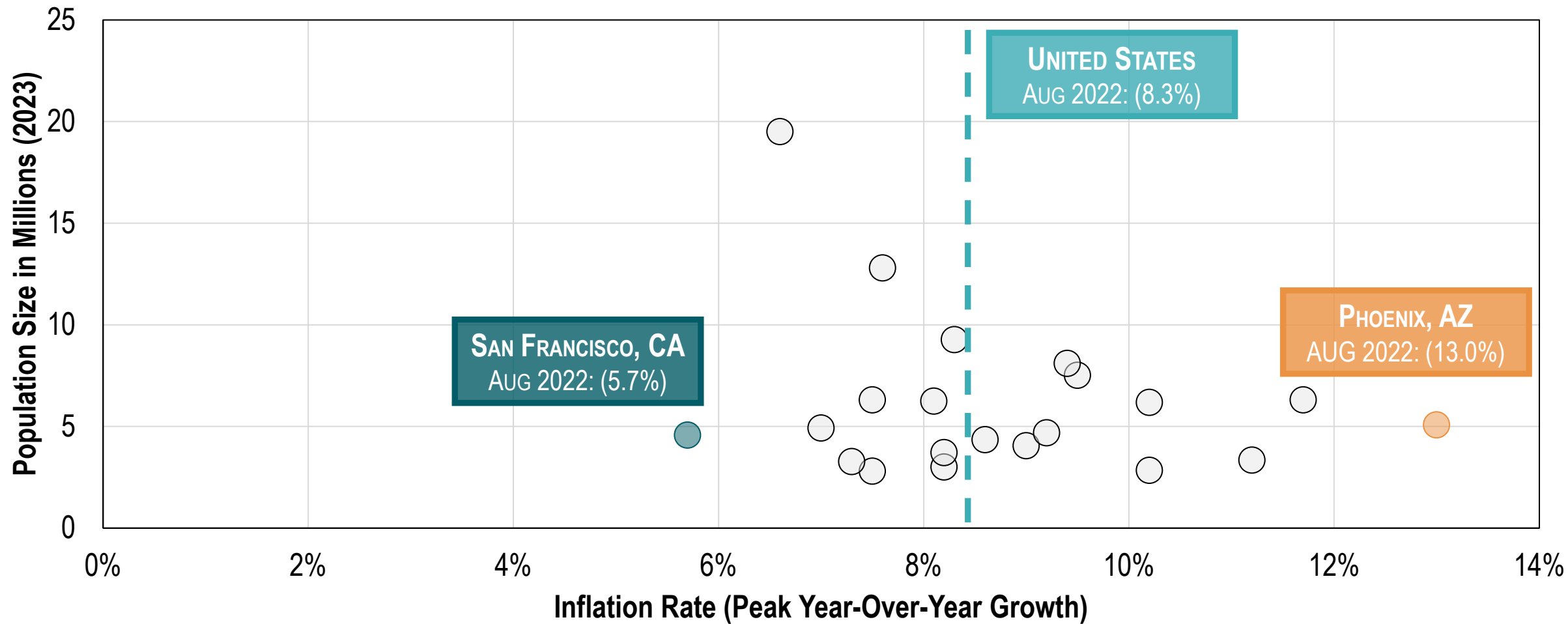
Consumer Price Index: All Items



Source: U.S. Bureau of Labor Statistics. Note: The inflation rate reflects year-over-year change in the consumer price index, not seasonally adjusted.

Inflation Rate

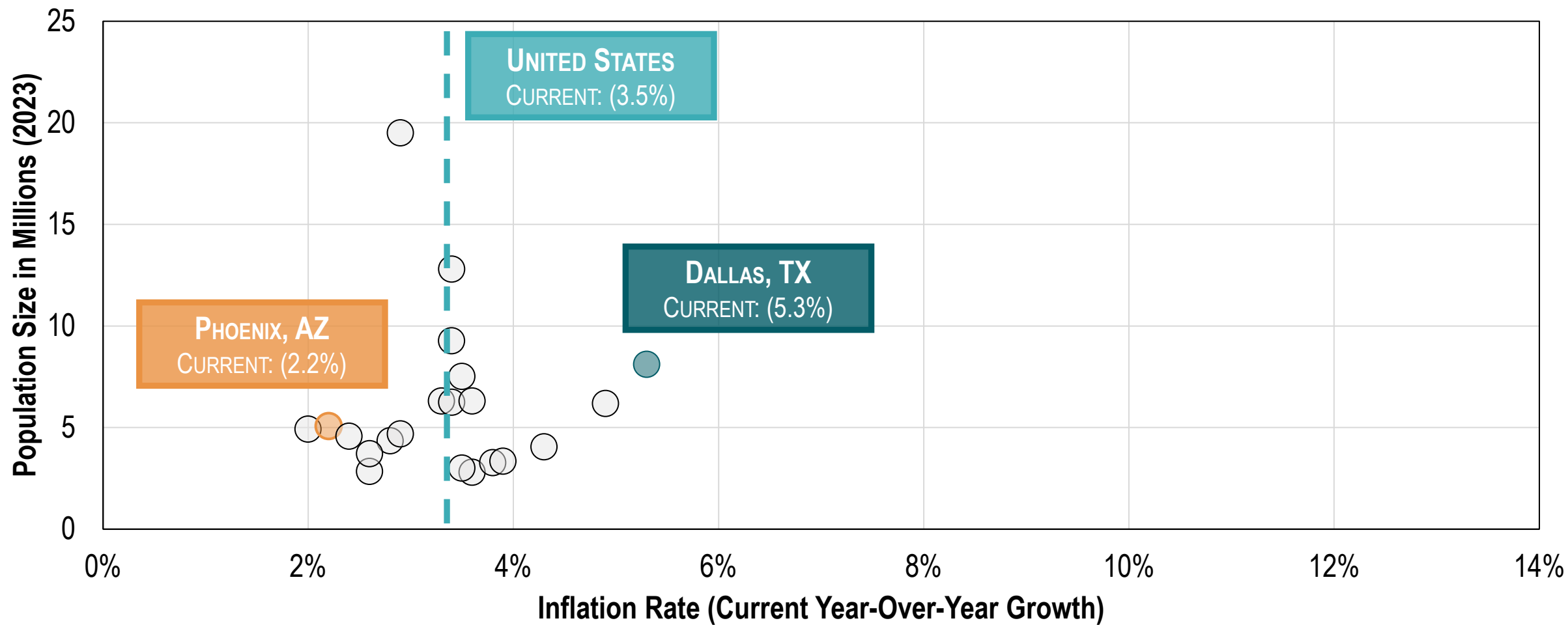
By MSA



Source: U.S. Bureau of Labor Statistics. Note: The inflation rate reflects year-over-year change in the consumer price index, not seasonally adjusted.

Inflation Rate

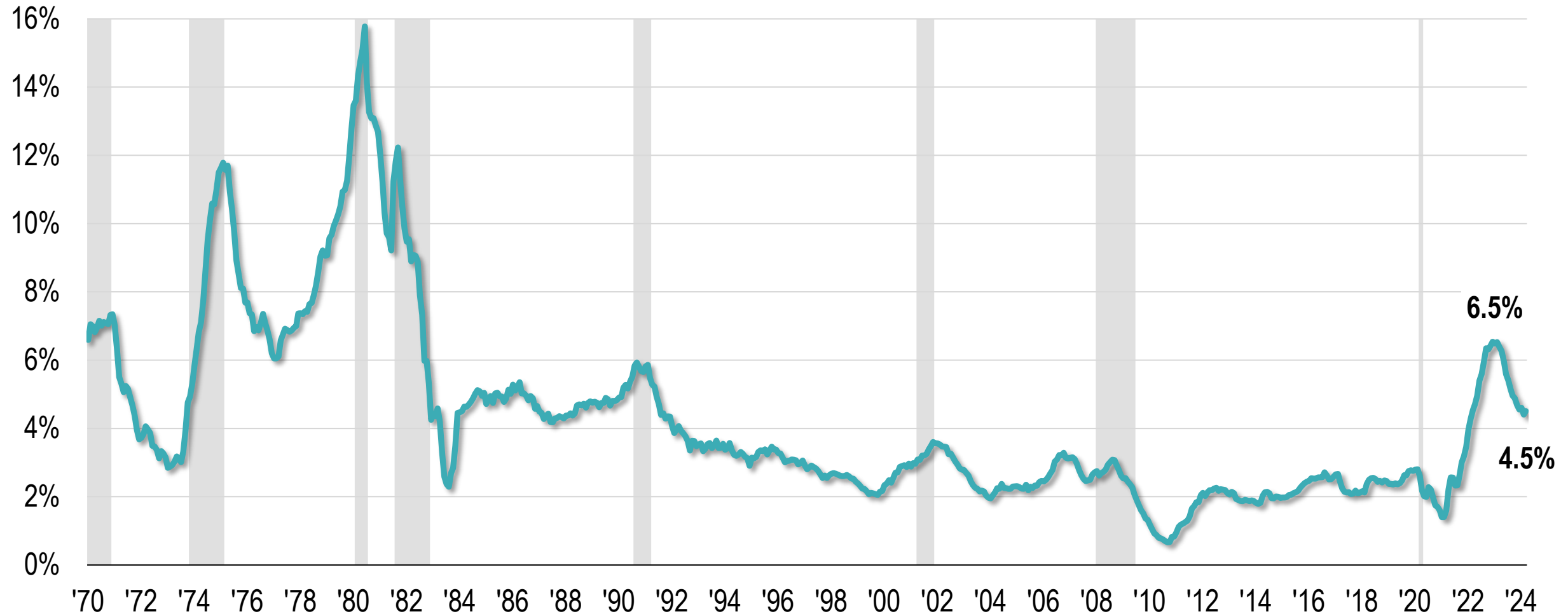
By MSA



Source: U.S. Bureau of Labor Statistics. Note: The inflation rate reflects year-over-year change in the consumer price index, not seasonally adjusted.

Sticky Price Inflation Rate

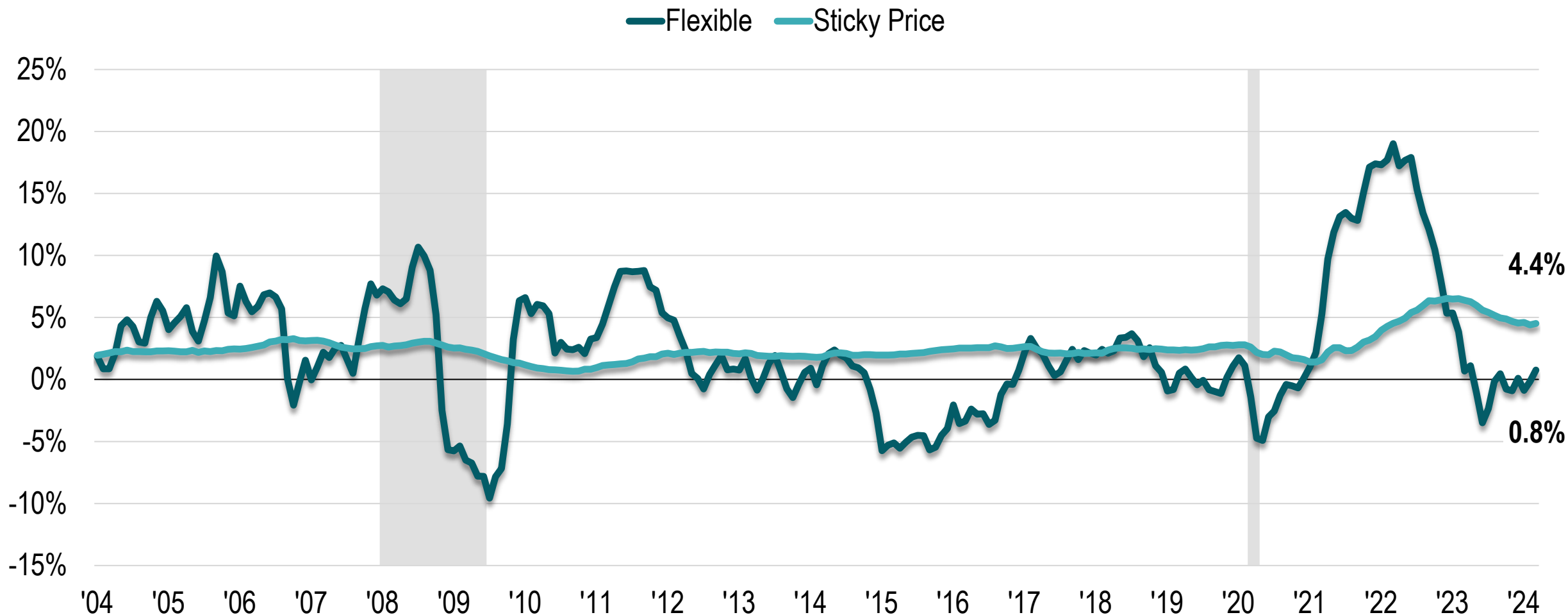
Consumer Price Index | Less Food and Energy



Source: Federal Reserve Bank of Atlanta. Note: The sticky price inflation rate reflects year-over-year change in the consumer price index, less food and energy, not seasonally adjusted.

Sticky Price vs. Flexible Price

United States | Consumer Price Index

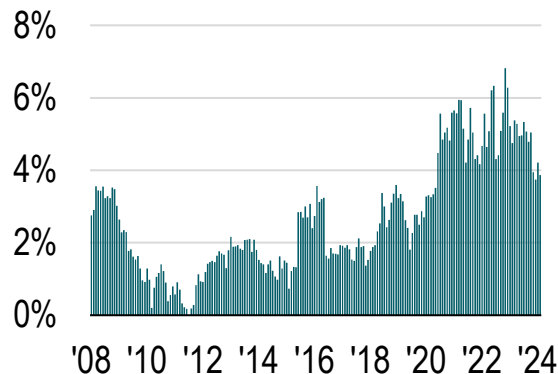


Source: Bureau of Labor Statistics. Note: Percent change from one year prior.

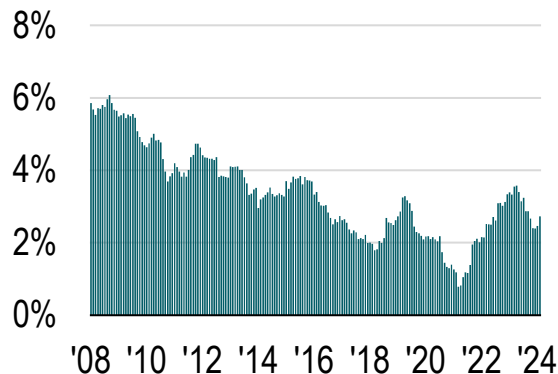
Sticky-Price Items

United States | Consumer Price Index

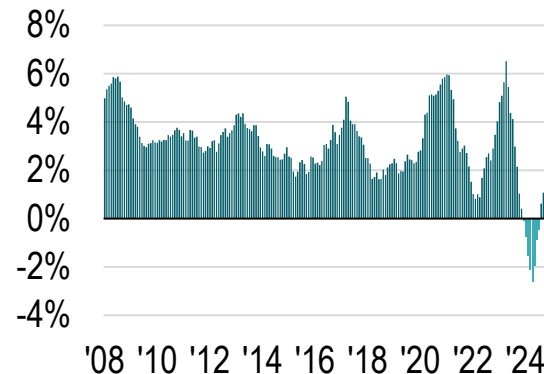
Personal Care Services



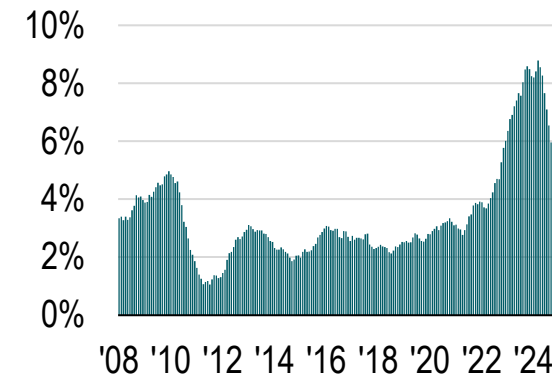
Education



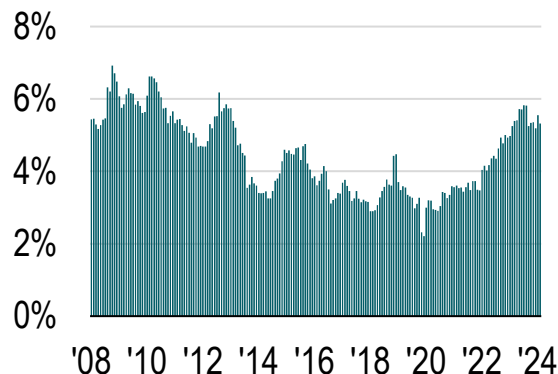
Medical Care Services



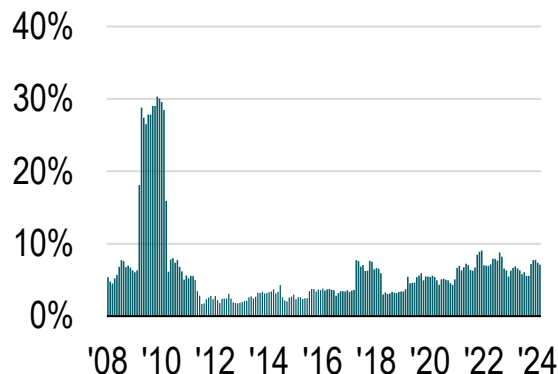
Food Away From Home



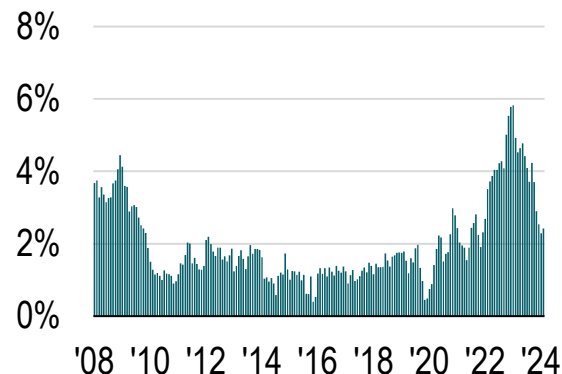
Water, Sewer and Trash



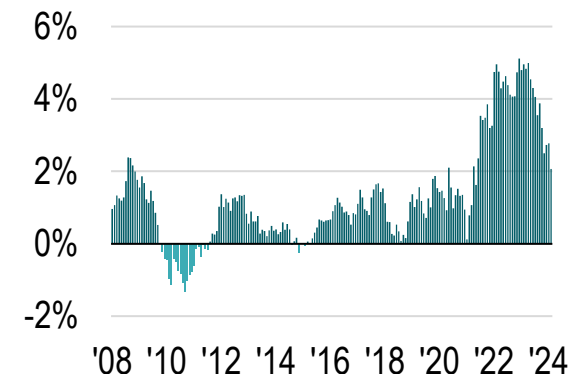
Tobacco and Smoking



Alcoholic Beverages



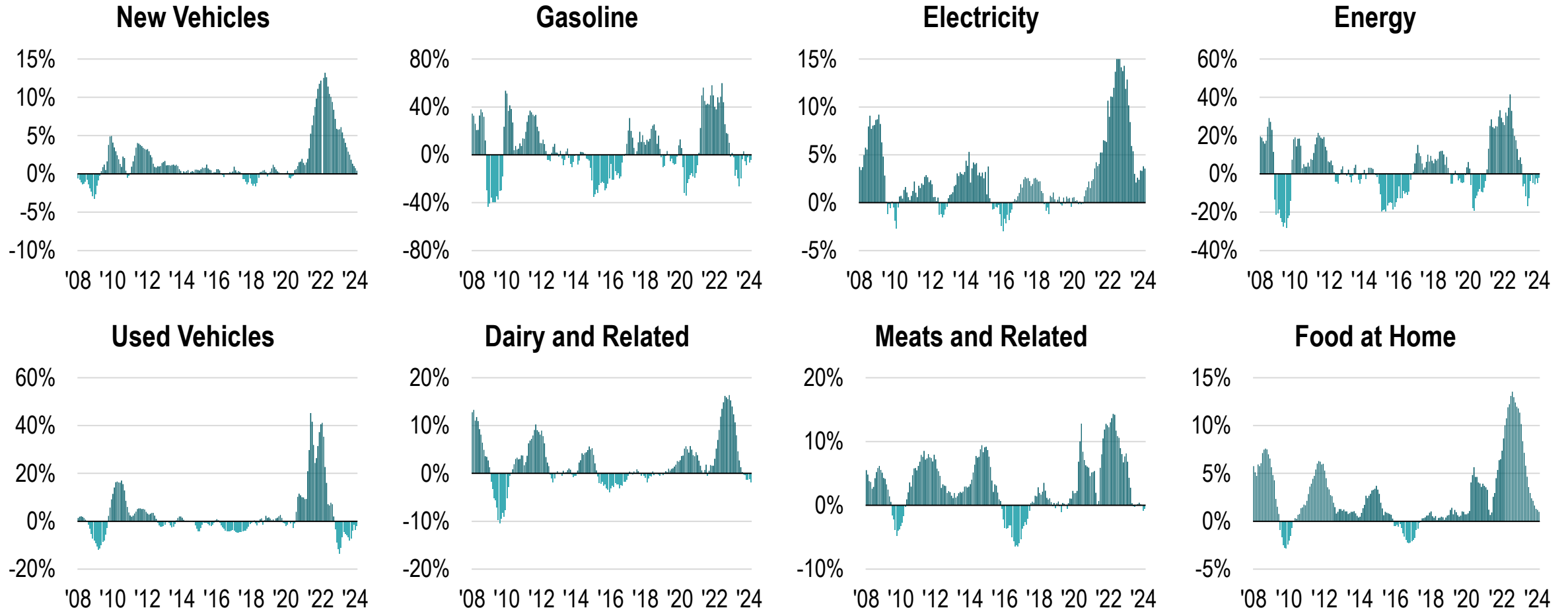
Recreation



Source: Bureau of Labor Statistics. Note: Percent change from one year prior.

Flexible-Price Items

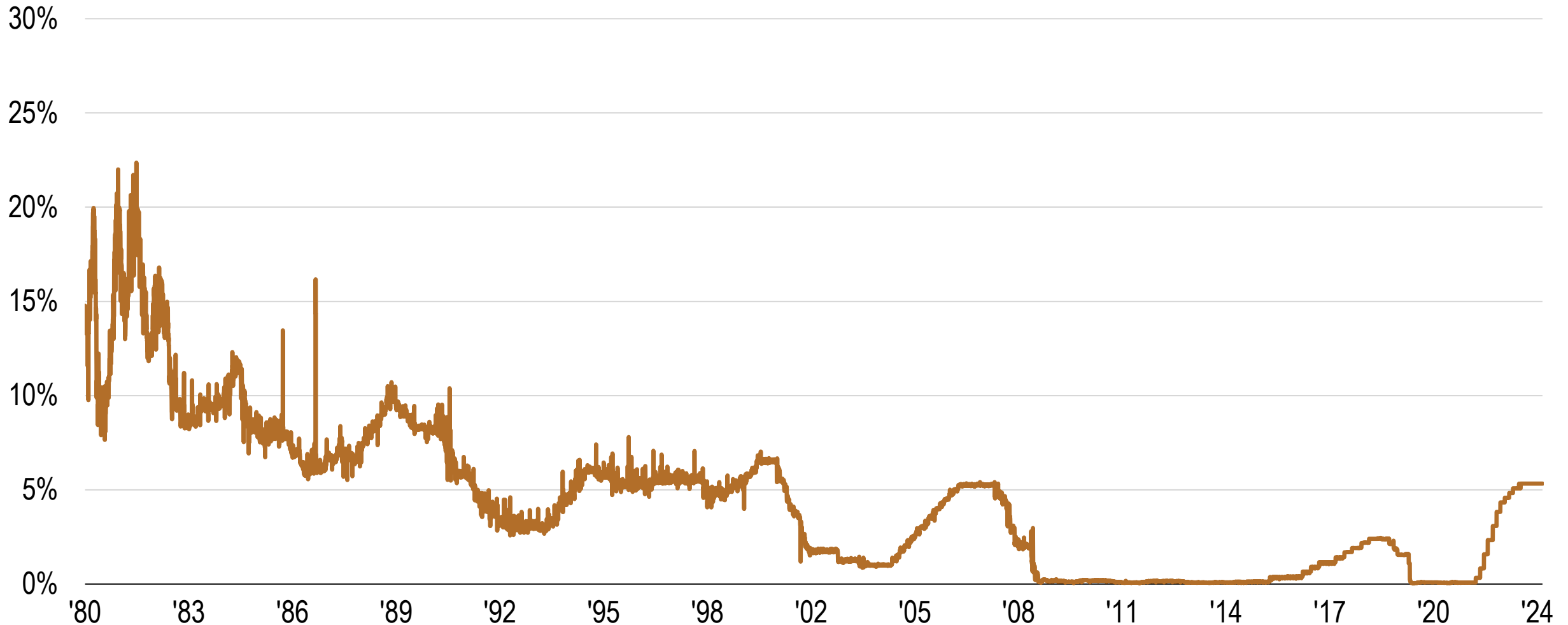
United States | Consumer Price Index



Source: Bureau of Labor Statistics. Note: Percent change from one year prior.

Effective Federal Funds Rate

Daily Since 1980

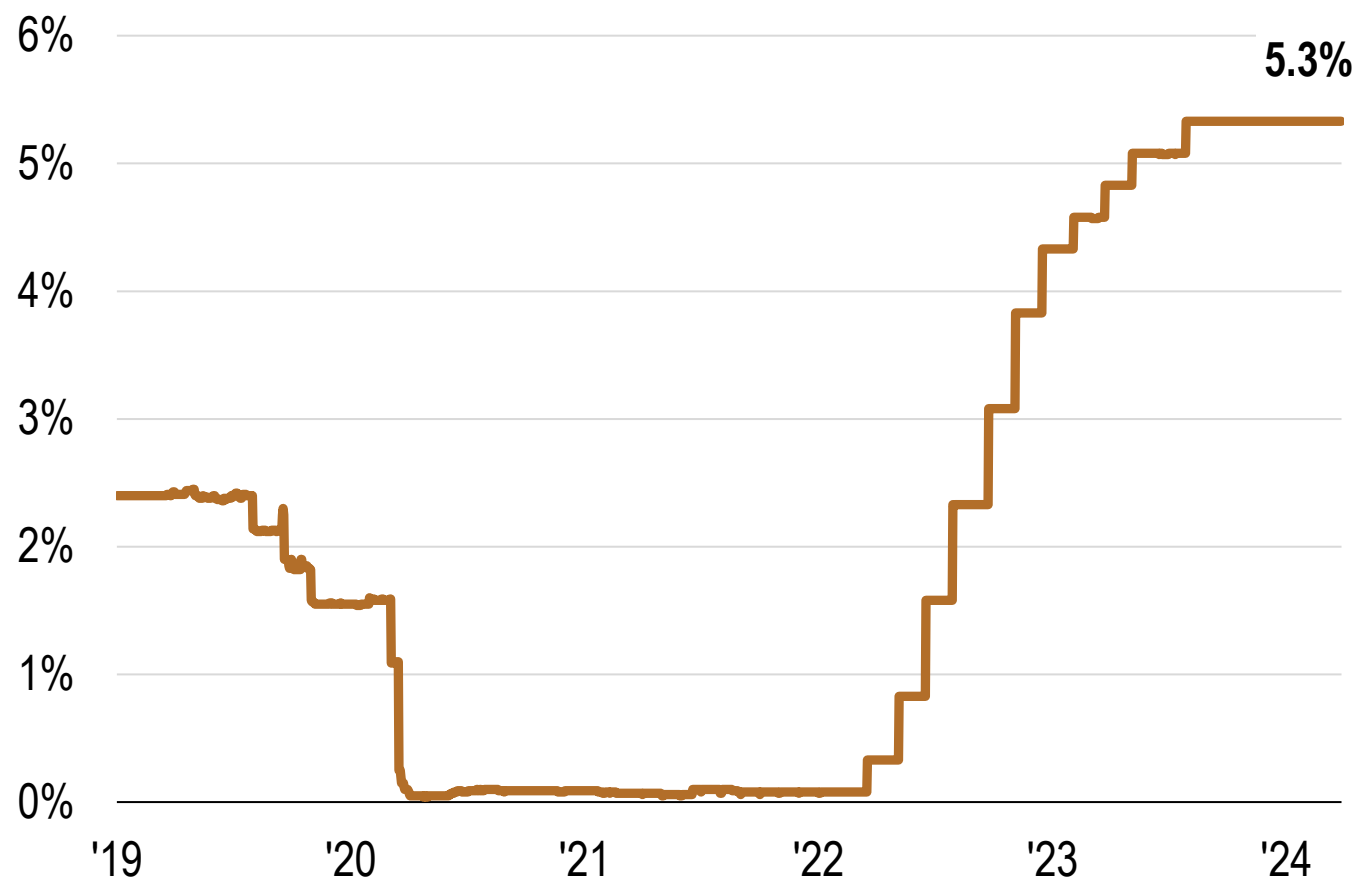


Source: Board of Governors of the Federal Reserve System

Federal Rate Hikes

2022 - 2023

Federal Funds Effective Rate

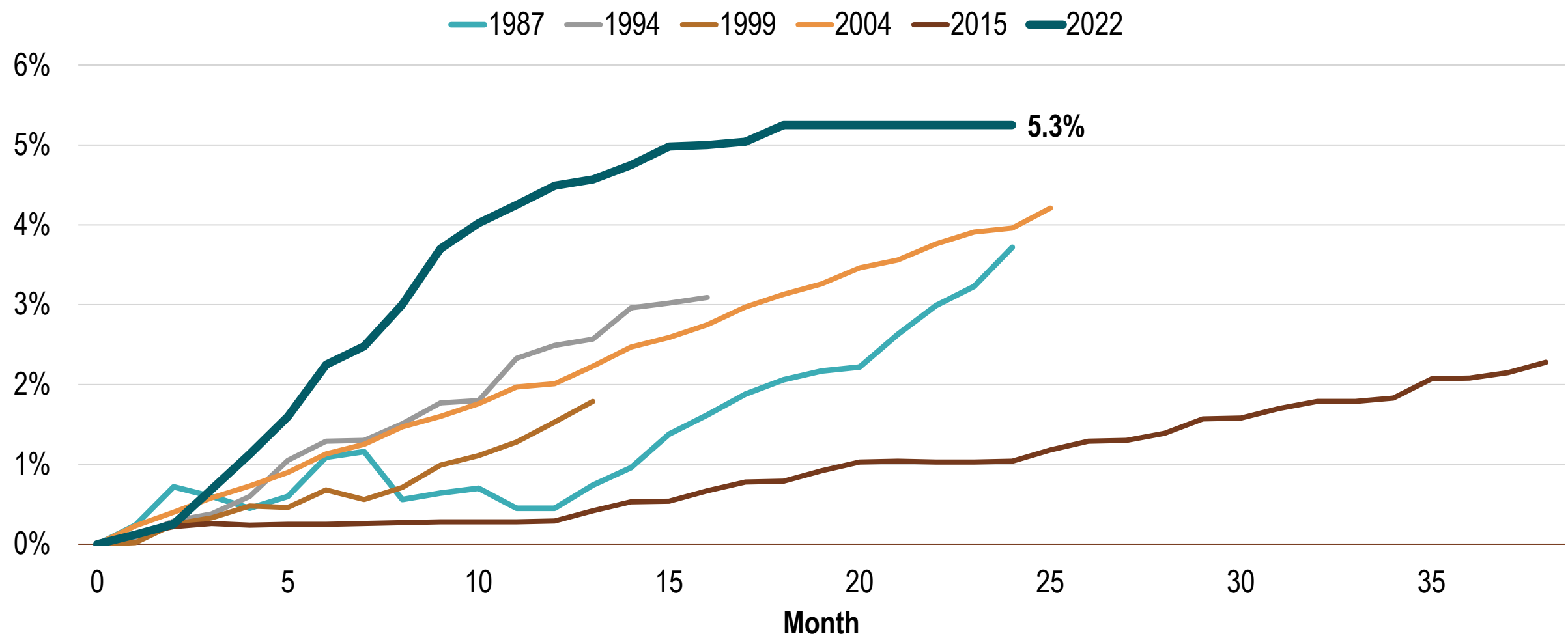


Federal Rate Hikes	
MEETING DATE	RATE CHANGE (BPS)
March 17, 2022	+25
May 5, 2022	+50
June 16, 2022	+75
July 27, 2022	+75
September 21, 2022	+75
November 2, 2022	+75
December 14, 2022	+50
February 1, 2023	+25
March 2, 2023	+25
May 3, 2023	+25
July 26, 2023	+25

Source: Board of Governors of the Federal Reserve System, Forbes. Note: BPS stands for “basis points” and reflects the change in the effect federal funds rate.

Federal Rate Hike Cycle

Change in Rates Since Hiking Began



Source: Federal Reserve Bank of St. Louis



Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



NATIONAL BANK OF ARIZONA

INFLATION IMPACTS

SPRING 2024





Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)

Cost of Living

Phoenix MSA | Percent More Expensive Relative to the United States



Q4 2022



+4.3%



+23.8%

Q4 2023



+1.9%



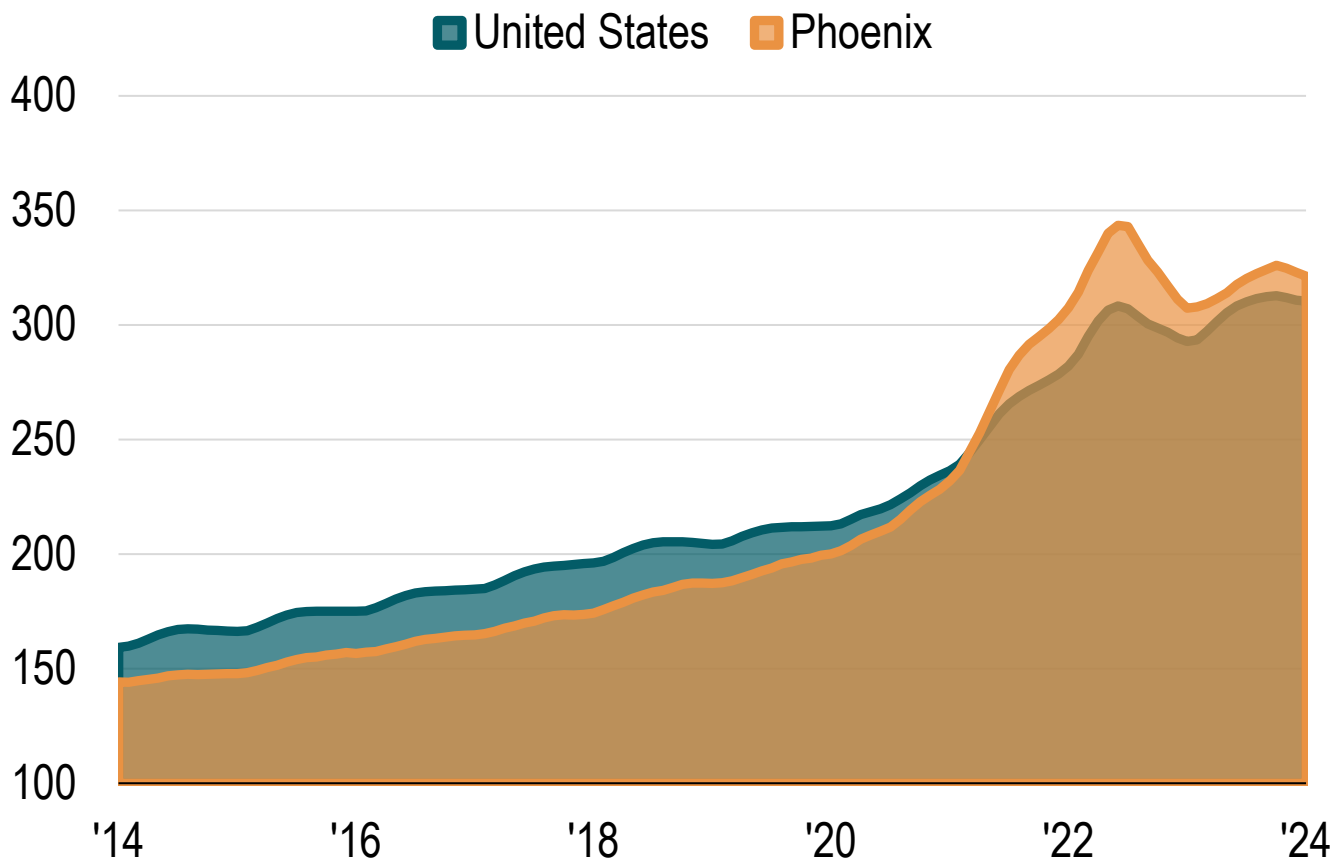
+15.8%

Source: The Council For Community and Economic Research. Note: Image is sourced to (Virrage Images/shutterstock.com).

Housing Prices

United States vs. Phoenix MSA

Case-Shiller Home Price Index



Home Prices			
	Q4 2022	Q4 2023	GROWTH
United States	\$450,913	\$485,506	+7.7%
Phoenix, AZ	\$497,561	\$518,848	+4.3%

Apartment Rent			
	Q4 2022	Q4 2023	GROWTH
United States	\$1,371	\$1,496	+9.1%
Phoenix, AZ	\$2,083	\$2,051	-1.5%

Source: S&P CoreLogic Case-Shiller U.S. National Home Price Index and The Council for Community and Economic Research

Cost of Living

Among Western Metropolitan Areas

COST OF LIVING (UNITED STATES = 100)

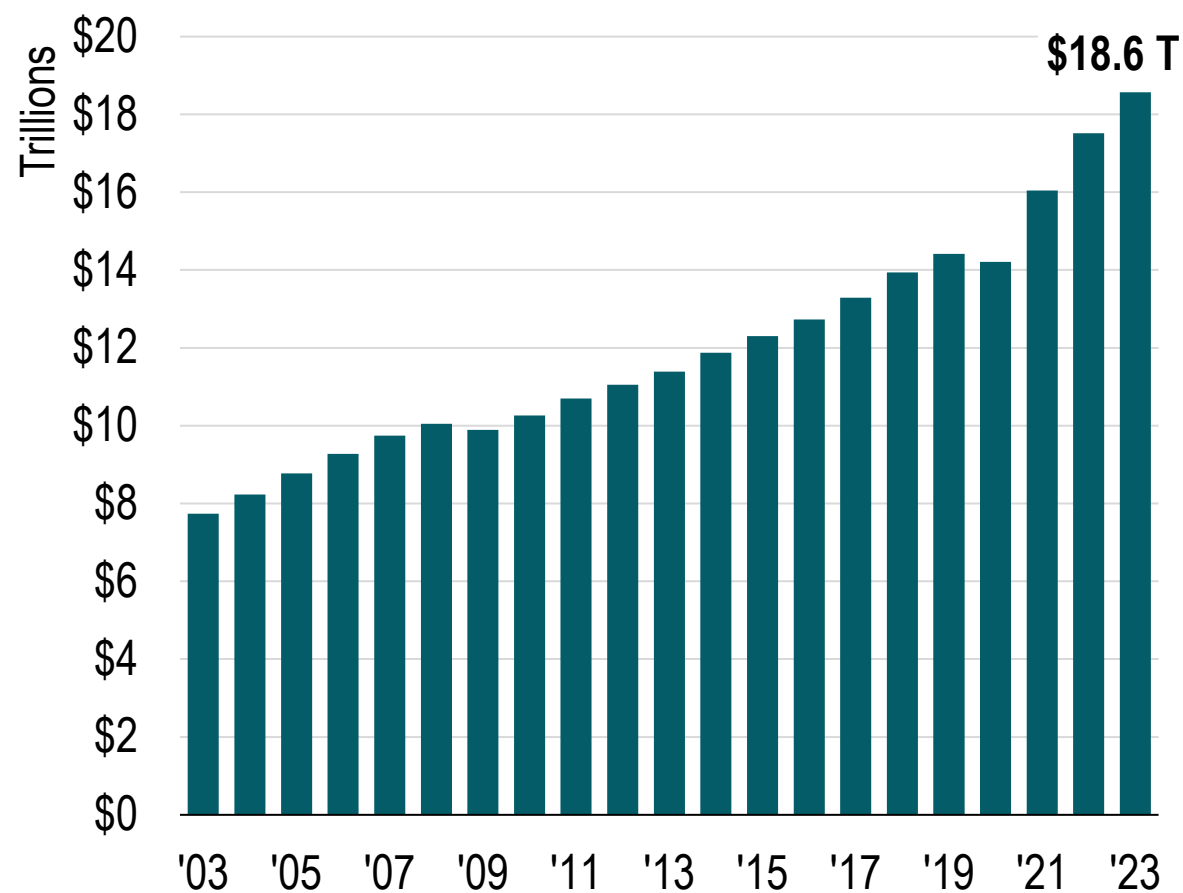
	HOUSING	OVERALL
San Francisco, CA	+187.3%	+70.0%
Los Angeles, CA	+134.5%	+48.9%
Seattle, WA	+110.1%	+44.6%
San Diego, CA	+113.6%	+42.0%
Portland, OR	+48.9%	+20.2%
Sacramento, CA	+39.6%	+19.4%
Denver, CO	+29.8%	+10.3%
Salt Lake City, UT	+22.5%	+8.7%
PHOENIX, AZ	+15.8%	+1.9%
Las Vegas NV	3.9%	-2.4%

Source: The Council for Community and Economic Research

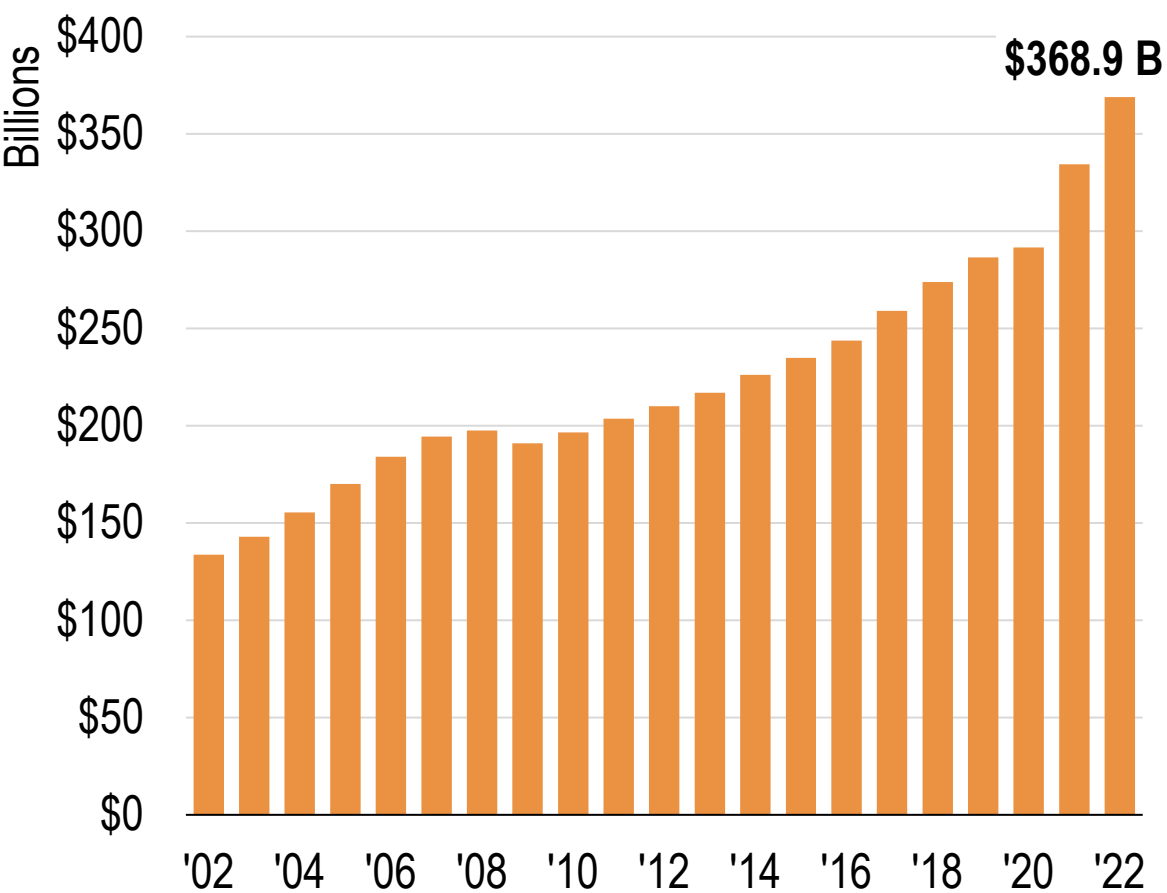
Consumer Spending

Personal Consumption Expenditures

United States



Arizona

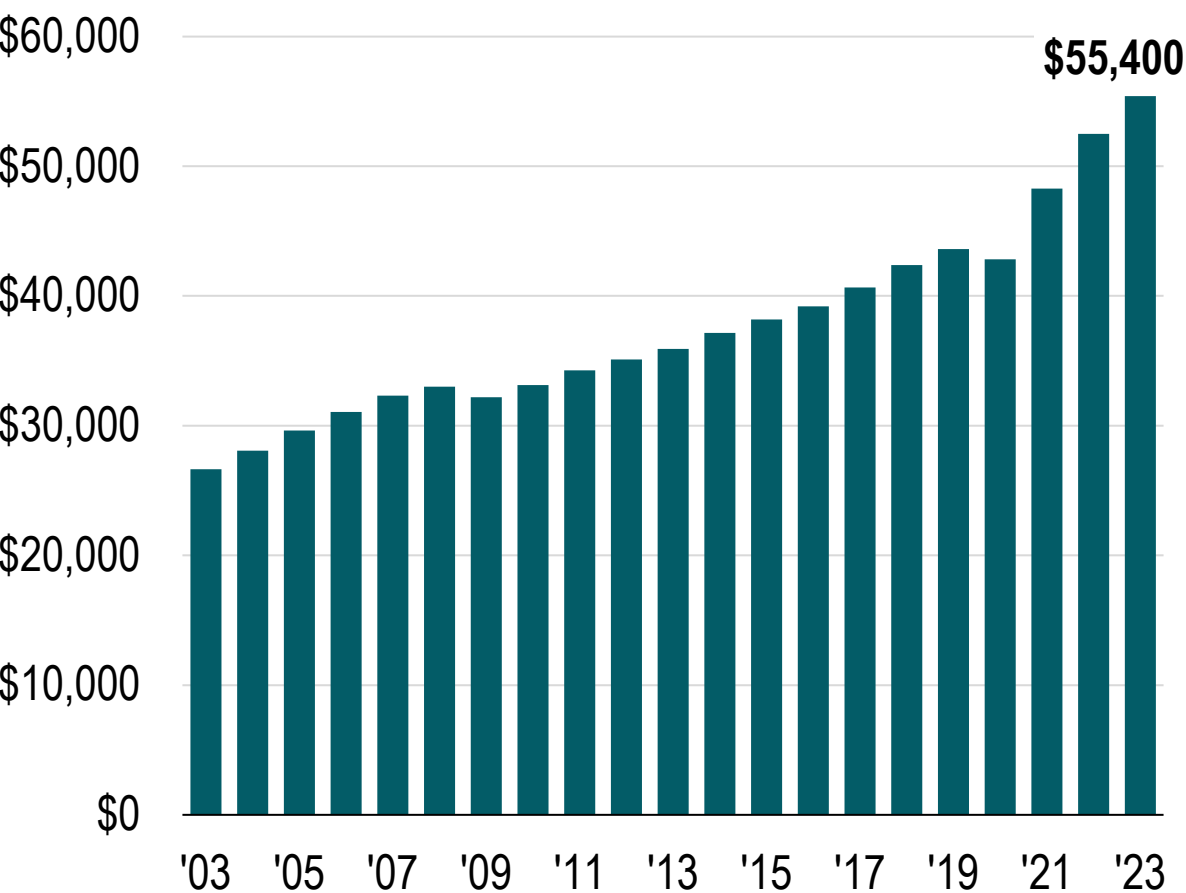


Source: U.S. Bureau of Economic Analysis. Note: The most recent data available for Arizona is 2022.

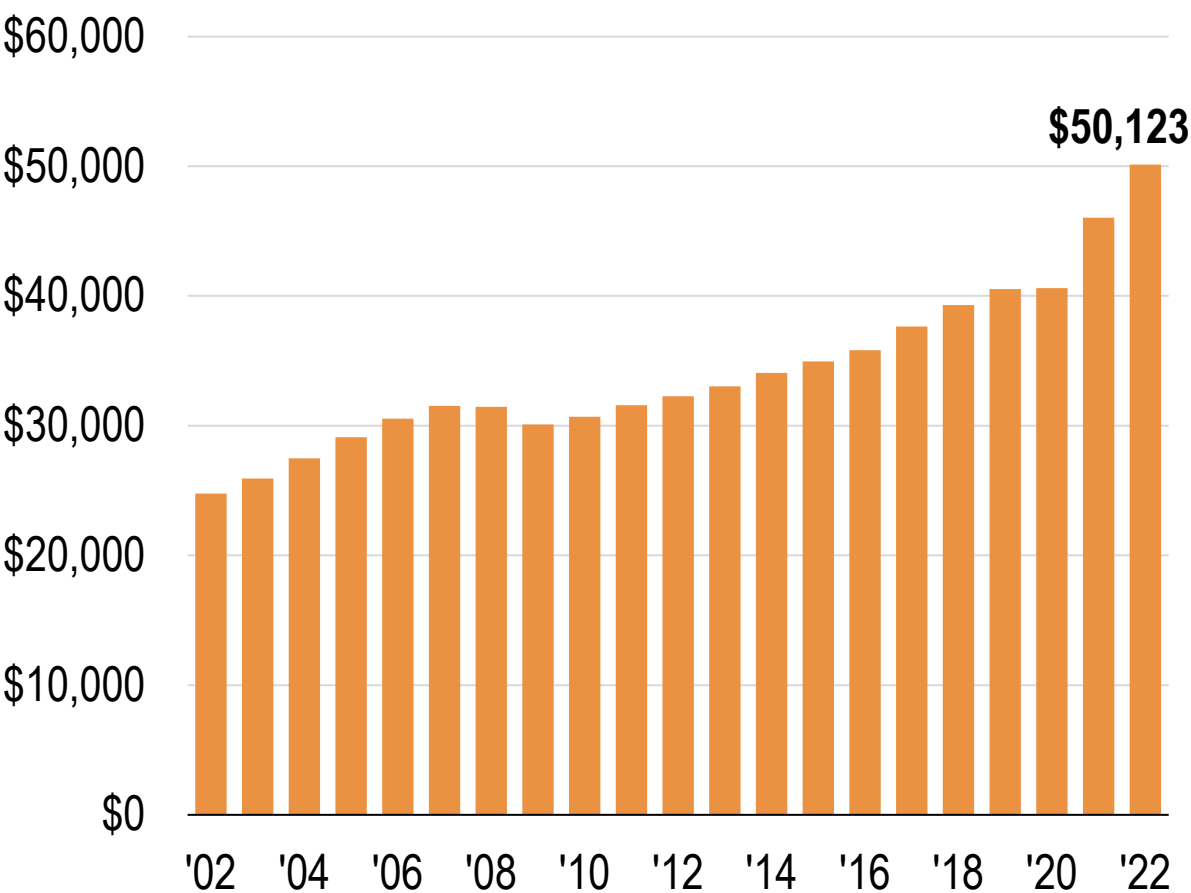
Consumer Spending

Personal Consumption Expenditures Per Capita

United States



Arizona



Source: U.S. Bureau of Economic Analysis. Note: The most recent data available for Arizona is 2022.



Source: The New York Times (August 25, 2023). Note: Image is sourced to (doublelee/shutterstock.com).

U.S. CONSUMERS SHOW SIGNS OF STRESS

“After a post-pandemic shopping spree, some Americans are becoming more selective with their spending as they struggle with factors like inflation. Although overall consumer spending remains strong, analysts say they detect worrying shifts in shopping habits.”

The Shopper's Dilemma



UNITED STATES

Q1 2020

Q4 2023

Wine

\$8.95

\$12.26

Eggs

\$1.52

\$4.12

Ibuprofen

\$9.34

\$10.63

Detergent

\$6.24

\$19.62

Total

\$26.05

\$46.63

Source: The Council for Community and Economic Research. Note: Images are sourced to (Creative Cat Studio/shutterstock.com).



+79%

INCREASE IN TOTAL SPENT

Image Source: (perfectlab/shutterstock.com)



NATIONAL BANK OF ARIZONA

INFLATION IMPACTS

SPRING 2024

APPLIED
ANALYSIS



Pricing Pain | United States

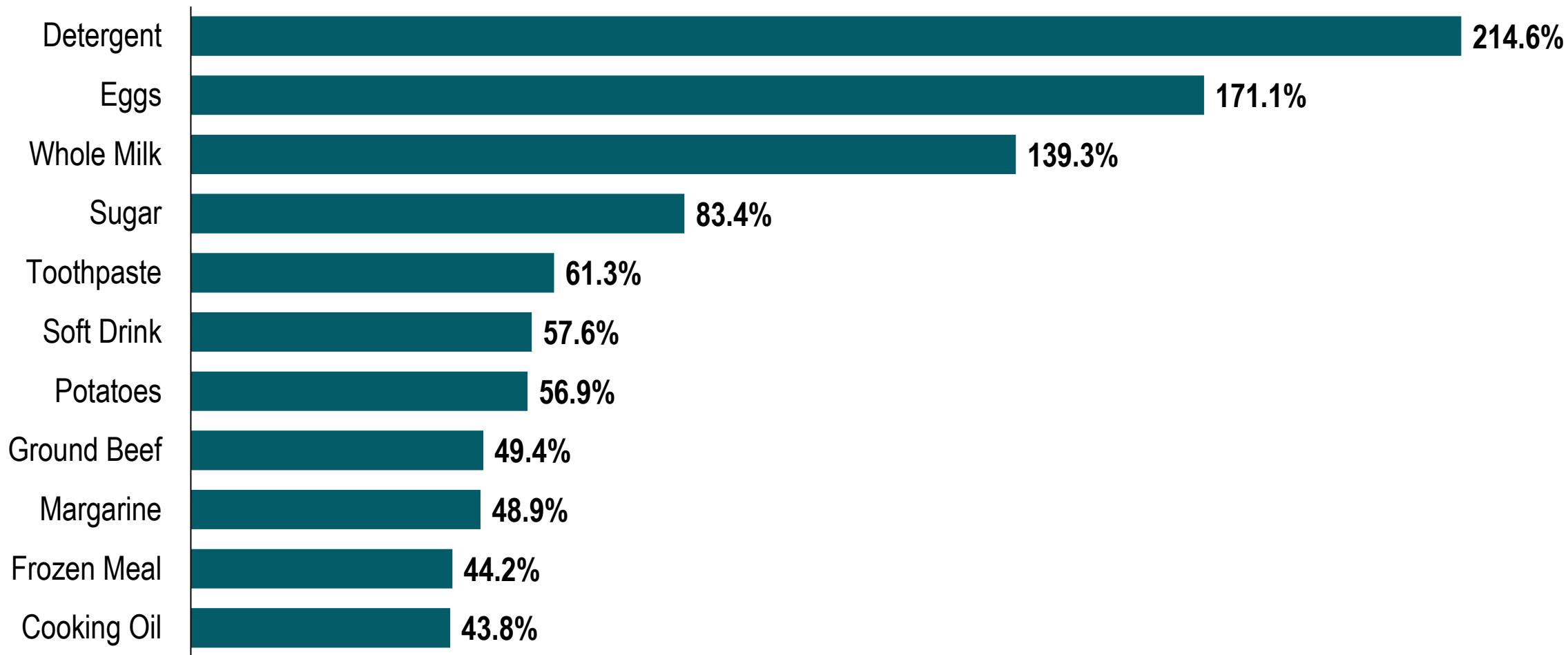
Selected Items

ITEM	FEBRUARY 2020	FEBRUARY 2024	INCREASE IN COSTS
Detergent	\$6.24	\$19.62	+\$13.38
Eggs (One Dozen)	\$1.52	\$4.12	+\$2.60
Whole Milk (1/2-Gallon)	\$1.95	\$4.68	+\$2.72
Sugar (5 lbs.)	\$2.23	\$4.09	+\$1.86
Toothpaste	\$2.30	\$3.71	+\$1.41
Soft Drink (2-Liter)	\$1.77	\$2.78	+\$1.02
Potatoes (5 lbs.)	\$3.16	\$4.95	+\$1.79
Ground Beef (1 lb.)	\$3.90	\$5.83	+\$1.93
Margarine (1 lb.)	\$1.11	\$1.66	+\$0.54
Frozen Meal	\$2.60	\$3.74	+\$1.15
Cooking Oil	\$5.02	\$7.22	+\$2.20

Source: The Council for Community and Economic Research

Pricing Pain | United States

Percent Price Increases | Q1 2020 vs. Q4 2024



Source: The Council for Community and Economic Research

The Shopper's Dilemma



ARIZONA

Q1 2020

Q4 2023

Wine

\$5.36

\$12.63

Eggs

\$1.95

\$5.25

Ibuprofen

\$7.99

\$11.04

Detergent

\$6.00

\$20.78

Total

\$21.30

\$49.70

Source: The Council for Community and Economic Research. Note: Image is sourced to (G-Stock Studio/shutterstock.com).



+133%

INCREASE IN TOTAL SPENT

Image Source: (perfectlab/shutterstock.com)

Pricing Pain | Arizona

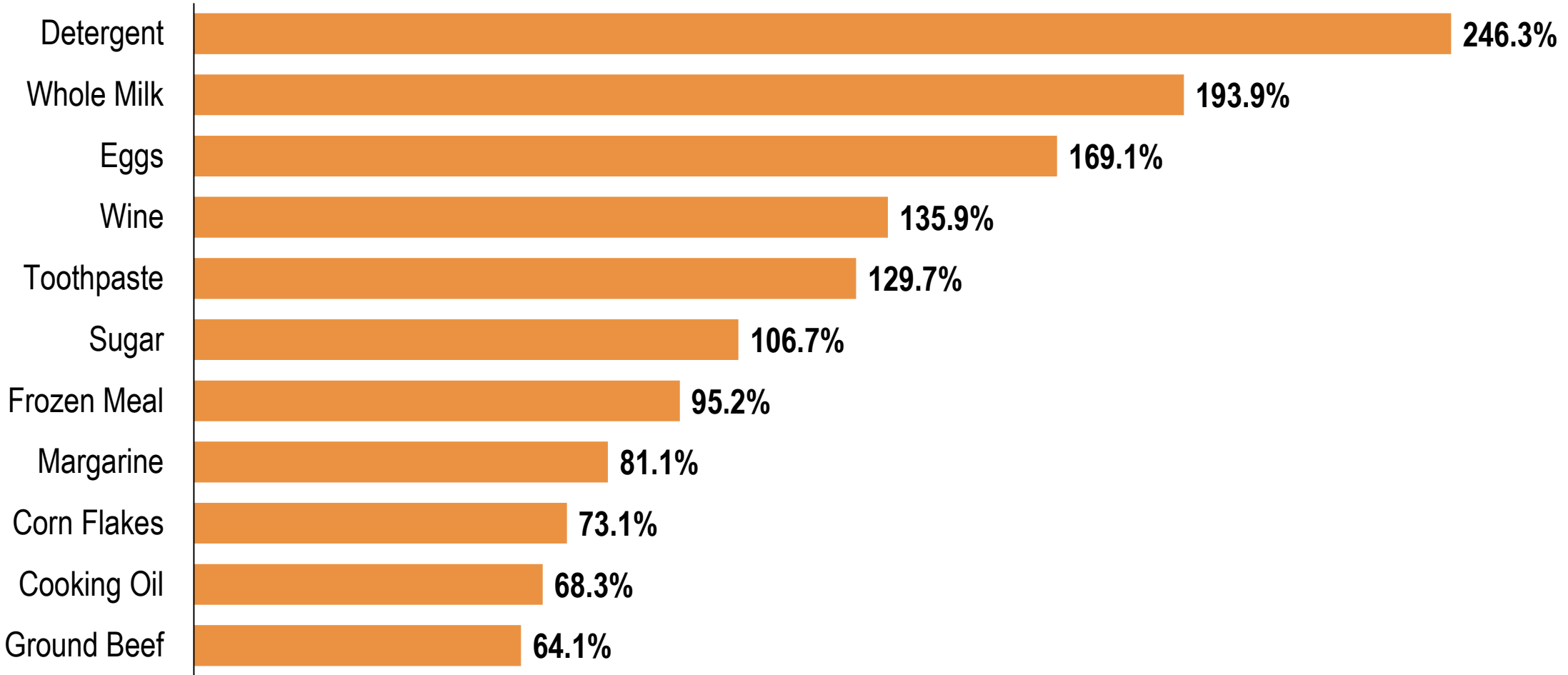
Selected Items

ITEM	Q1 2020	Q4 2024	INCREASE IN COSTS
Detergent	\$6.00	\$20.78	+ \$14.78
Whole Milk (1/2-Gallon)	\$1.63	\$4.78	+ \$3.16
Eggs (One Dozen)	\$1.95	\$5.25	+ \$3.30
Wine	\$5.36	\$12.63	+ \$7.28
Toothpaste	\$1.54	\$3.54	+ \$2.00
Sugar (5 lbs.)	\$1.98	\$4.09	+ \$2.11
Frozen Meal	\$2.04	\$3.98	+ \$1.94
Margarine (1 lb.)	\$0.97	\$1.76	+ \$0.79
Corn Flakes	\$3.25	\$5.62	+ \$2.37
Cooking Oil	\$4.41	\$7.43	+ \$3.01
Ground Beef (1 lb.)	\$3.76	\$6.17	+ \$2.41

Source: The Council for Community and Economic Research

Pricing Pain | Arizona

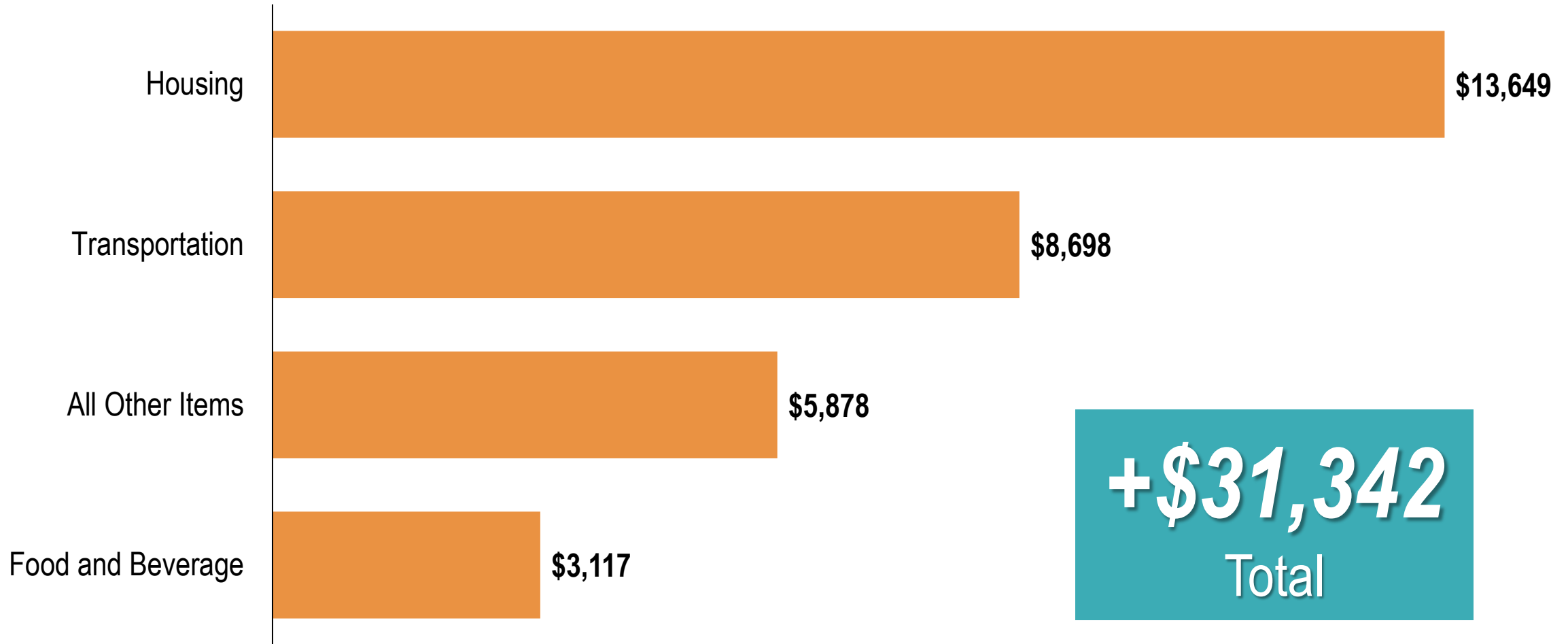
Percent Price Increases | Q1 2020 vs. Q4 2024



Source: The Council for Community and Economic Research

Overall Cost Increases | Phoenix

Last 3 Years



Source: BLS



NATIONAL BANK OF ARIZONA

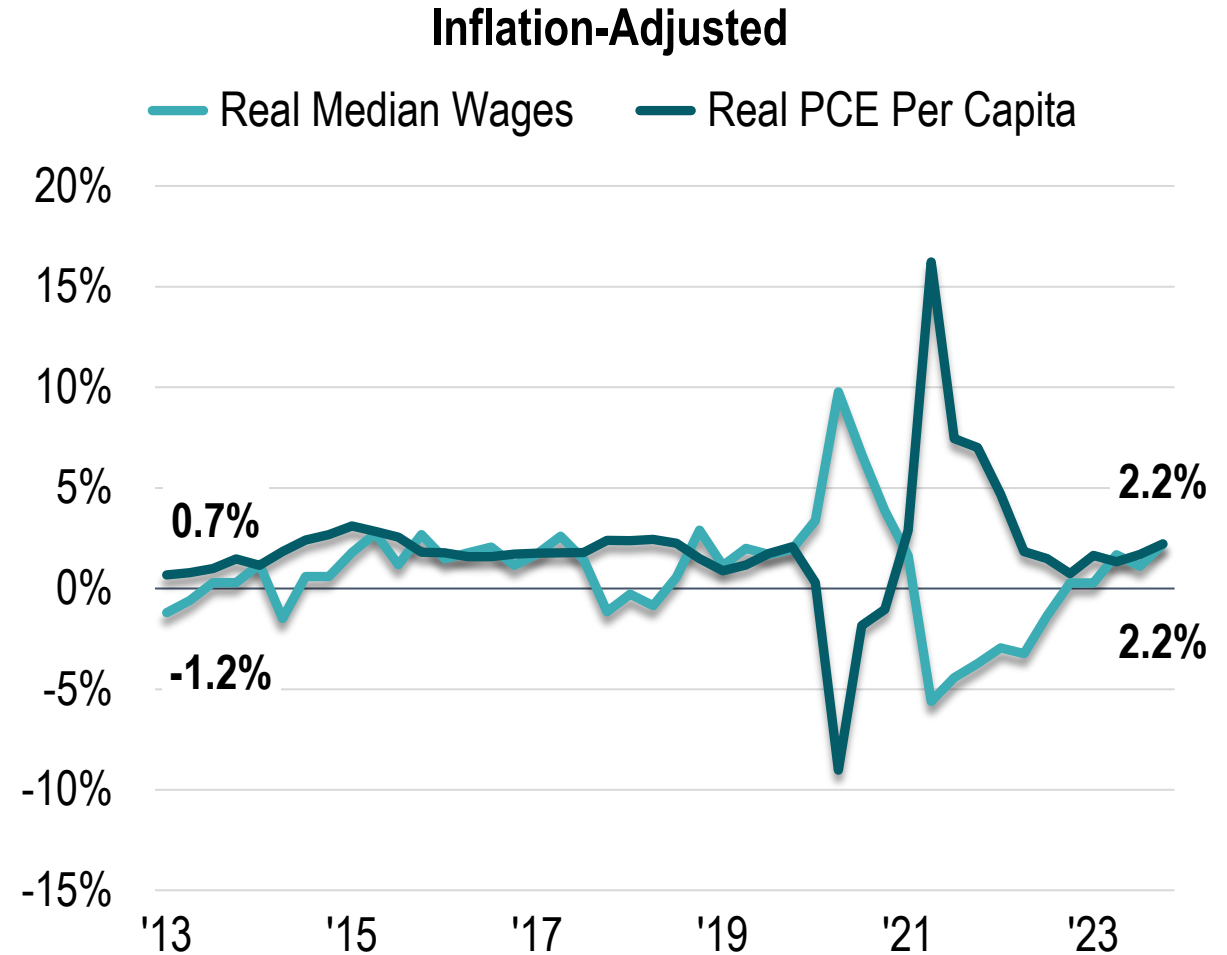
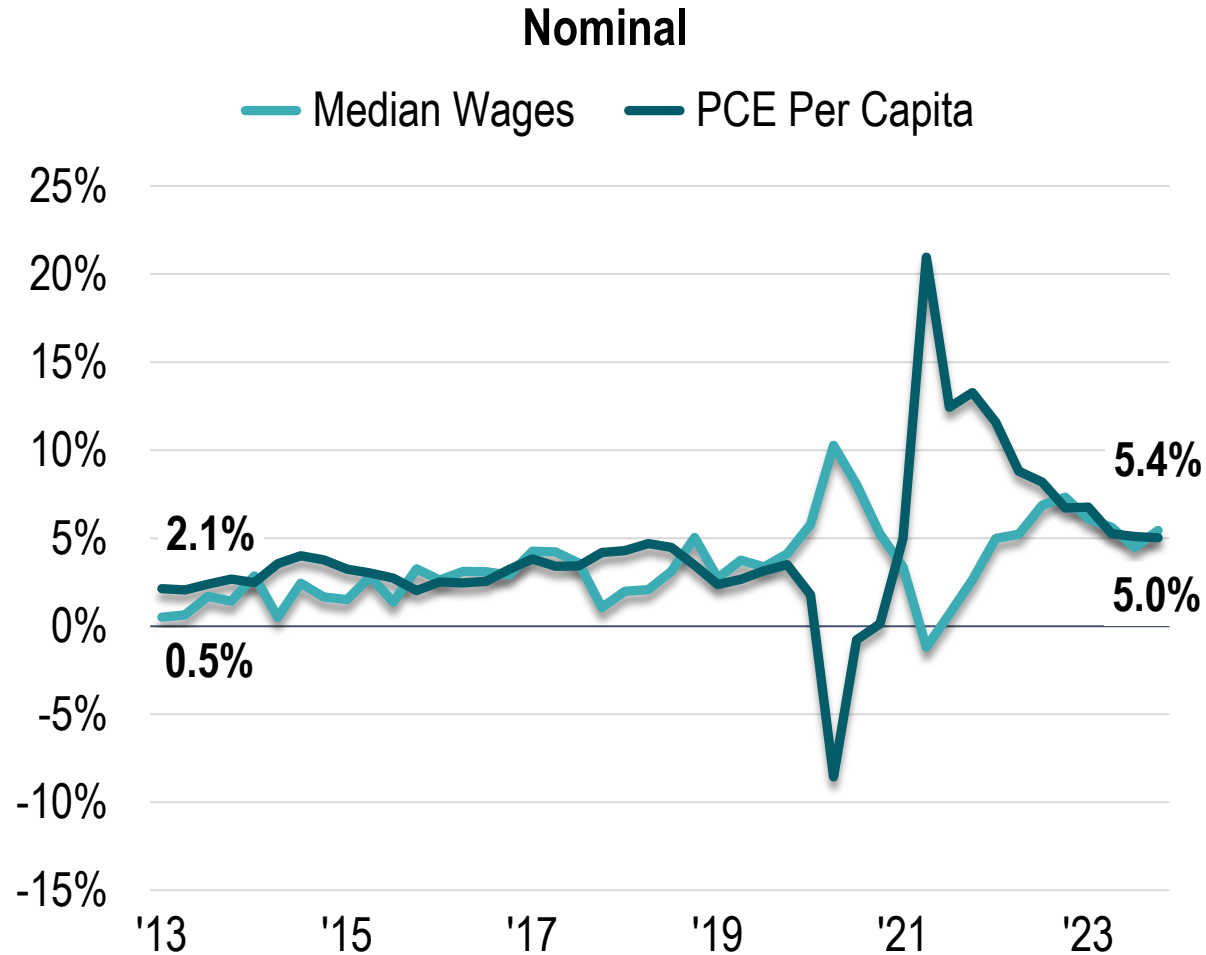
INFLATION IMPACTS

SPRING 2024



Wages vs. Spending

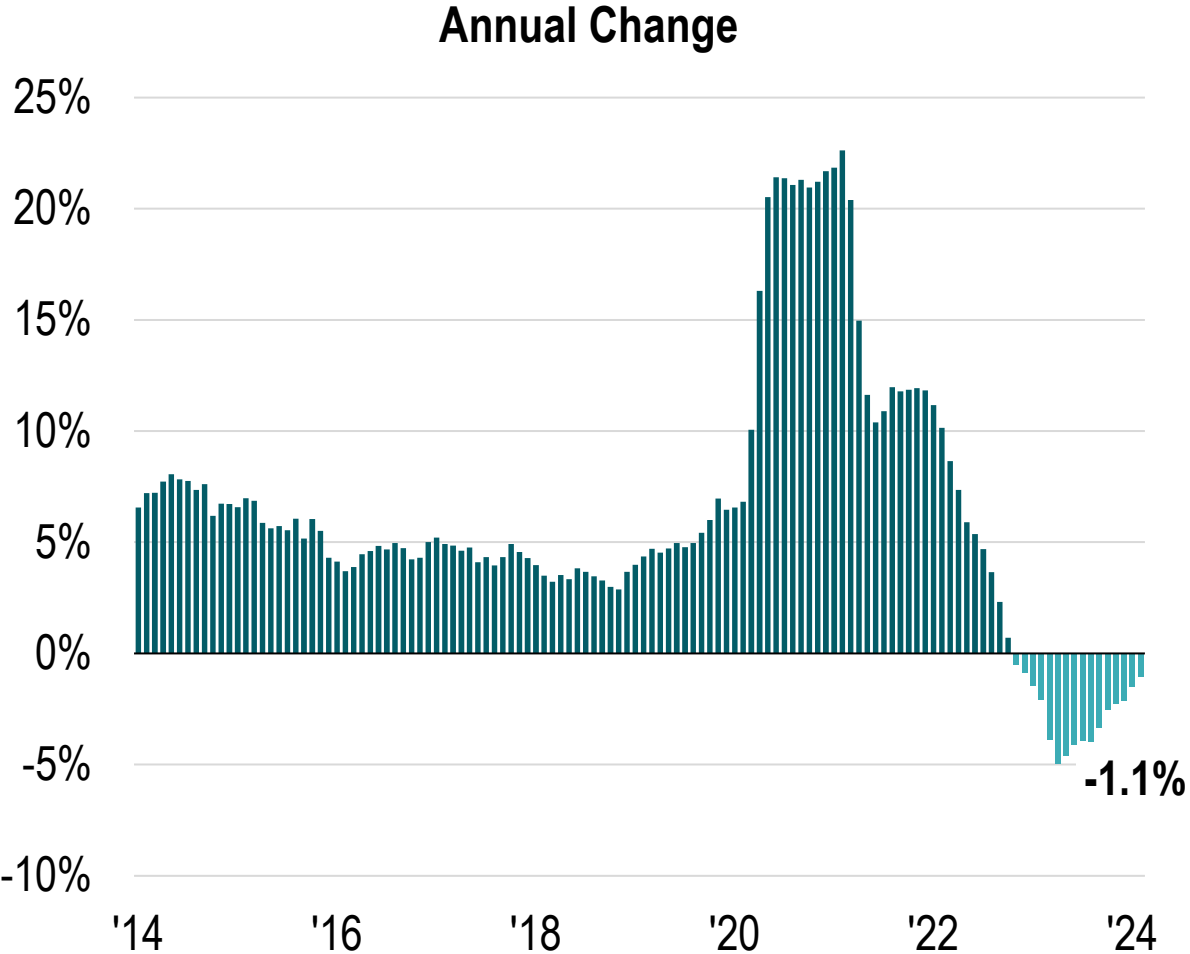
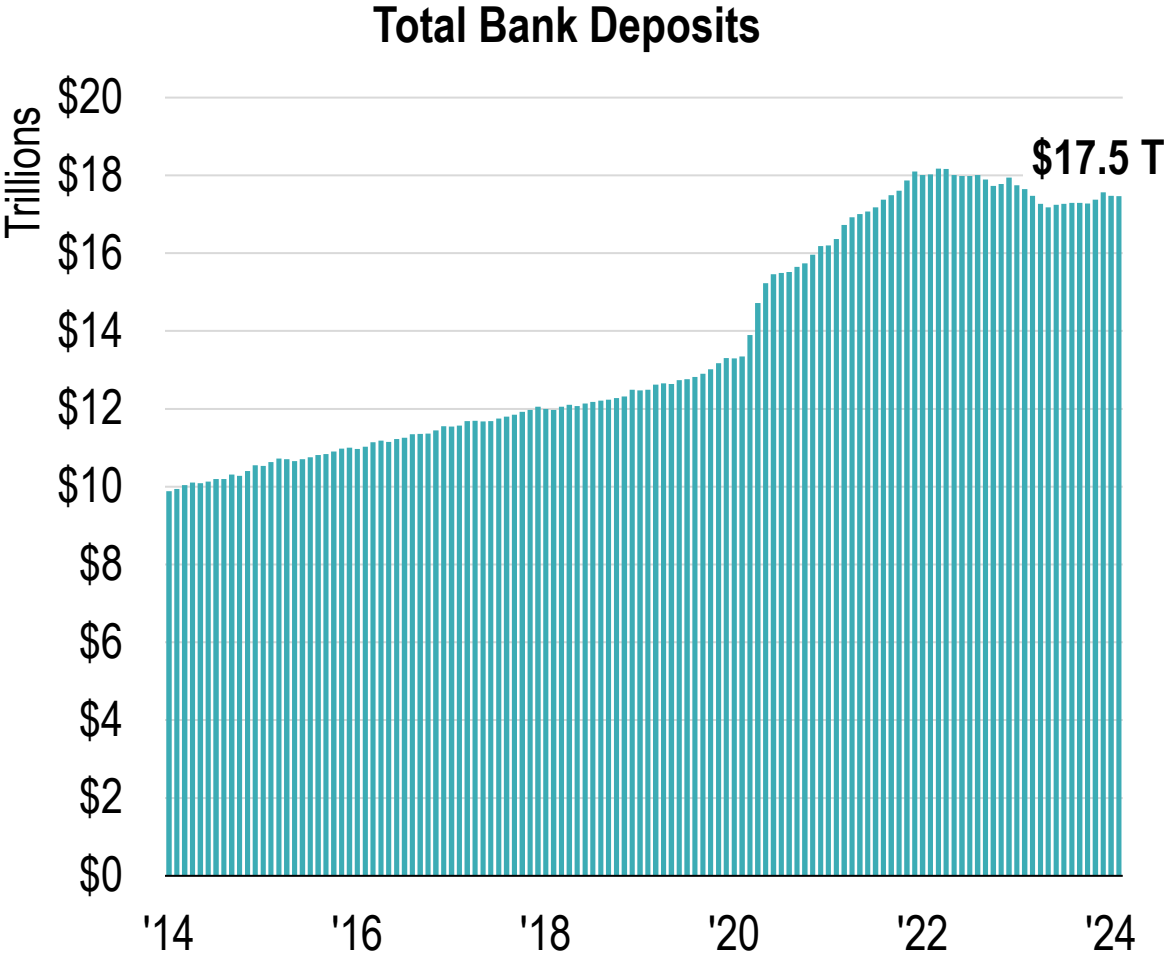
United States | Annual Change



Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and Applied Analysis. Note: PCE = Personal Consumption Expenditures.

Bank Deposits

United States | All Commercial Banks

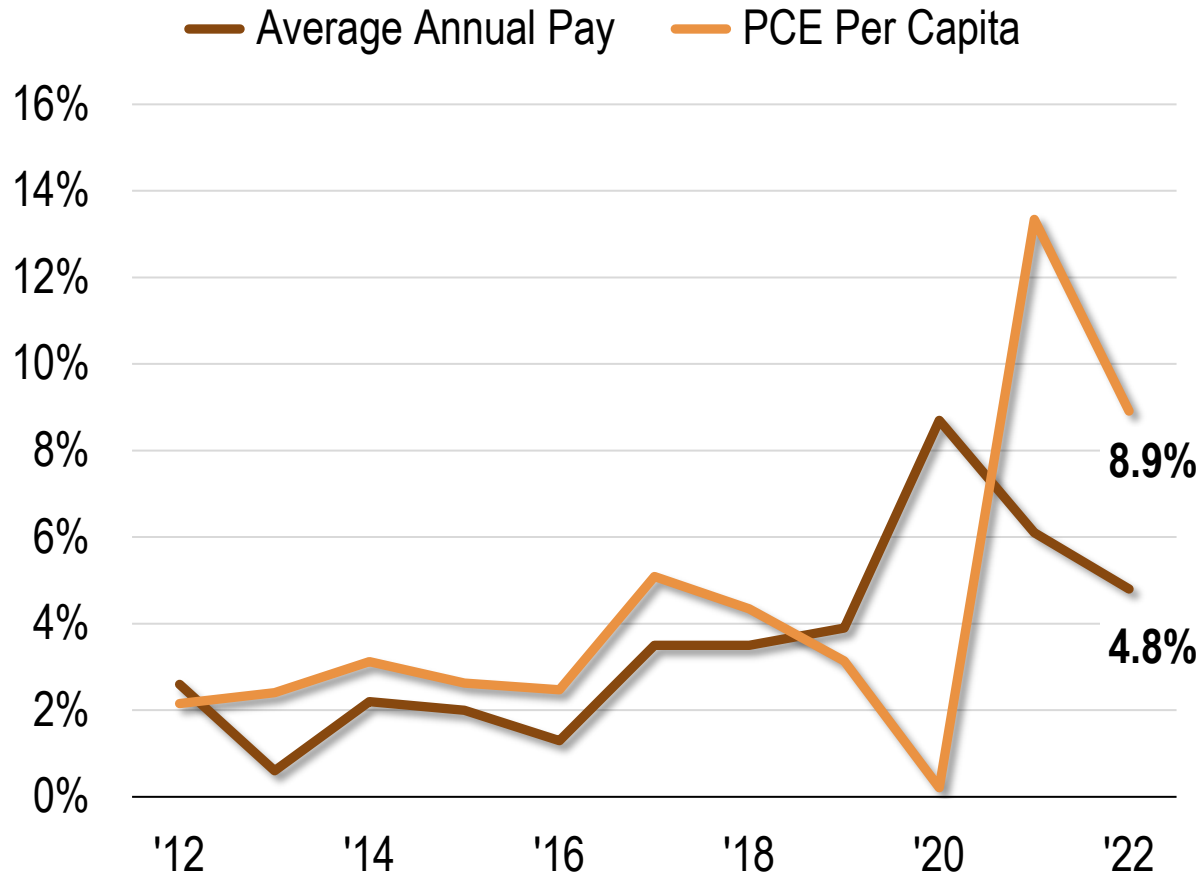


Source: Board of Governors of the Federal Reserve System

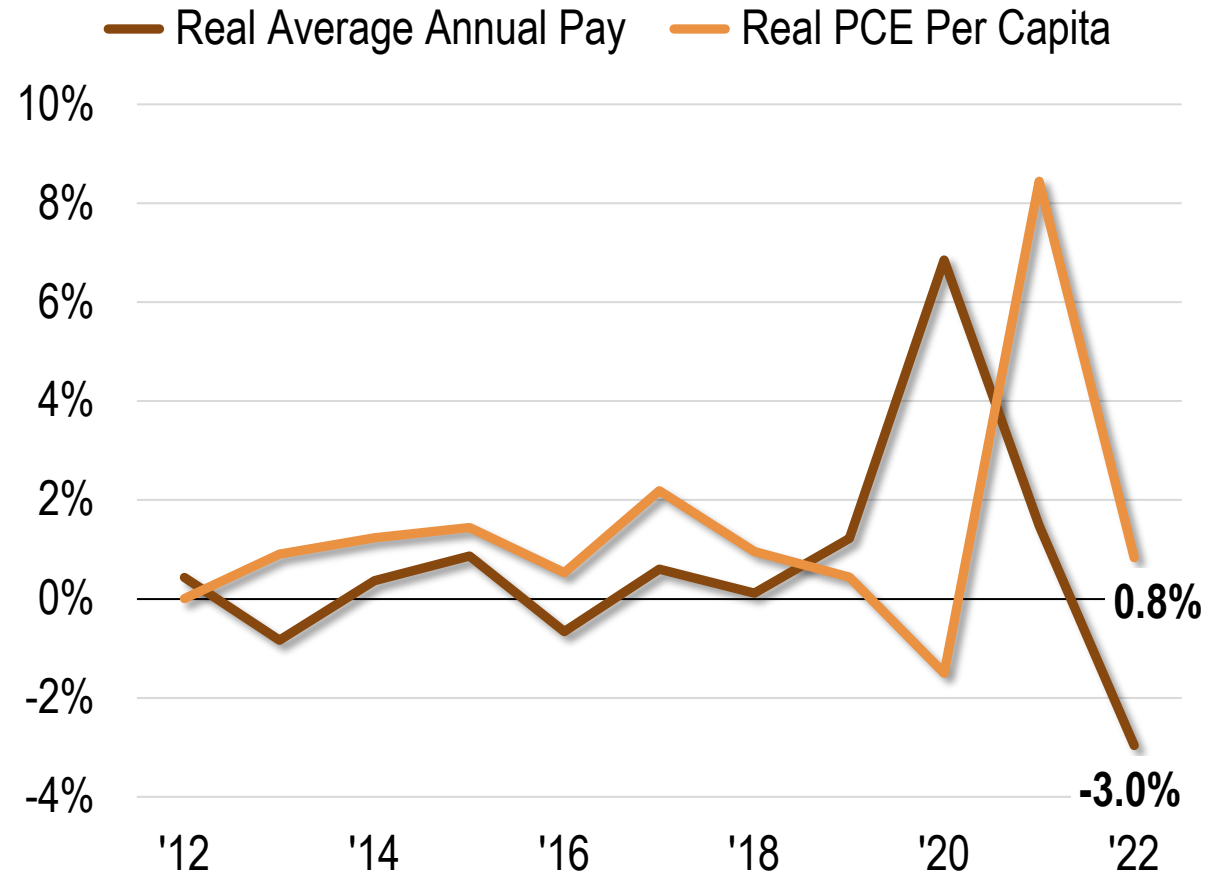
Wages vs. Spending

Arizona | Annual Change

Nominal



Inflation-Adjusted

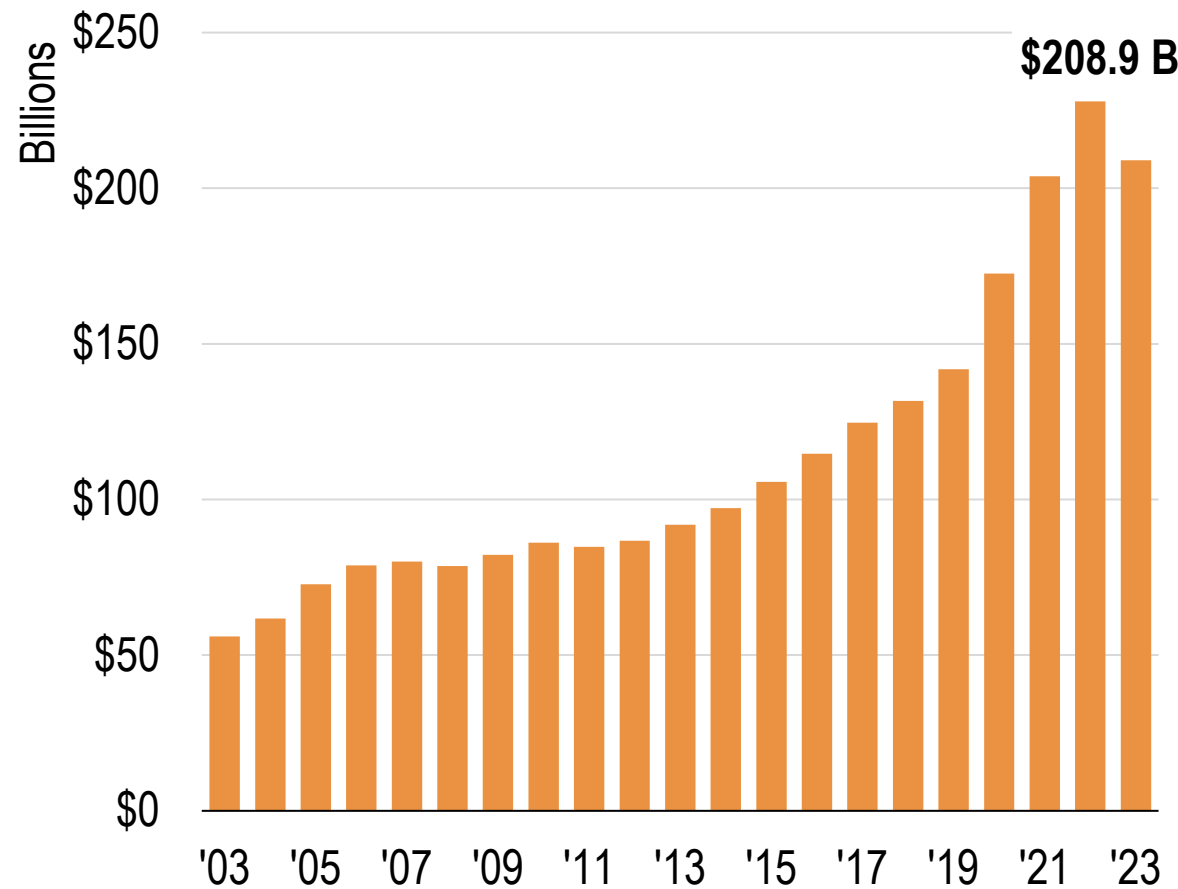


Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and Applied Analysis. Note: PCE = Personal Consumption Expenditures.

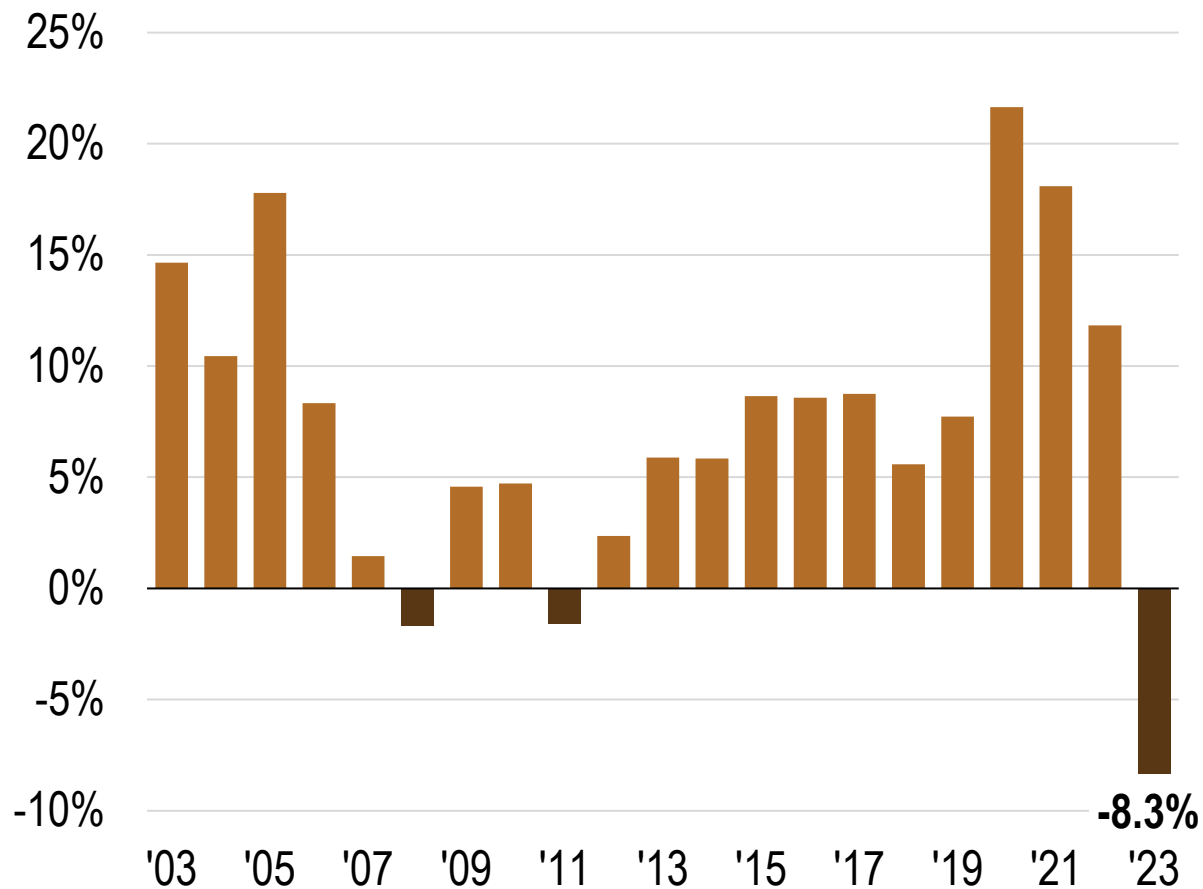
Bank Deposits

Arizona

Total Deposits



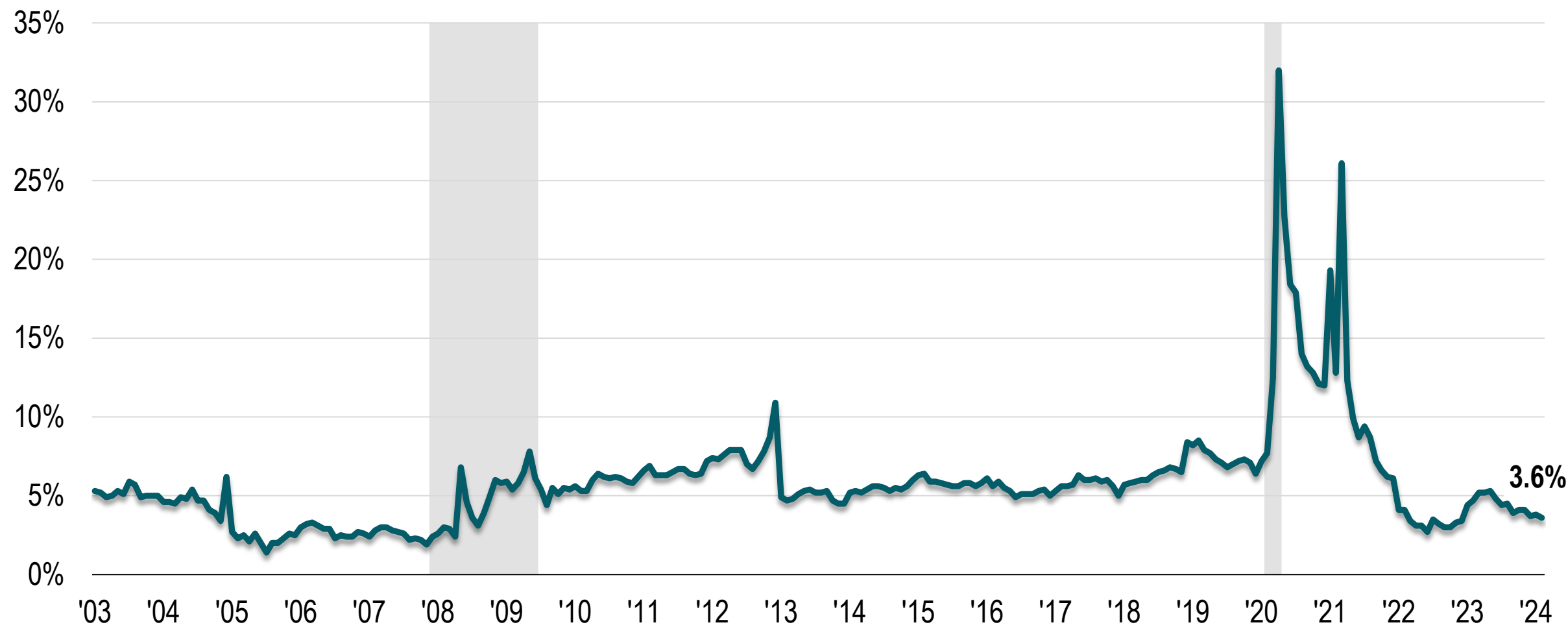
Annual Change



Source: Federal Deposit Insurance Corporation

Personal Saving Rate

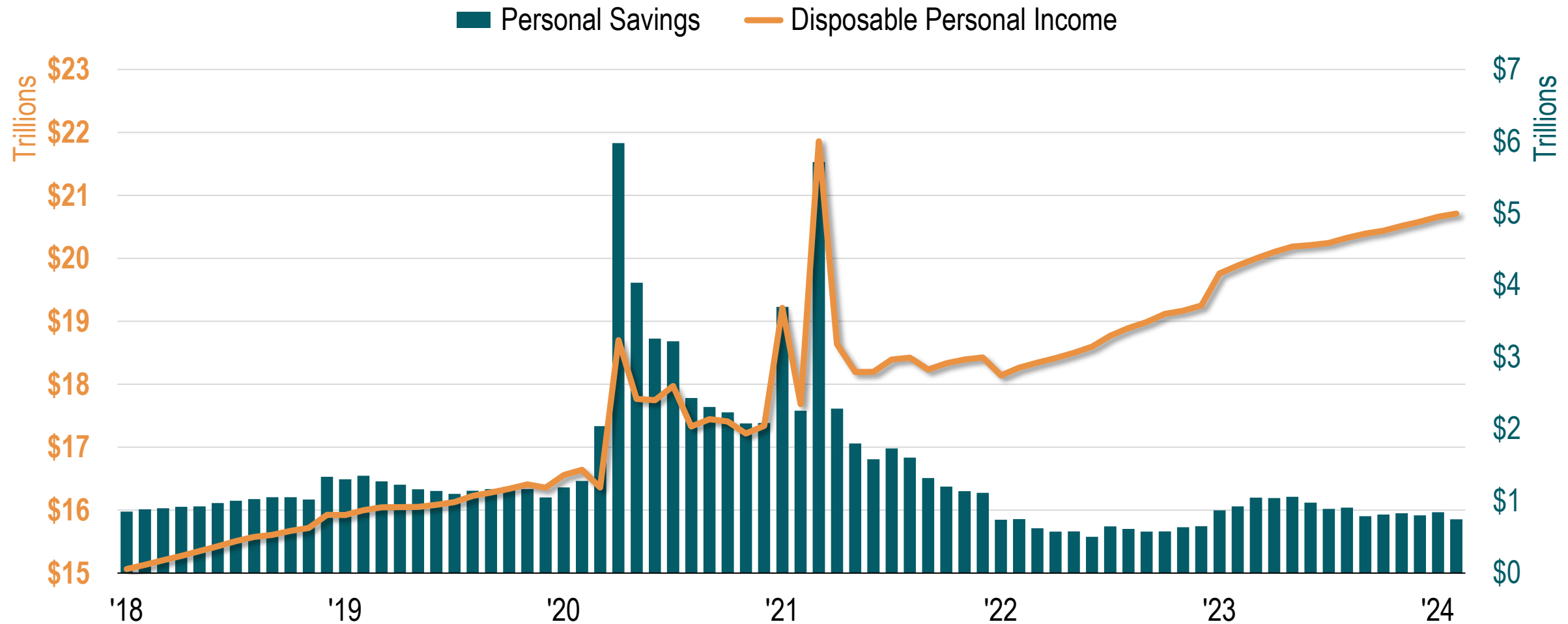
United States



Source: U.S. Bureau of Economic Analysis

Spending vs. Savings

United States



Source: Board of Governors of the Federal Reserve System



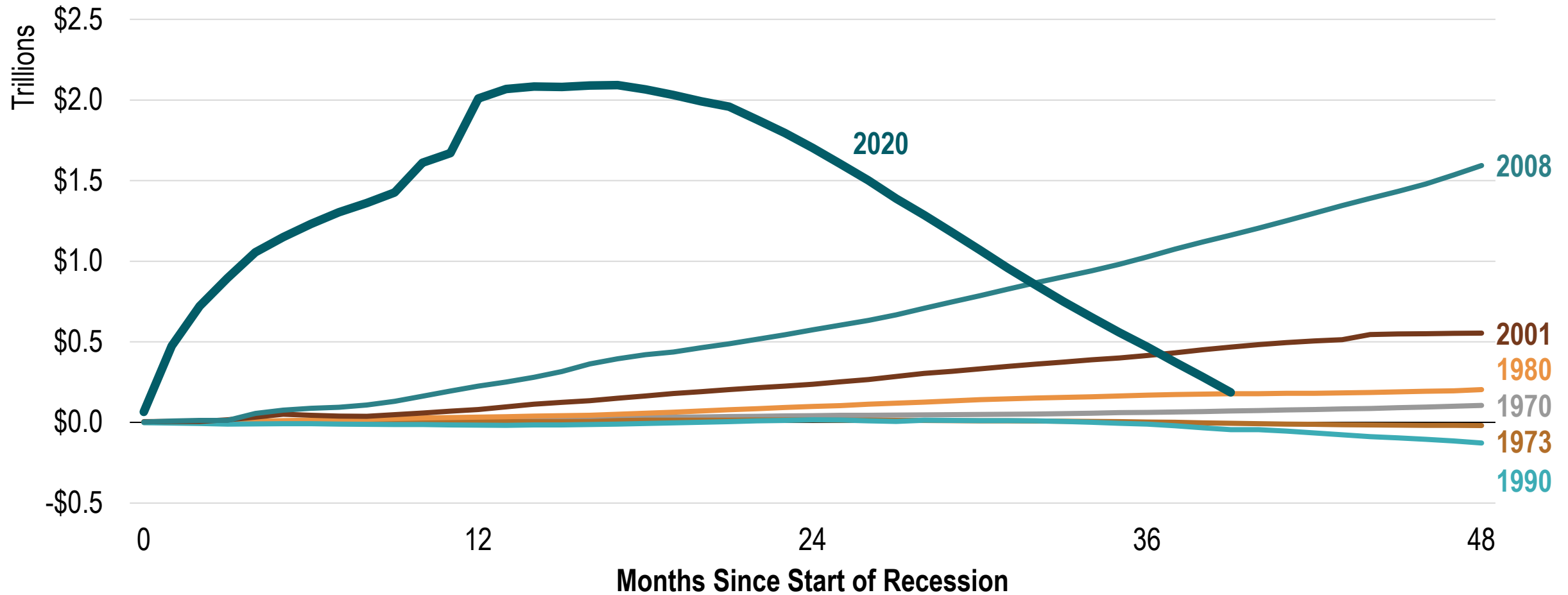
FED REPORTS AMERICANS HAVE SPENT THEIR PANDEMIC SAVINGS

“Consumers have spent nearly all of their excess savings from the Covid-19 pandemic...The stimulus checks, enhanced unemployment benefits, student loan payment moratoriums and eviction protections during the pandemic made American consumers feel flush with money.”

Source: Forbes (August 21, 2023). Note: Image is sourced to (Evgenia Parajanian/shutterstock.com).

Excess Savings

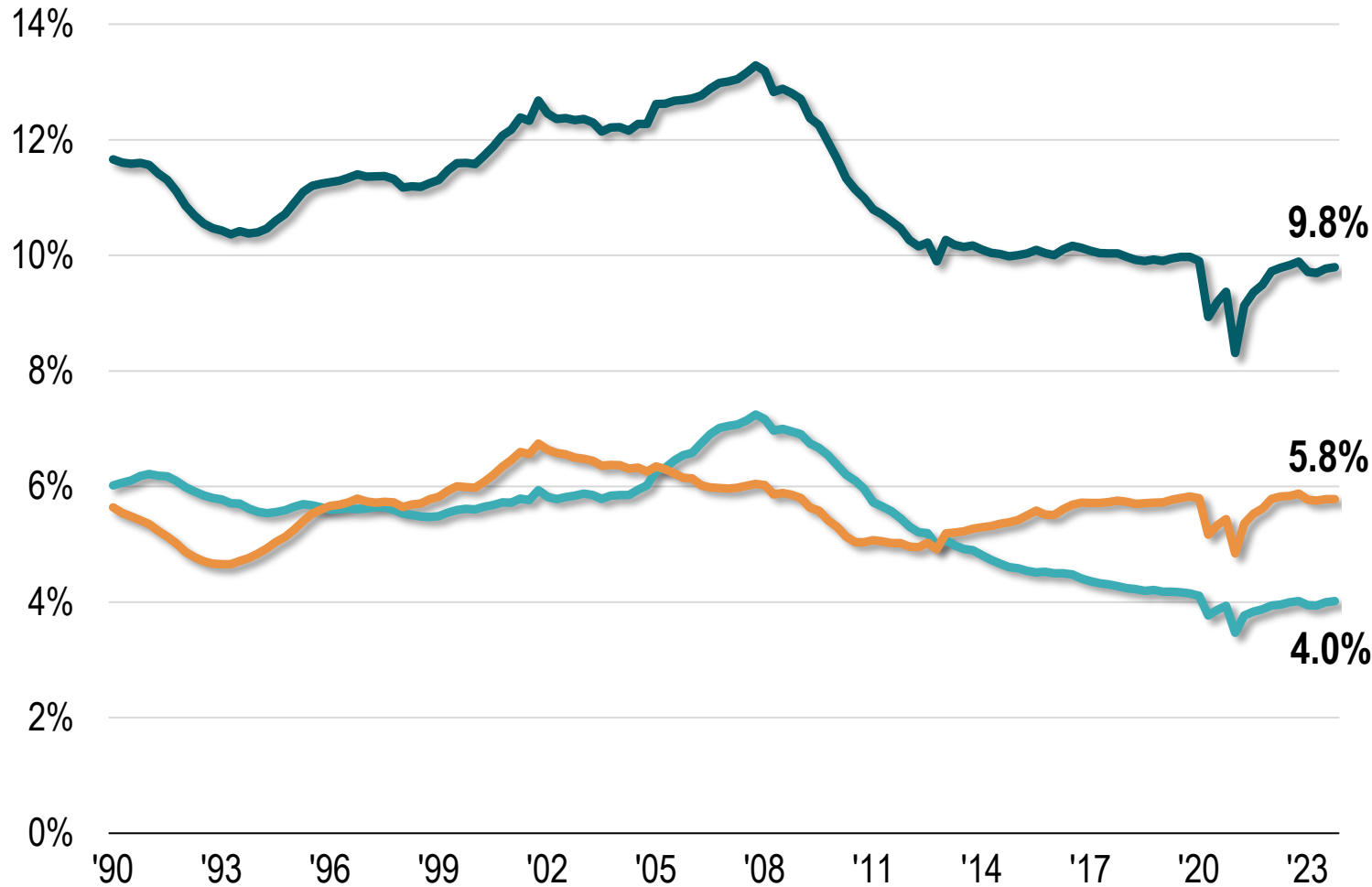
Cumulative | Following Onset of Recessions



Source: Board of Governors of the Federal Reserve System. Note: For simplicity, the two recessions in the early 1980s are combined.

Household Debt Payments

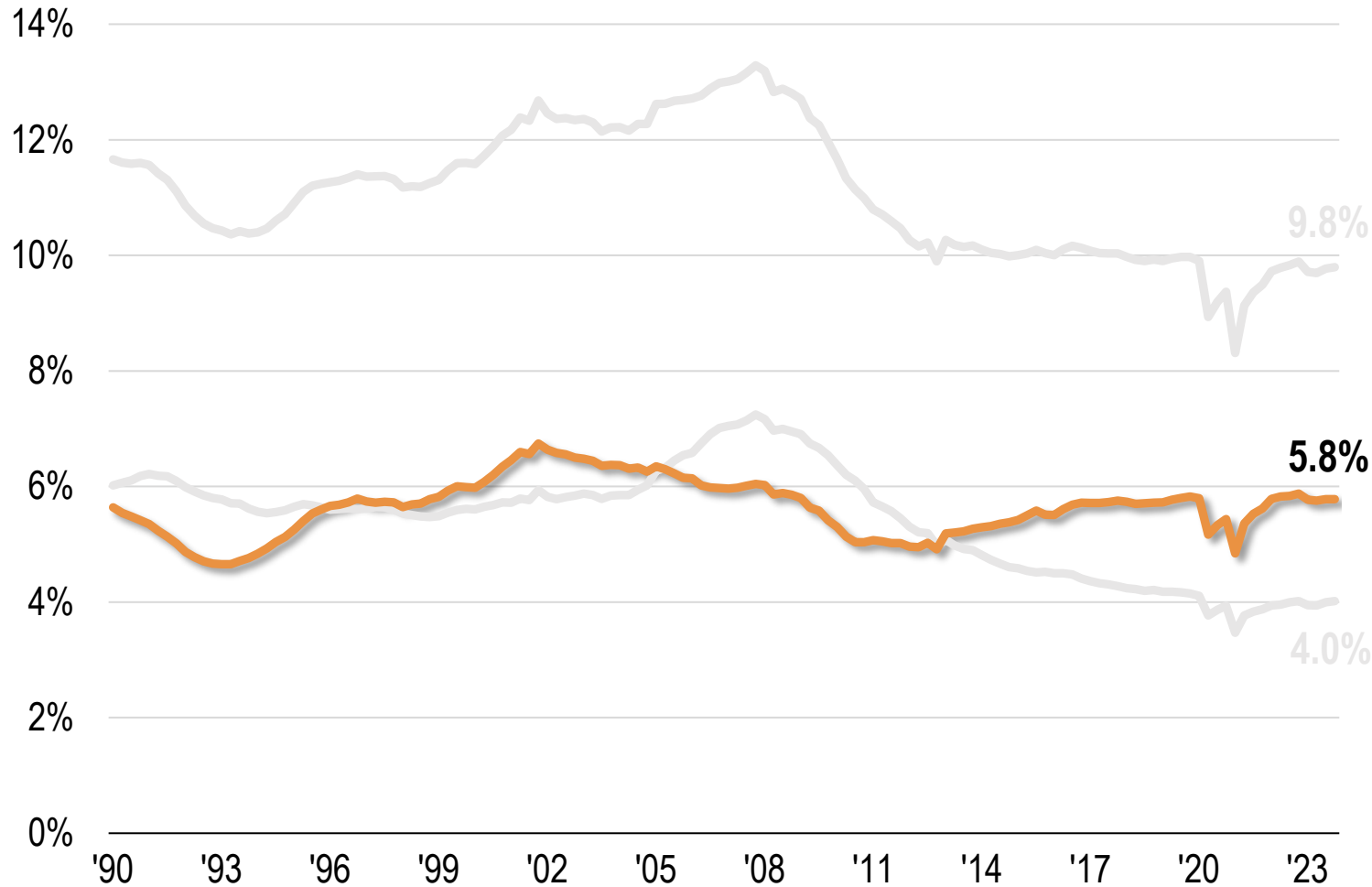
Share of Disposable Income



Source: Board of Governors of the Federal Reserve System. Note: All images are sourced to shutterstock.com.

Household Debt Payments

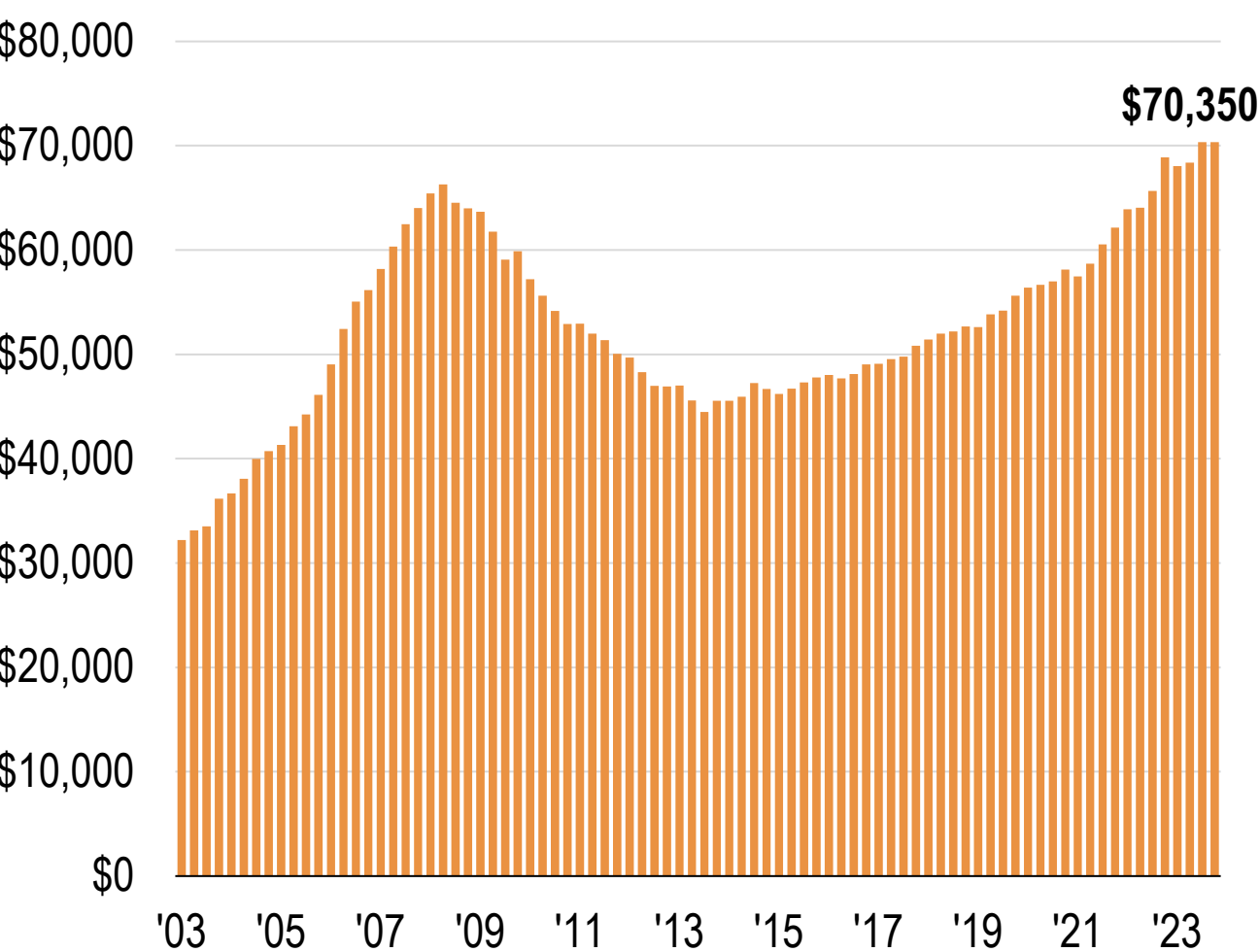
Share of Disposable Income



Source: Board of Governors of the Federal Reserve System. Note: All images are sourced to shutterstock.com.

Household Debt Per Capita

Arizona



Mortgage Debt			
	Q4 2022	Q4 2023	GROWTH
United States	\$42,160	\$43,010	+2.0%
Arizona	\$50,480	\$51,820	+2.7%

Credit Card Debt			
	Q4 2022	Q4 2023	GROWTH
United States	\$3,490	\$3,970	+13.8%
Arizona	\$3,630	\$4,240	+16.8%

Source: New York Fed Consumer Credit Panel/Equifax. Note: Mortgage debt and credit card tables reflect per capita values.

Credit Card and Unsecured Personal Loan Balances Remain at or Near-Record Levels as Consumers Navigate Challenging Economic Climate

Gen Z Coming of Age in Credit Markets

Credit Balances on the Rise as Consumers Manage Higher Costs

Credit Card Balances Continue to Surge as Millennials Increasingly Turn To Cards

Total Credit Card Balances

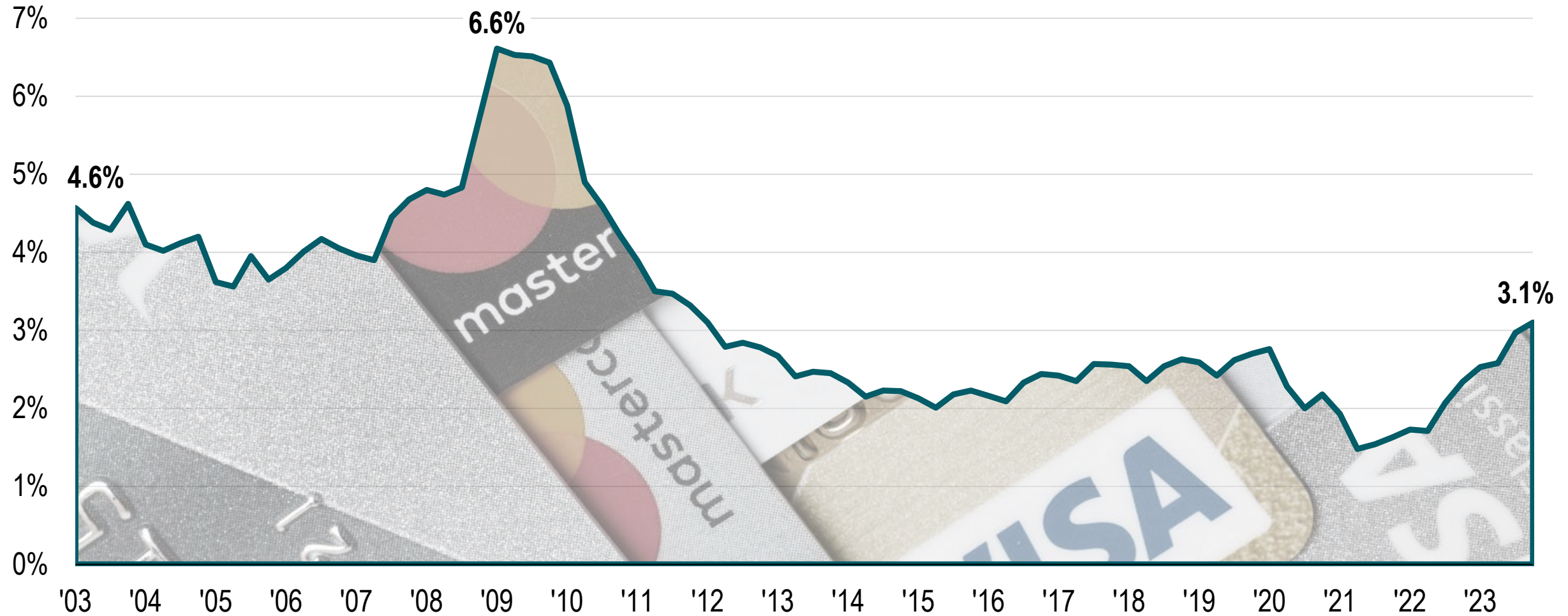
Large Bank Consumers



Source: Board of Governors of the Federal Reserve System. Note: Image is sourced to (Ryosha/shutterstock.com).

Delinquency Rate

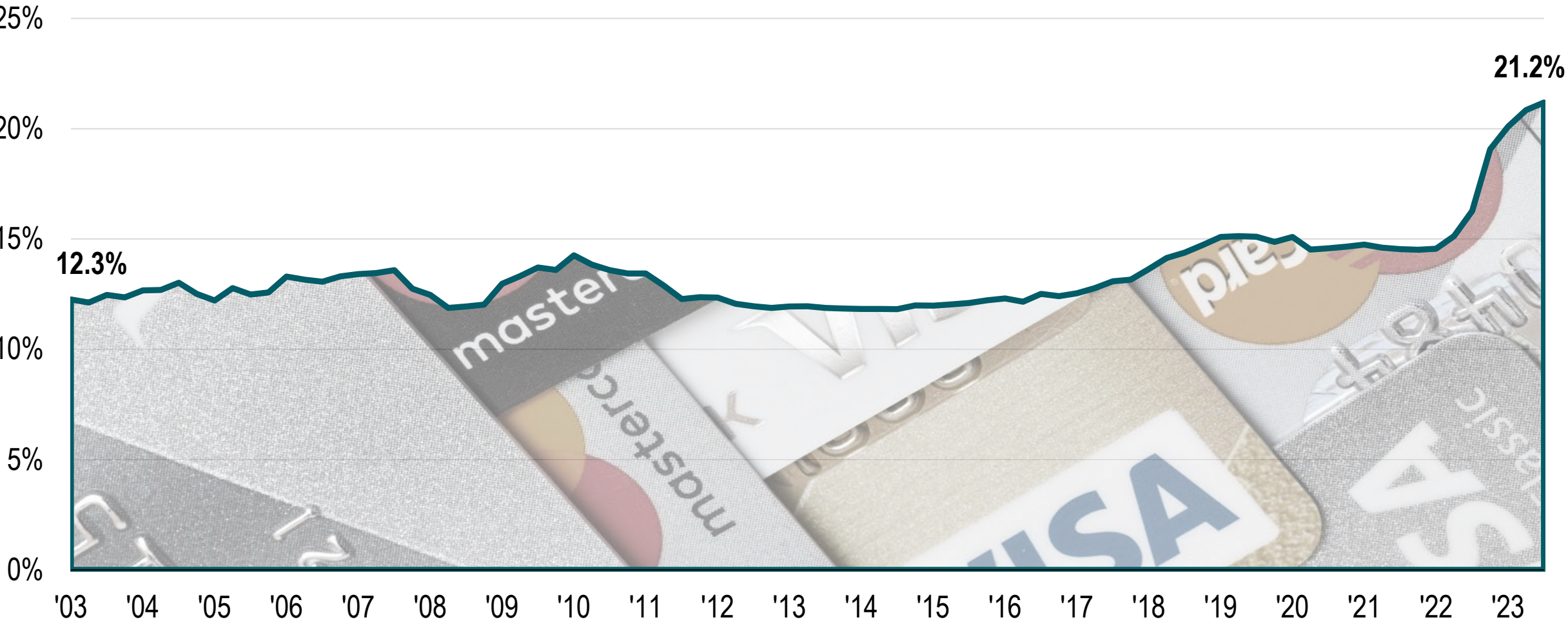
On Credit Card Loans | All Commercial Banks



Source: Board of Governors of the Federal Reserve System. Note: Image is sourced to (Ryosha/shutterstock.com).

Credit Card Interest Rate

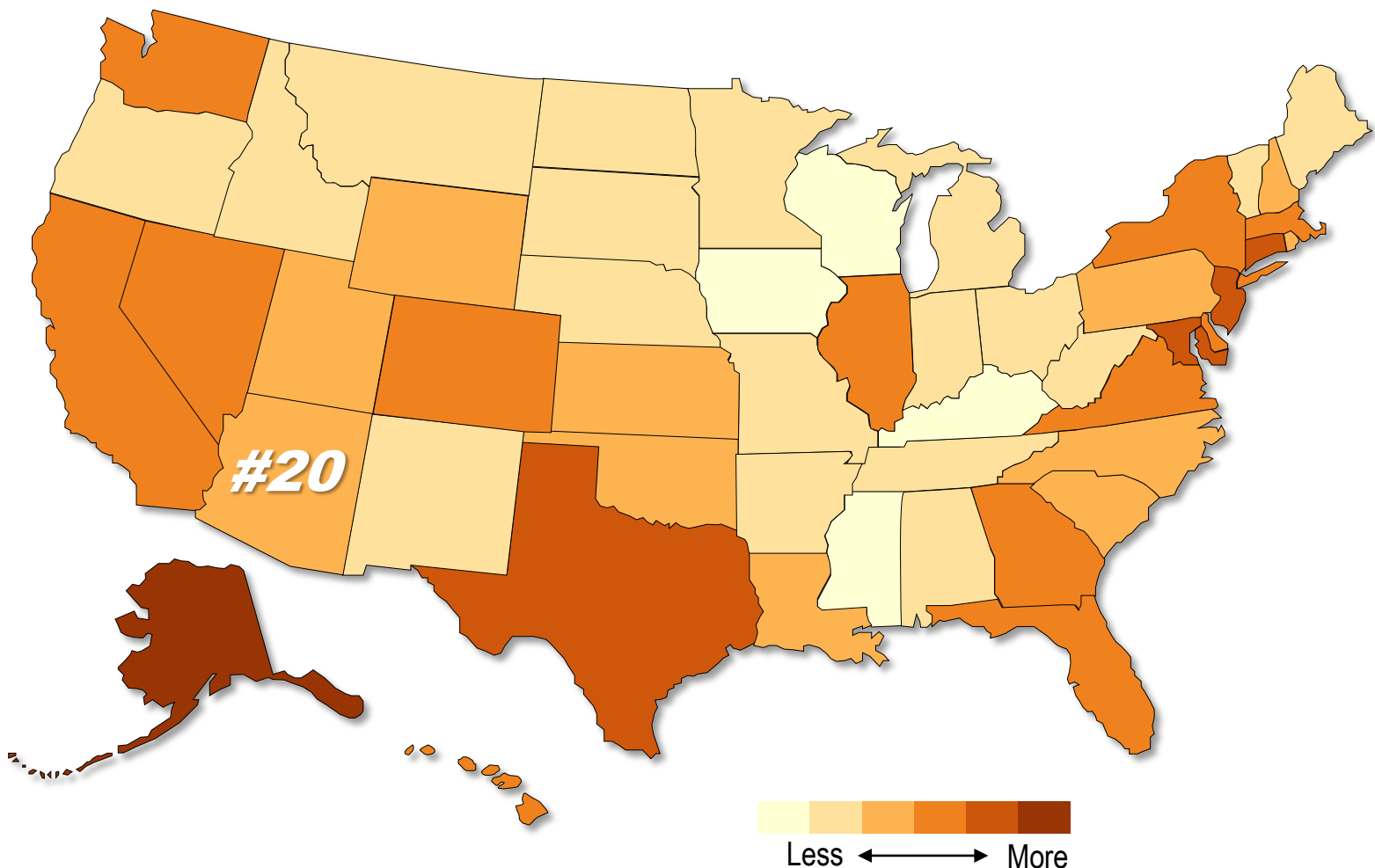
Commercial Banks | All Accounts



Source: Board of Governors of the Federal Reserve System. Note: Image is sourced to (Ryosha/shutterstock.com).

Average Credit Card Debt

By State | Q4 2024



RANK		STATE	AVERAGE CREDIT CARD DEBT
1		Alaska	\$7,338
2		Connecticut	\$6,825
3		New Jersey	\$6,819
4		Maryland	\$6,668
5		Texas	\$6,542
6		Virginia	\$6,477
7		Florida	\$6,408
8		Hawaii	\$6,343
9		Colorado	\$6,274
10		New York	\$6,269
20		ARIZONA	\$5,755

Source: Experian

AVERAGE CREDIT CARD DEBT		MONTHS TO CLEAR DEBT	INTEREST PAID
ARIZONA	\$5,755	293	\$9,446
U.S.	\$6,630	303	\$10,505

Source: Experian, Transunion and Applied Analysis. Note: Image is sourced to (Teerasak Ladnongkhun/shutterstock.com).



Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



NATIONAL BANK OF ARIZONA

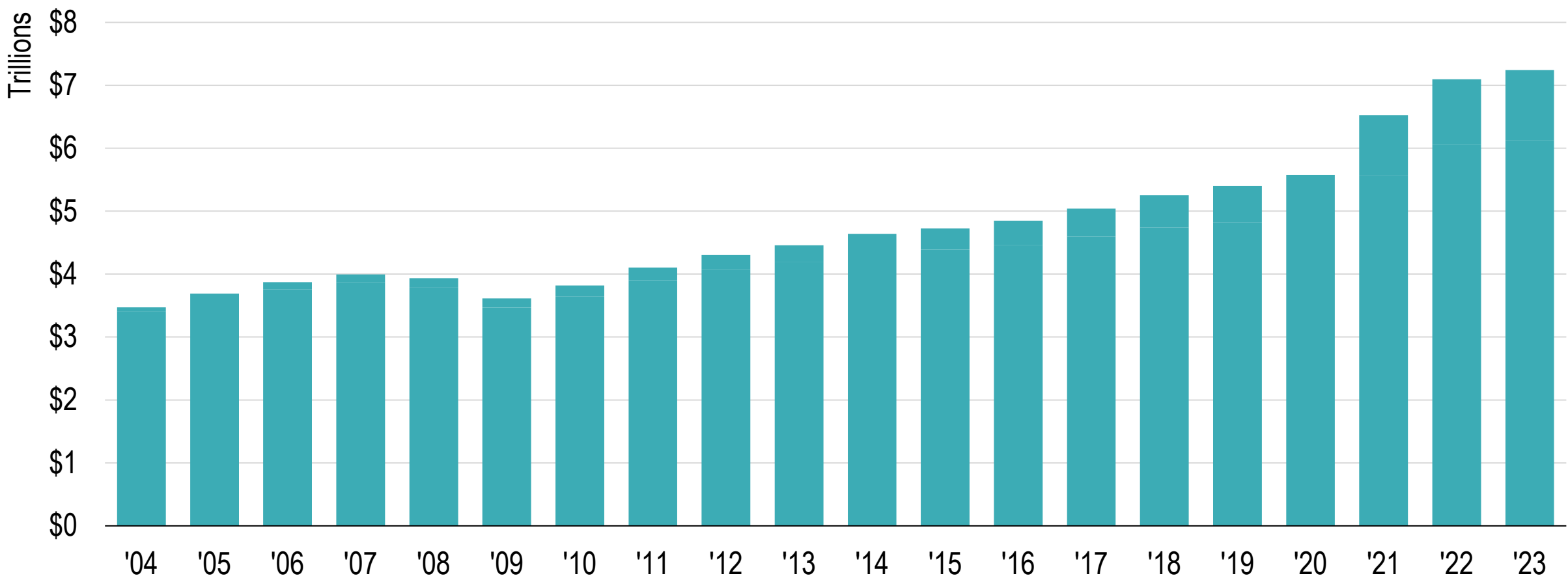
INFLATION IMPACTS

SPRING 2024



Retail Sales

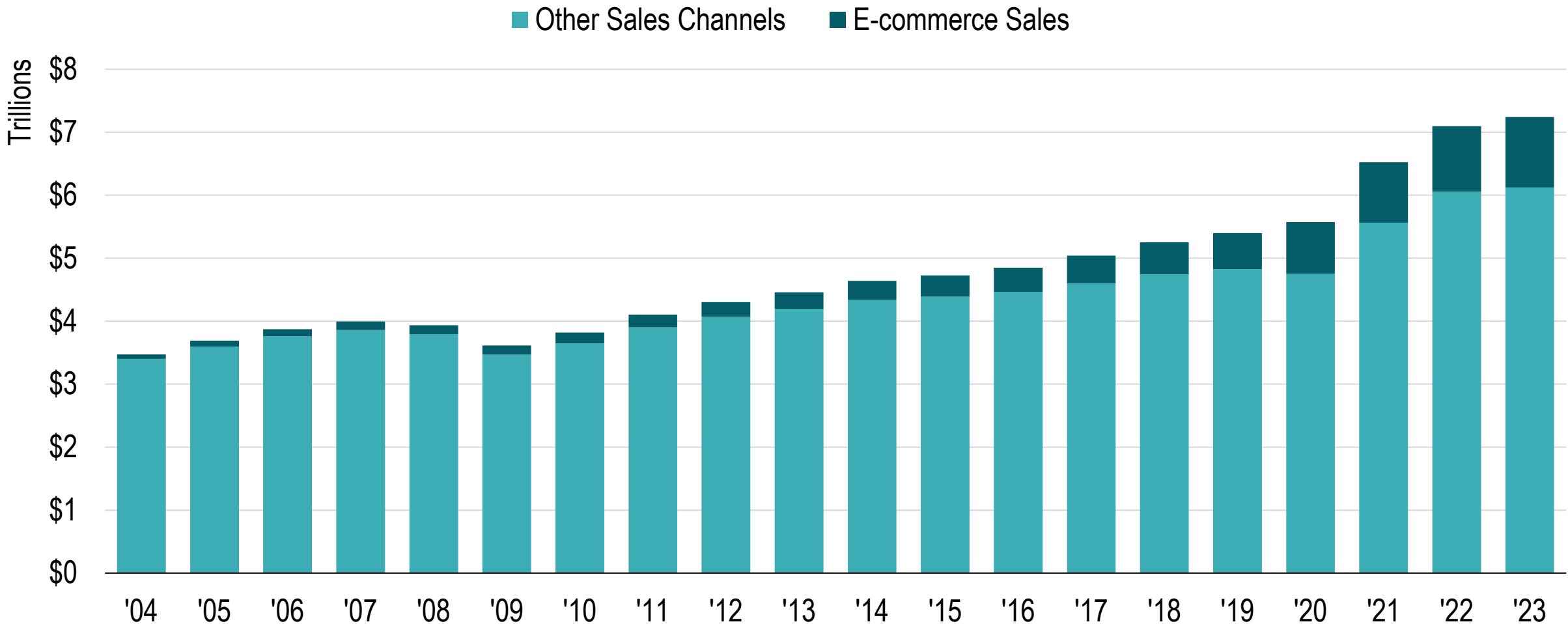
United States | Trailing 12-Month Total



Source: U.S. Census Bureau; CBS; Packagor; Investopedia

Retail Sales By Channel

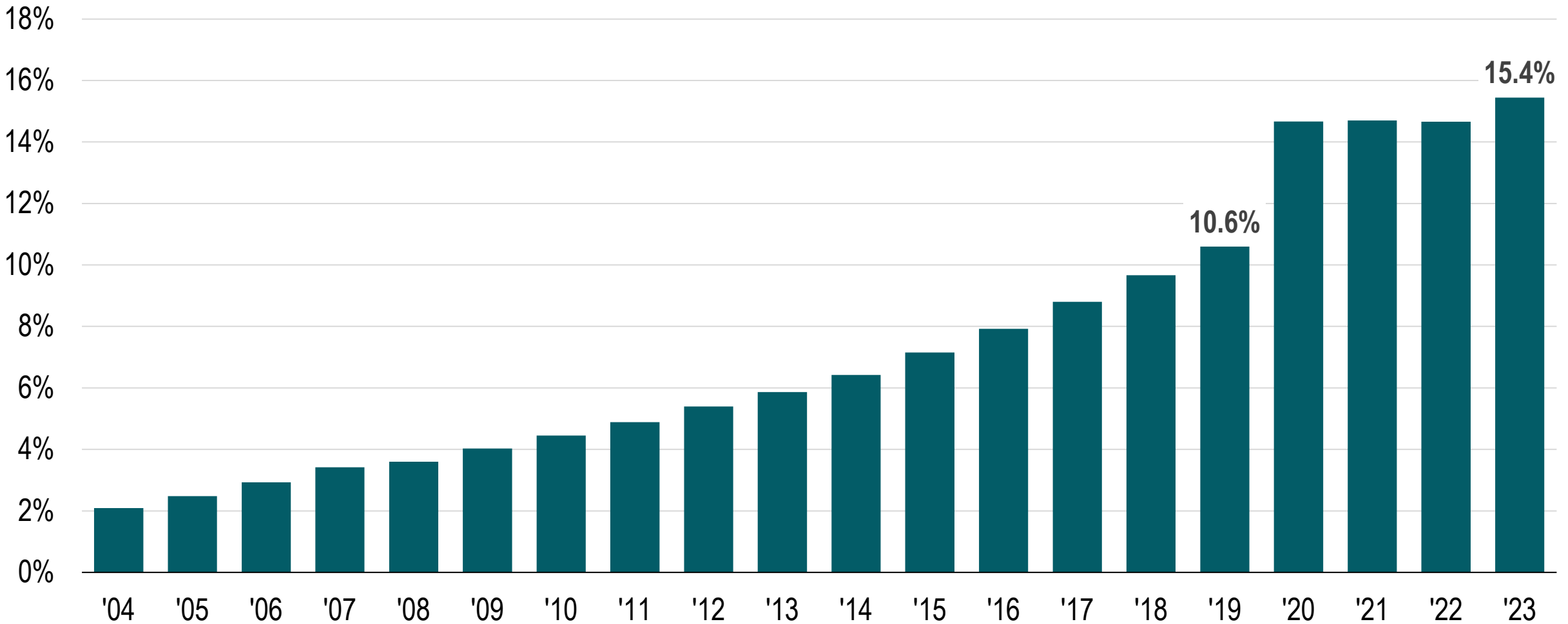
United States | Trailing 12-Month Total



Source: U.S. Census Bureau; CBS; Packagor; Investopedia

Retail Sales By Channel

E-Commerce Sales as Share of Total Retail Sales

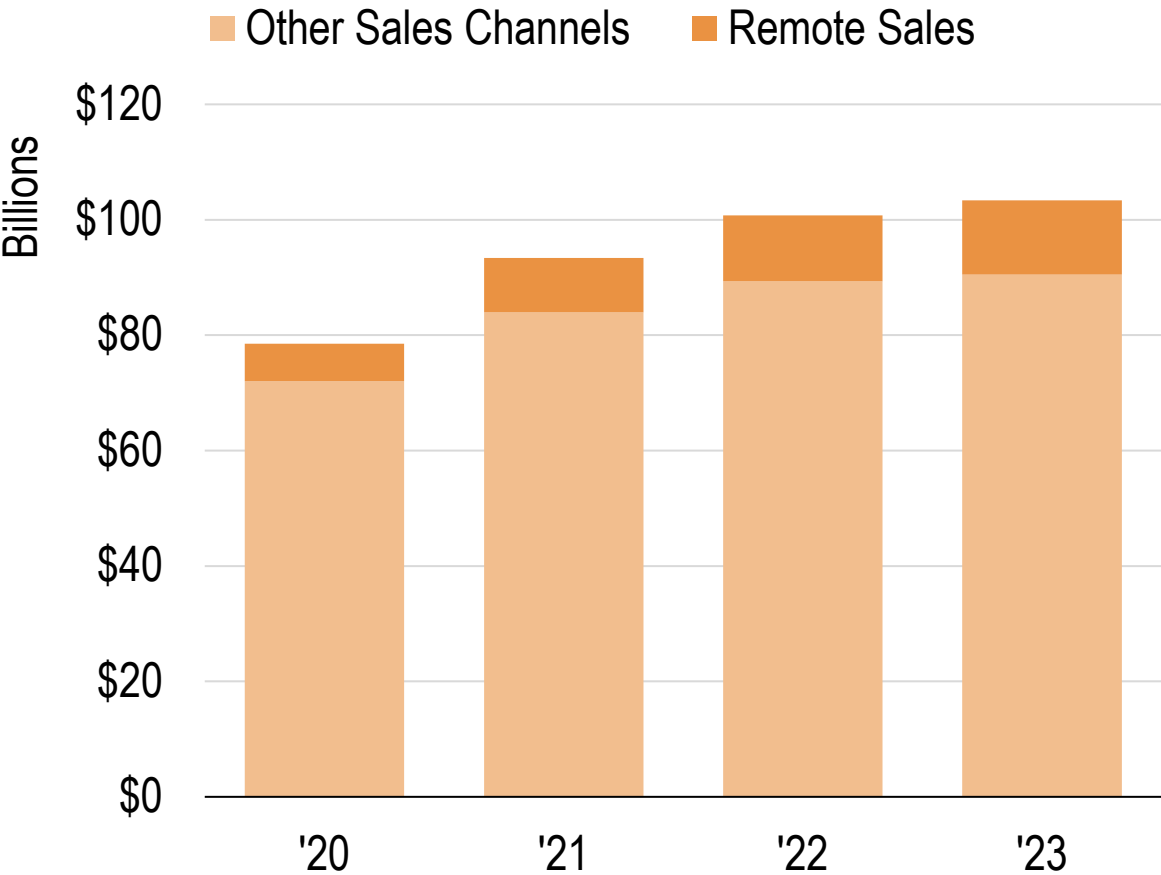


Source: U.S. Census Bureau; CBS; Packagor; Investopedia

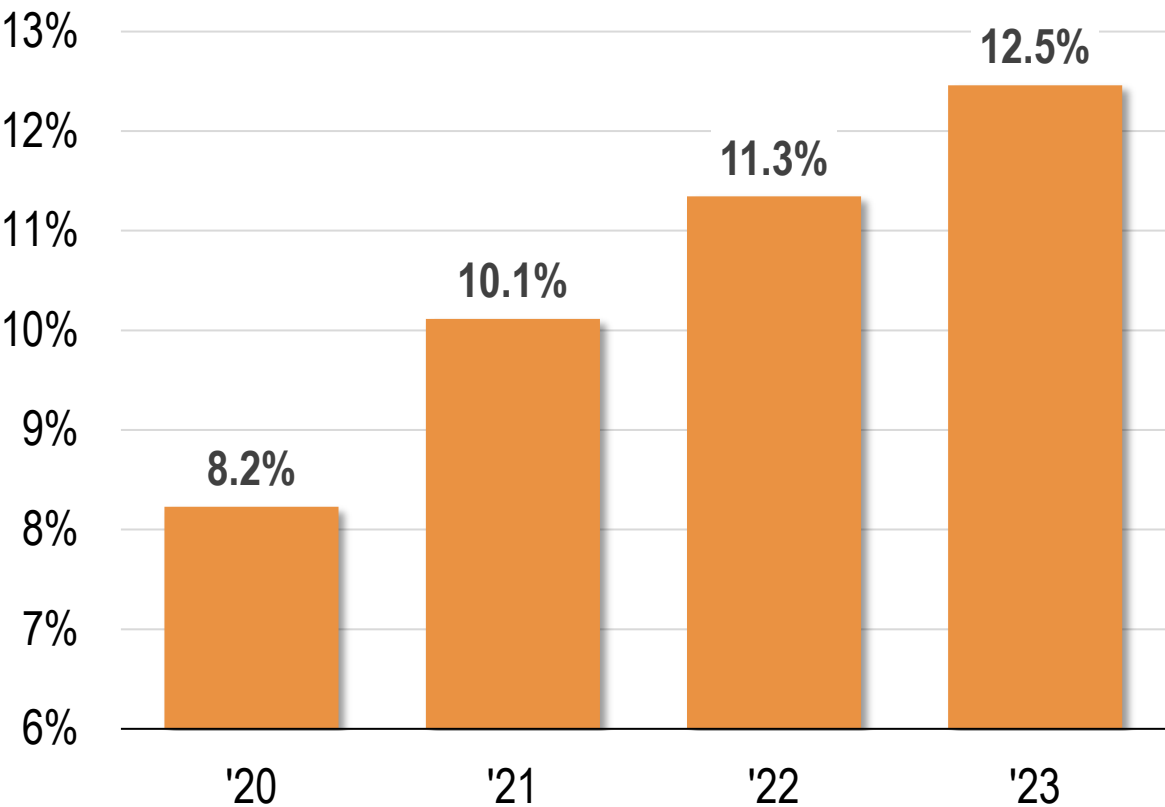
Retail Sales

Arizona

By Channel



E-Commerce Sales
as Share of Total Retail Sales



Source: Arizona Department of Revenue. Note: Data prior to 2020 is not available as the state of Arizona began to tax marketplace/remote sales in October 2019.

Retail Market

Phoenix MSA

	Q4 2022	Q4 2023	GROWTH
Inventory (SF)	240.7 M	242.6 M	0.8% 
Net Absorption (SF)	1.3 M	0.5 M	-61.8% 
Vacancy Rate	5.2%	4.5%	-0.7% 
Market Rent (Per SF)	\$22	\$25	13.6% 
Total Sales Volume	\$594.2 M	\$413.4 M	-30.4% 
Transaction Sales Price (Per SF)	\$274	\$243	-11.3% 

Demand for retail space is **stronger than nationwide** as this area has a faster absorption of retail space. As a result, rent prices rose faster than nationwide. However, vacancy rate is higher in this area.

Source: National Association of Realtors. Note: Image is sourced to (Gorodenkoff/shutterstock.com).

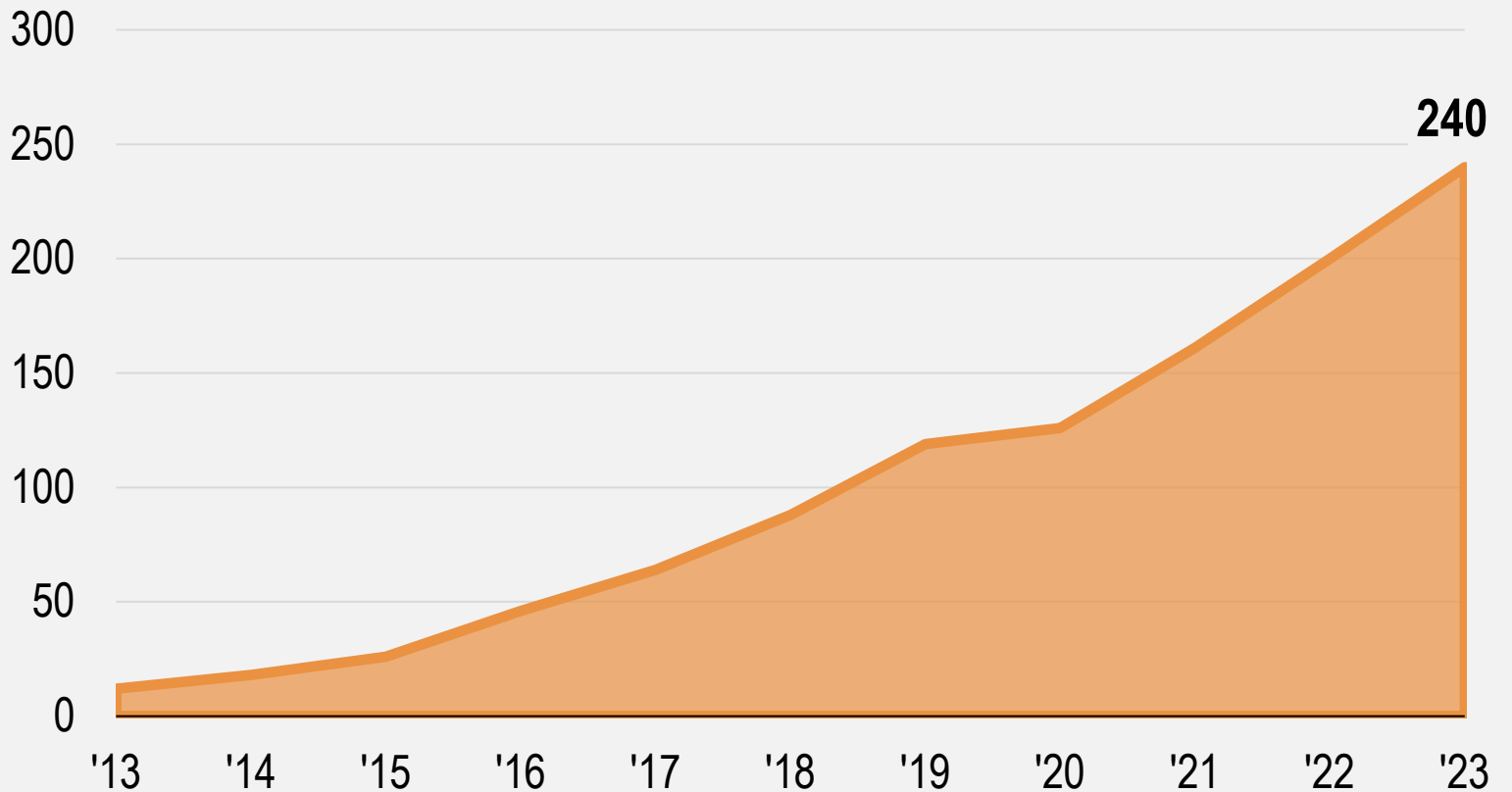
Shifting Retail Landscape

Omnichannel Marketing

INCREASE IN TOTAL ONLINE SALES

Department Stores	50.6%
Apparel	11.6%
Home	9.9%
Discount Department Stores	4.8%
Big Box Specialty	1.9%
Cosmetics	-4.6%
ALL RETAILERS	6.9%

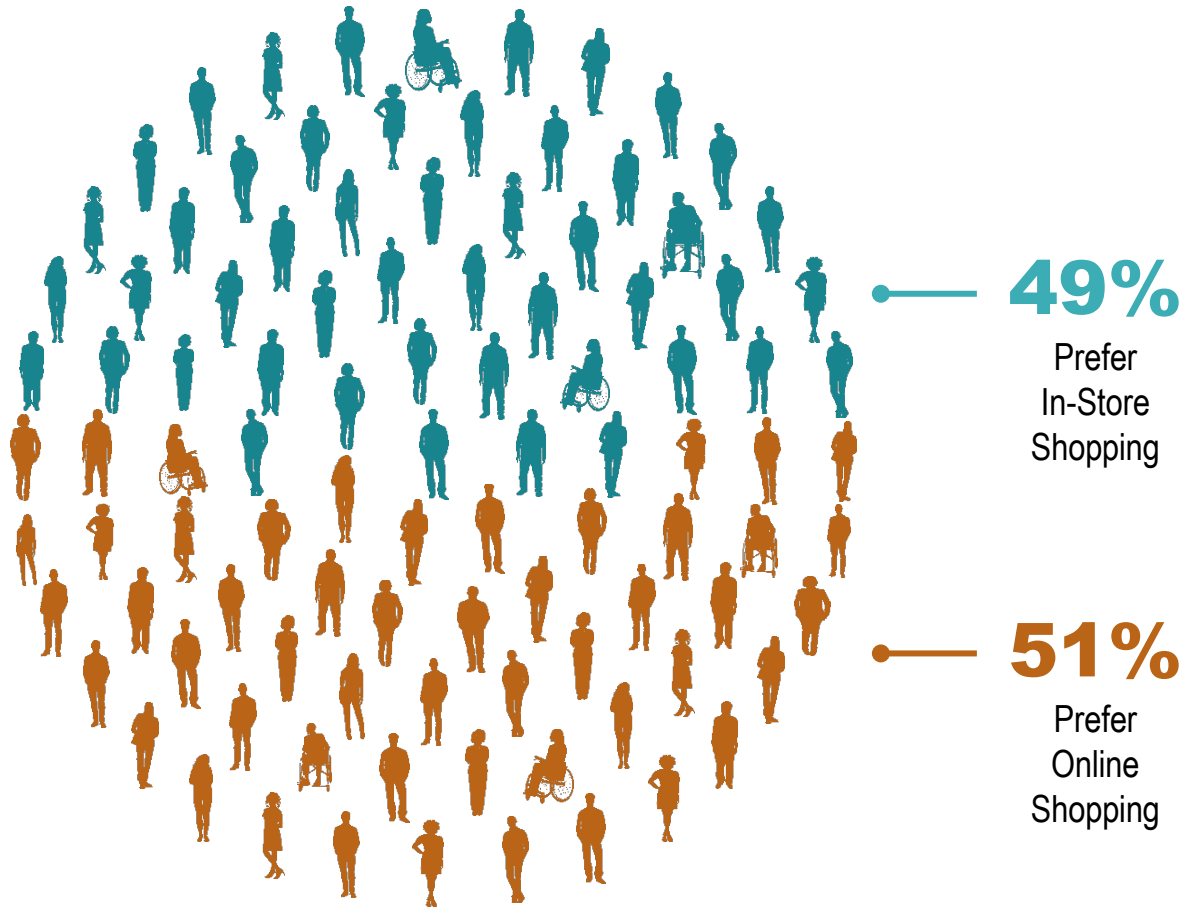
Number of Warby Parker Retail Locations



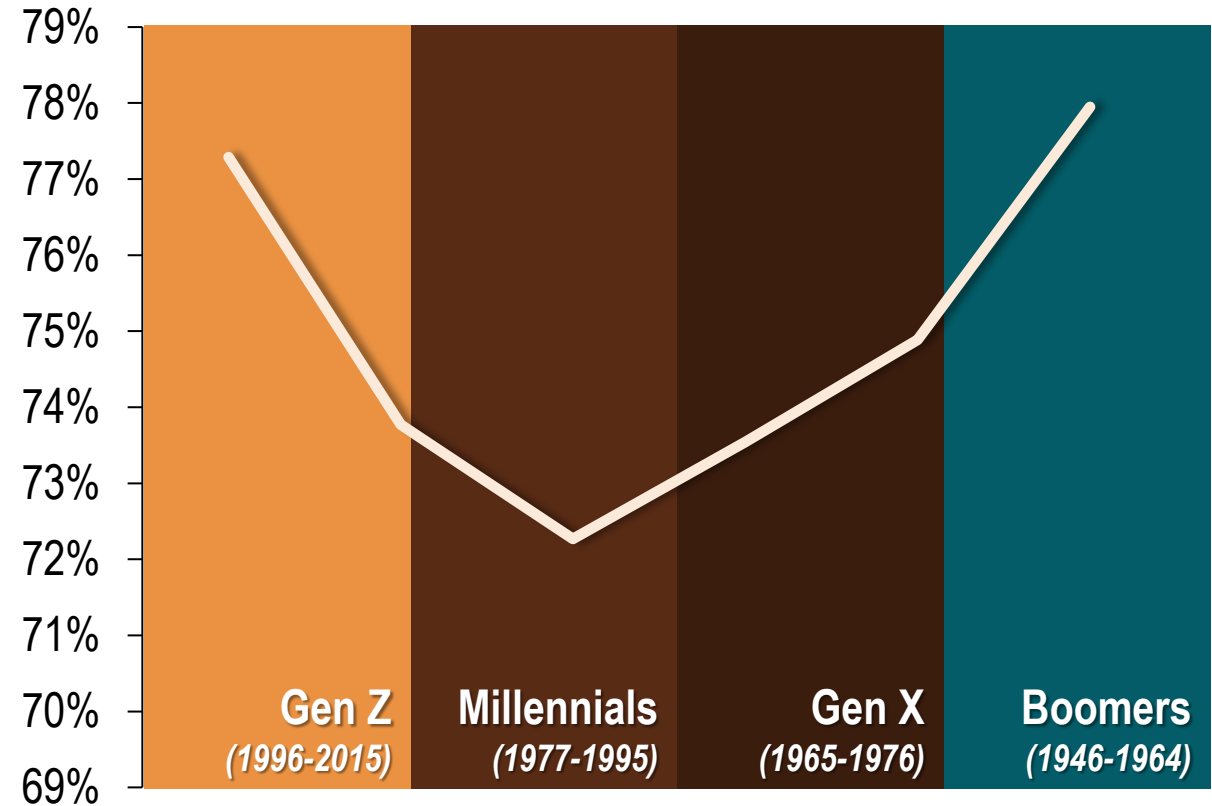
Source: Warby Parker; Wall Street Journal; International Council of Shopping Centers Note: Figures as of the end of each year. 2023 Warby Parker Retail Locations figure is an estimate.

Shifting Retail Landscape

Consumer Preferences



Share of In-Store Spending by Age



Source: Raydiant; International Council of Shopping Centers

97%

SHOP AT BRICK-AND-MORTAR STORES

95%

SHOP ONLINE

THE GEN Z CONSUMER

Source: International Council of Shopping Centers. Note: Image is sourced to (Gorodenkoff/shutterstock.com).



61%

**OF SHOPPERS CONDUCT PRODUCT RESEARCH
BEFORE GOING SHOPPING**

Source: 1WorldSync. Note: Image is sourced to (Rawpixel.com/shutterstock.com).



Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



NATIONAL BANK OF ARIZONA

INFLATION IMPACTS

SPRING 2024





Inflation



Consumers



Shifts in Spending



Businesses

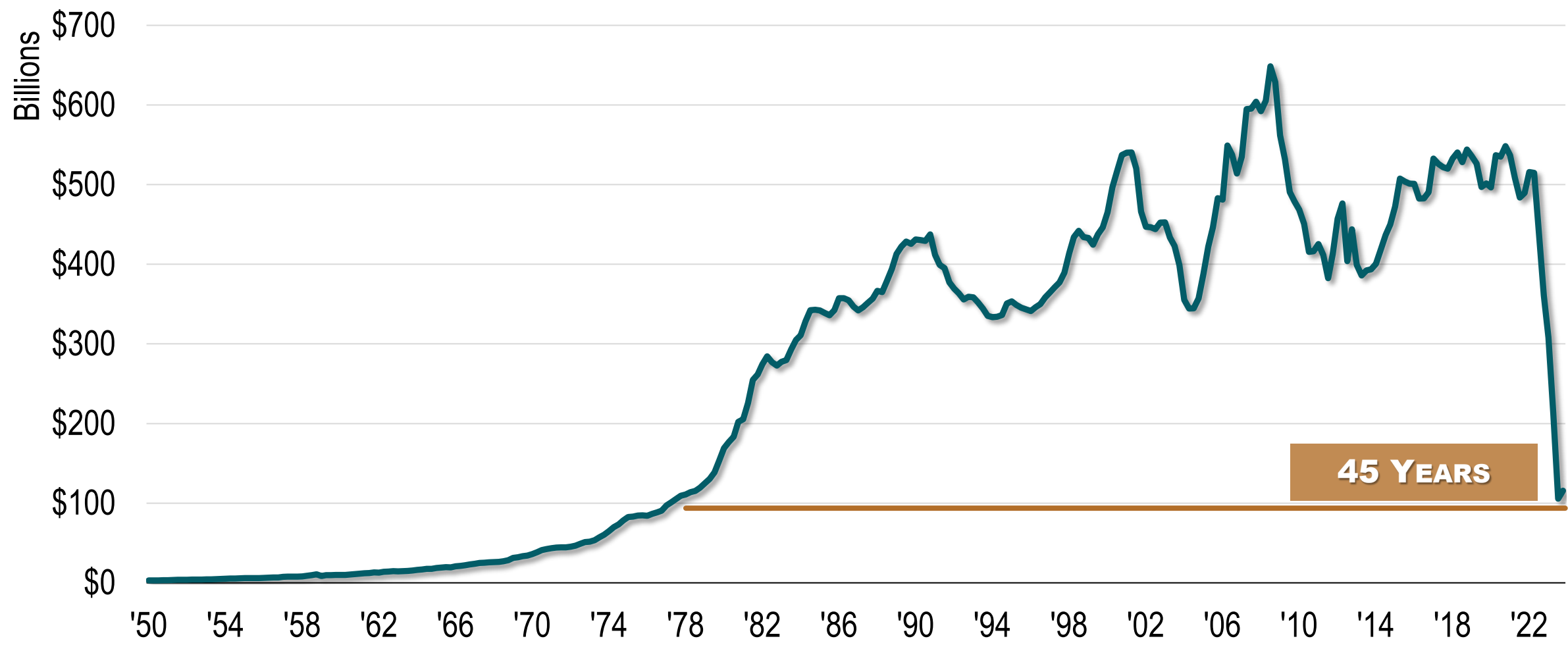


Looking Forward

Image Source: (Brent Coulter/shutterstock.com)

Corporate Net Interest Payments

United States

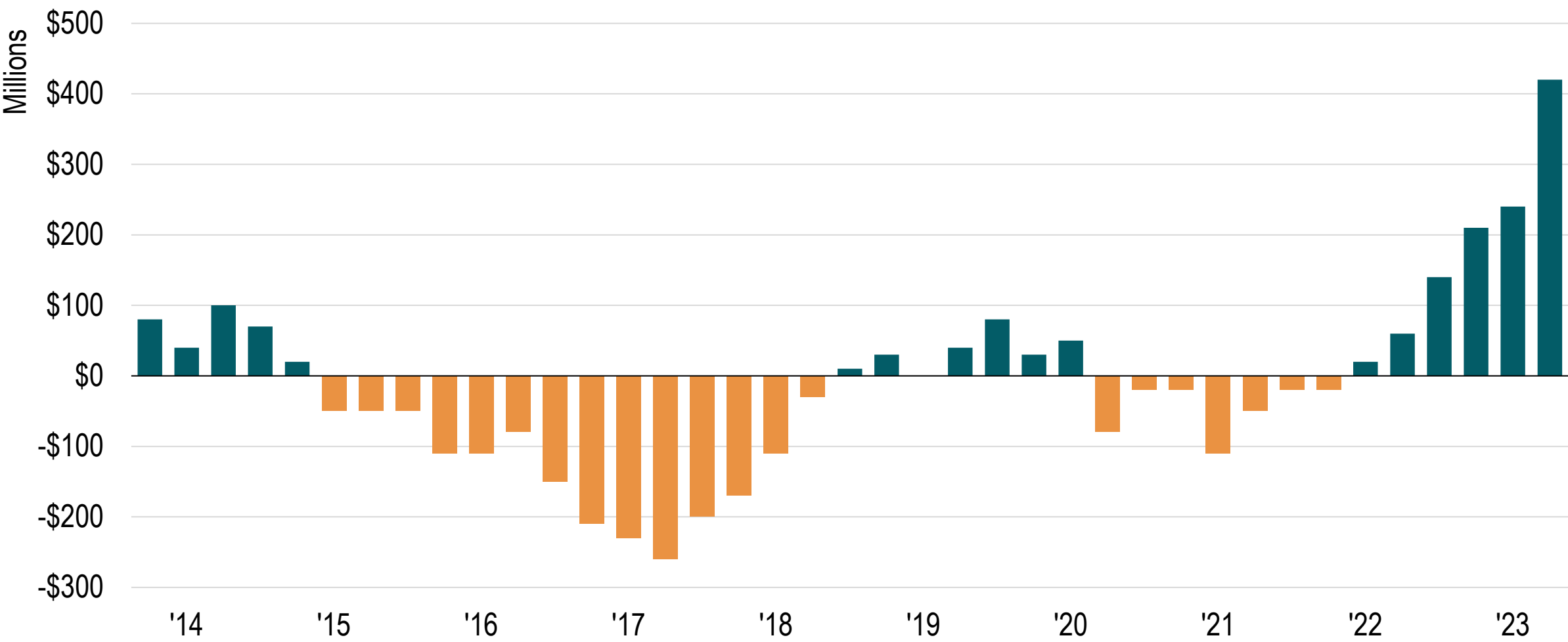


45 YEARS

Source: U.S. Bureau of Economic Analysis. (Net interest and miscellaneous payments on assets)

Net Interest Income

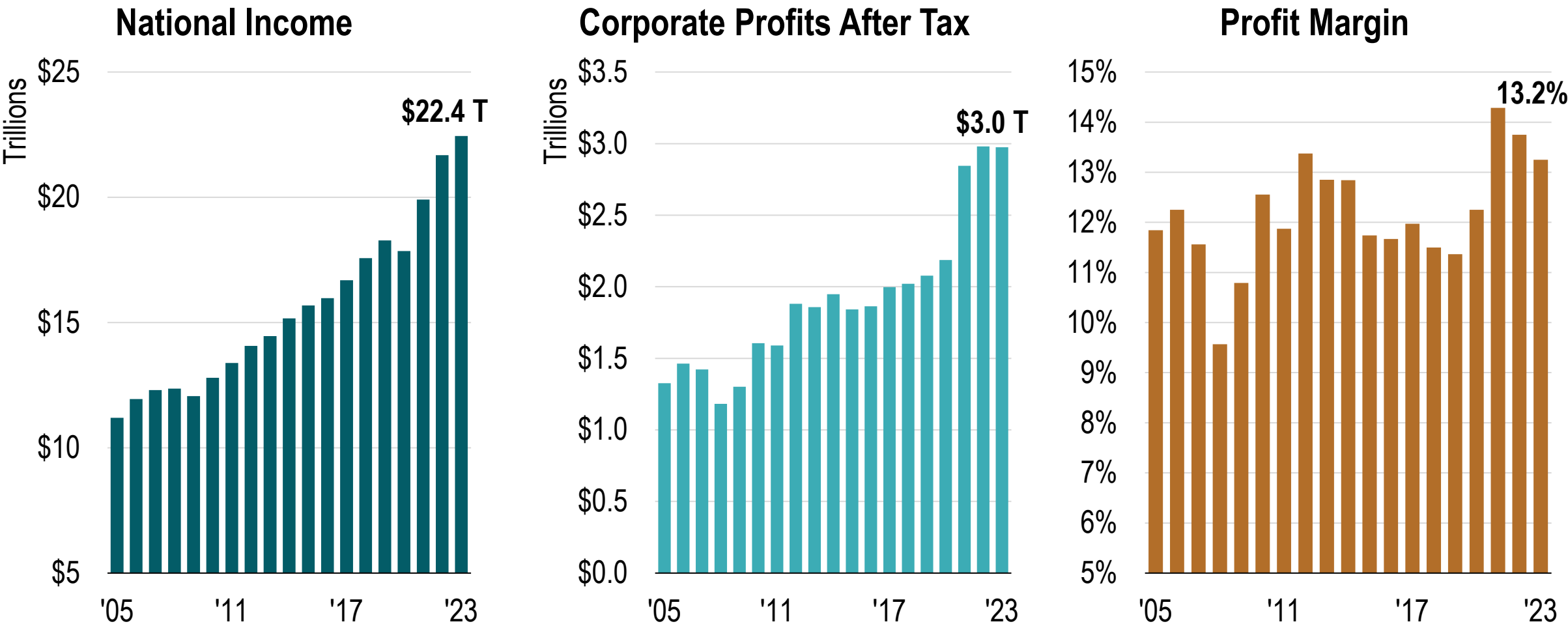
Microsoft | Interest Income Less Interest Expense



Source: S&P Capital IQ

Corporate Financial Health

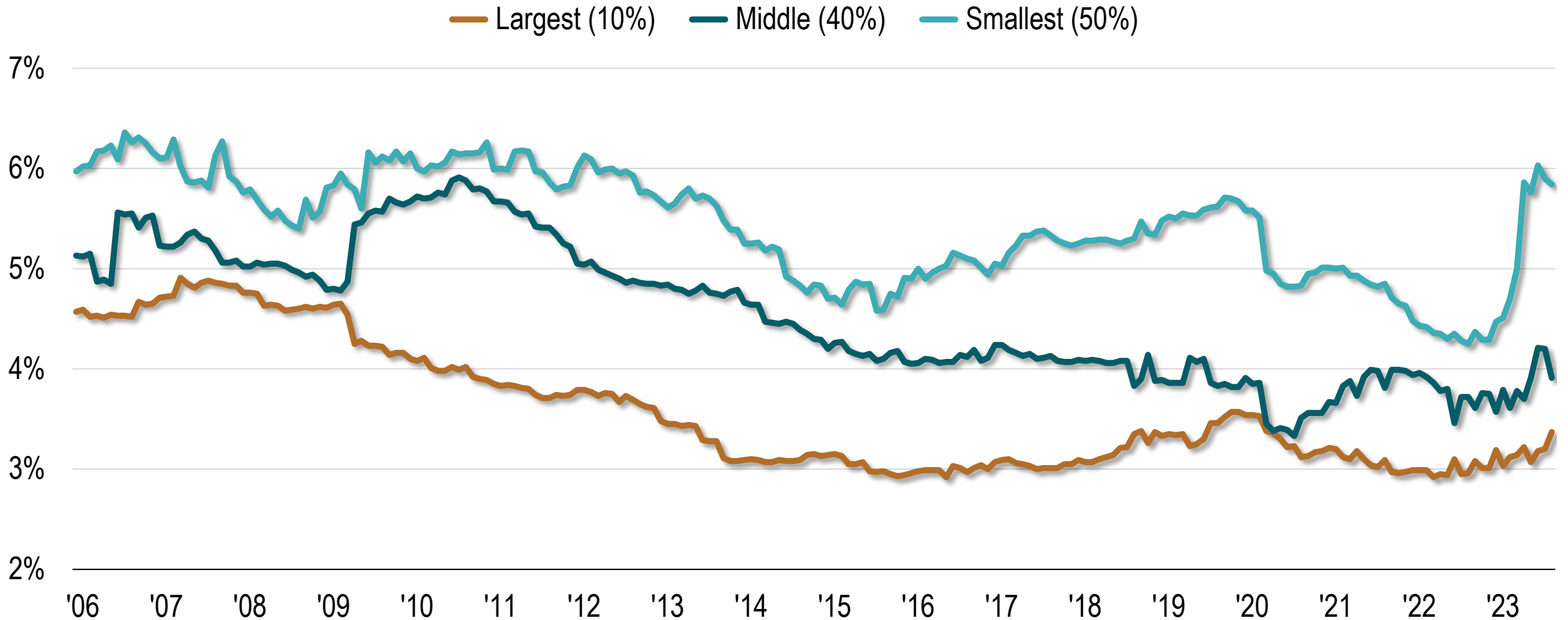
National | Annual



Source: U.S. Bureau of Economic Analysis. Note: Corporate profits after tax without inventory valuation and capital consumption adjustments.

Effective Interest Rate

By Firm Size



Source: Société Générale

35%

OF BUSINESS OWNERS APPLIED FOR A LOAN IN THE LAST YEAR

40%

**RECEIVED ALL THE
FUNDING REQUESTED**

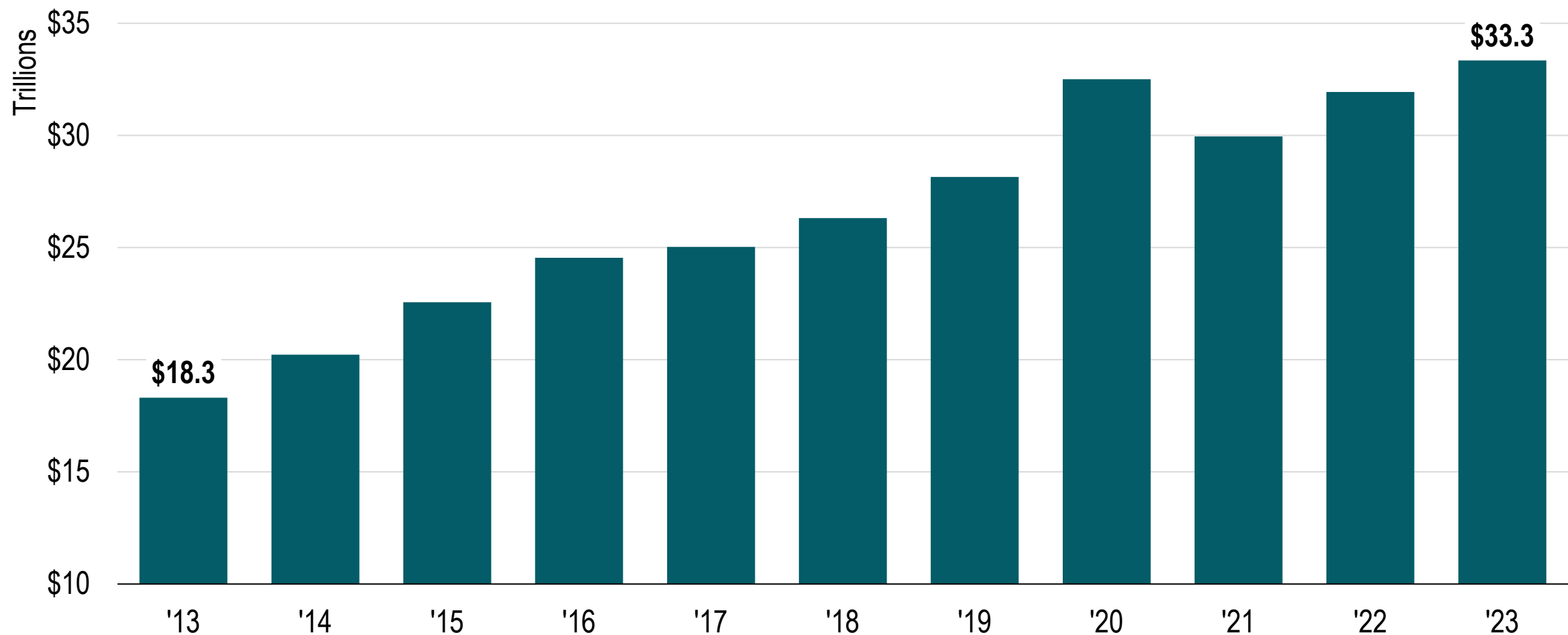
80%

**FOUND IT DIFFICULT
TO ACCESS CAPITAL**

Source: Goldman Sachs. Note: Image is sourced to (Ground Picture/shutterstock.com).

Commercial and Industrial Loans

United States



Source: Board of Governors of the Federal Reserve System

Office Market

Phoenix MSA

	Q4 2022	Q4 2023	GROWTH
Inventory (SF)	194.7 M	195.4 M	0.4% 
Net Delivered (SF)	355,374	150,000	-57.8% 
Net Absorption (SF)	-303,960	42,202	-113.9% 
Vacancy Rate	14.7%	15.9%	1.2% 
Market Cap Rate	7.8%	8.1%	0.3% 
Market Rent (Per SF)	\$28	\$29	3.6% 
Total Sales Volume	\$536.2 M	\$298.1 M	-44.4% 

Demand for office space is **weaker than nationwide** as this area has a slower absorption of office space. Despite weak conditions, rent prices rose faster than nationwide. However, vacancy rate is higher in this area.

Source: National Association of Realtors. Note: Image is sourced to (Monkey Business Images/shutterstock.com).

Industrial Market

Phoenix MSA

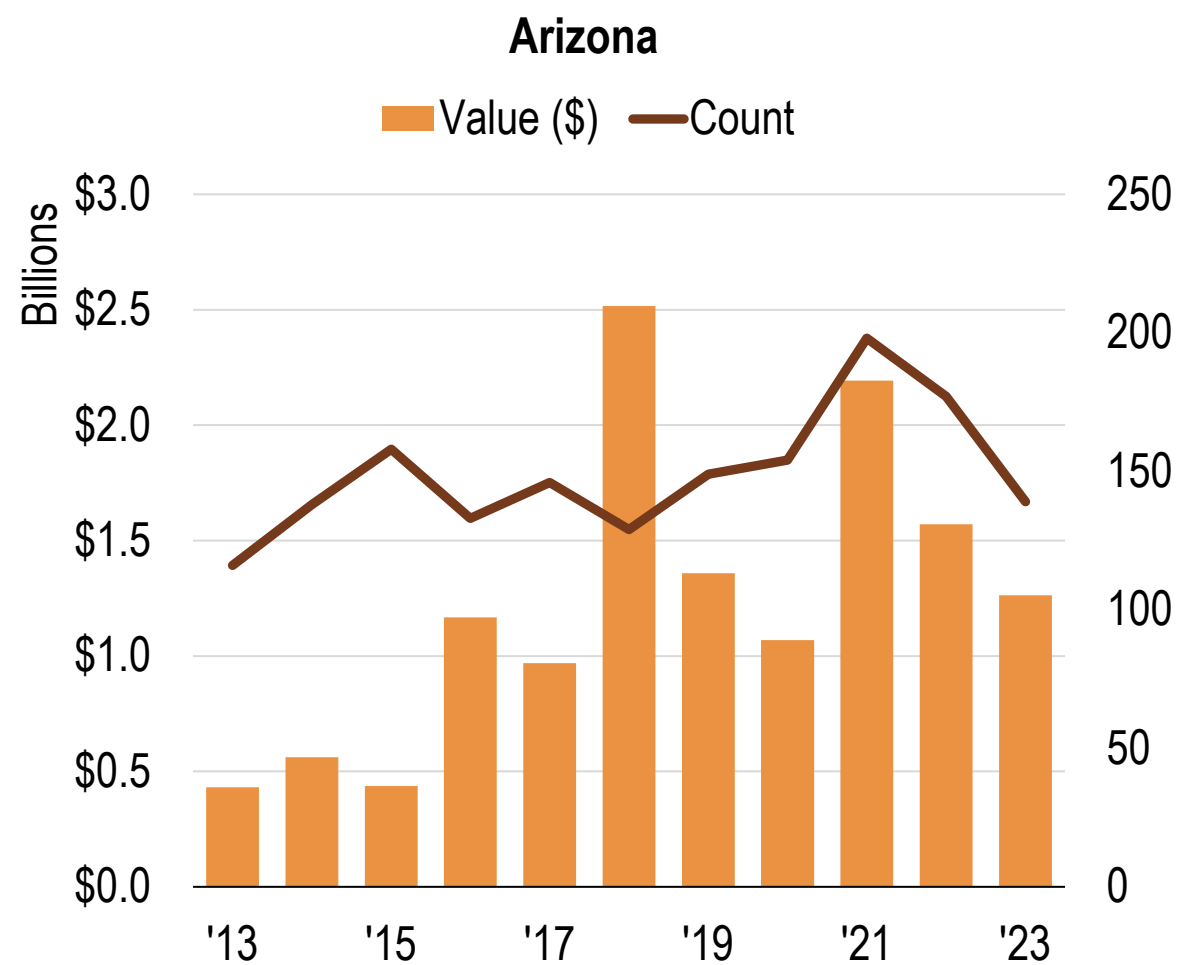
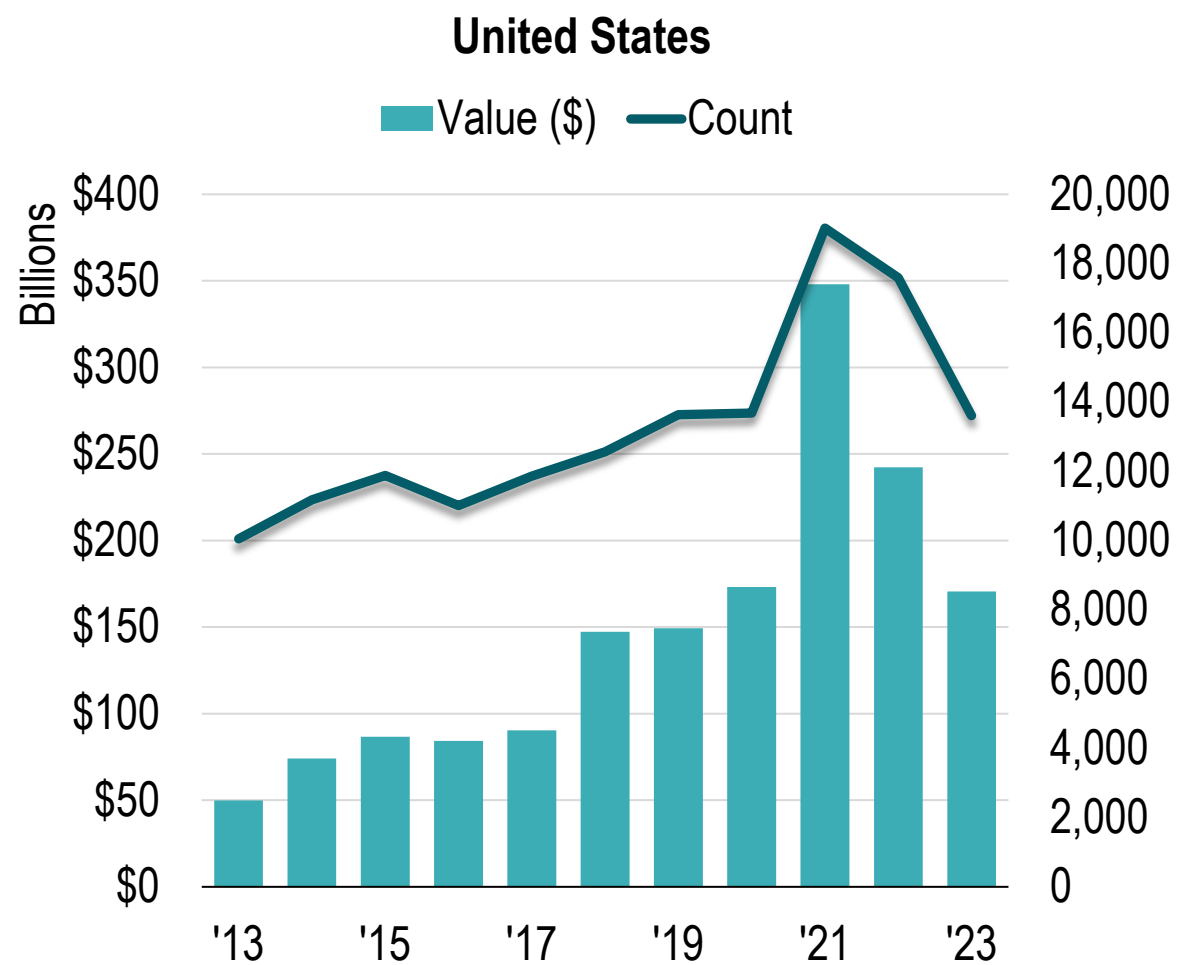
	Q4 2022	Q4 2023	GROWTH
Inventory (SF)	418.6 M	448.0 M	7.0% 
Net Delivered (SF)	9.0 M	8.9 M	-1.6% 
Net Absorption (SF)	7.3 M	2.3 M	-68.1% 
Vacancy Rate	4.7%	7.9%	3.2% 
Market Cap Rate	6.0%	6.3%	0.3% 
Market Rent (Per SF)	\$12	\$13	8.3% 
Total Sales Volume	\$666.6 M	\$382.3 M	-42.7% 

Demand for industrial space is **stronger than nationwide** as this area has a faster absorption of industrial space. As a result, rent prices rose faster than nationwide. However, vacancy rate is higher in this area.

Source: National Association of Realtors. Note: Image is sourced to (Don Pablo/shutterstock.com).

Venture Capital Investments

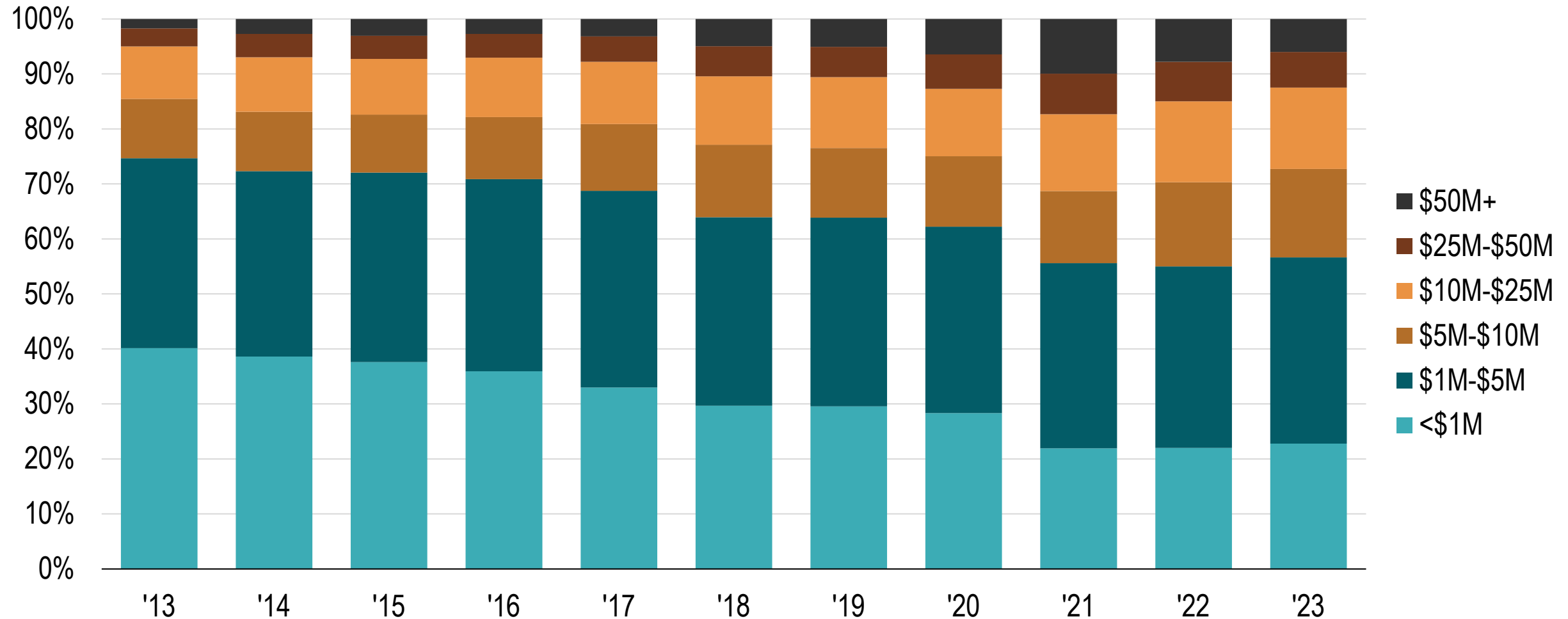
Transacted Volume and Counts



Source: Pitchbook

Venture Capital Investments

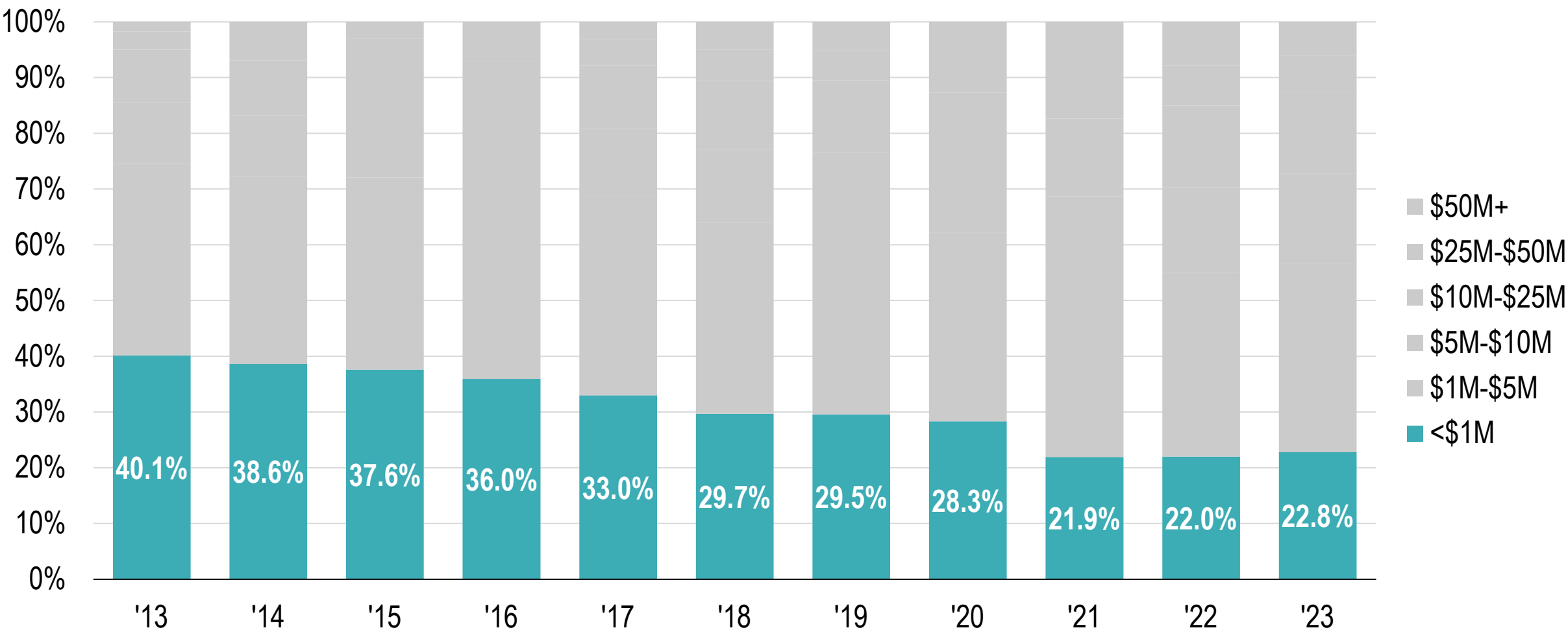
United States | Deals by Size Bucket



Source: Pitchbook. Note: Share of deal counts by size bucket excludes undisclosed deals.

Venture Capital Investments

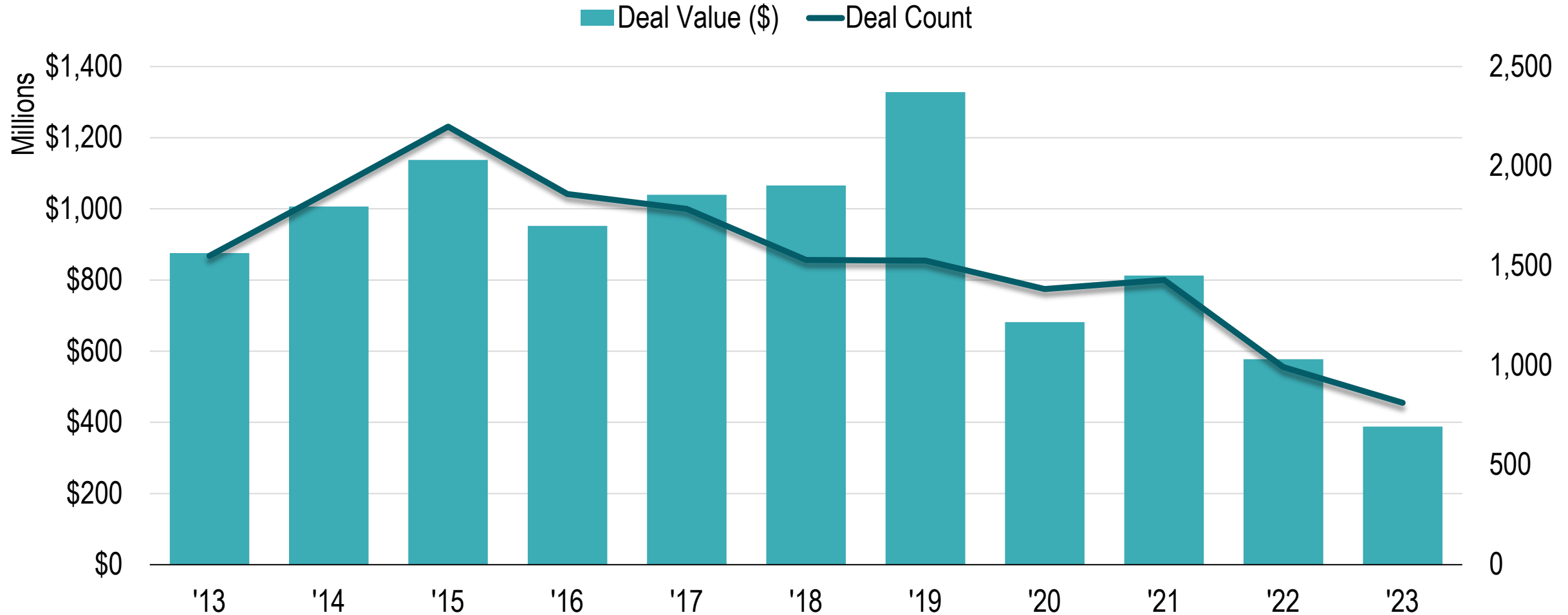
United States | Deals by Size Bucket



Source: Pitchbook. Note: Share of deal counts by size bucket excludes undisclosed deals.

Venture Capital Investments

United States | Angel Investor Deals



Source: Pitchbook



NATIONAL BANK OF ARIZONA

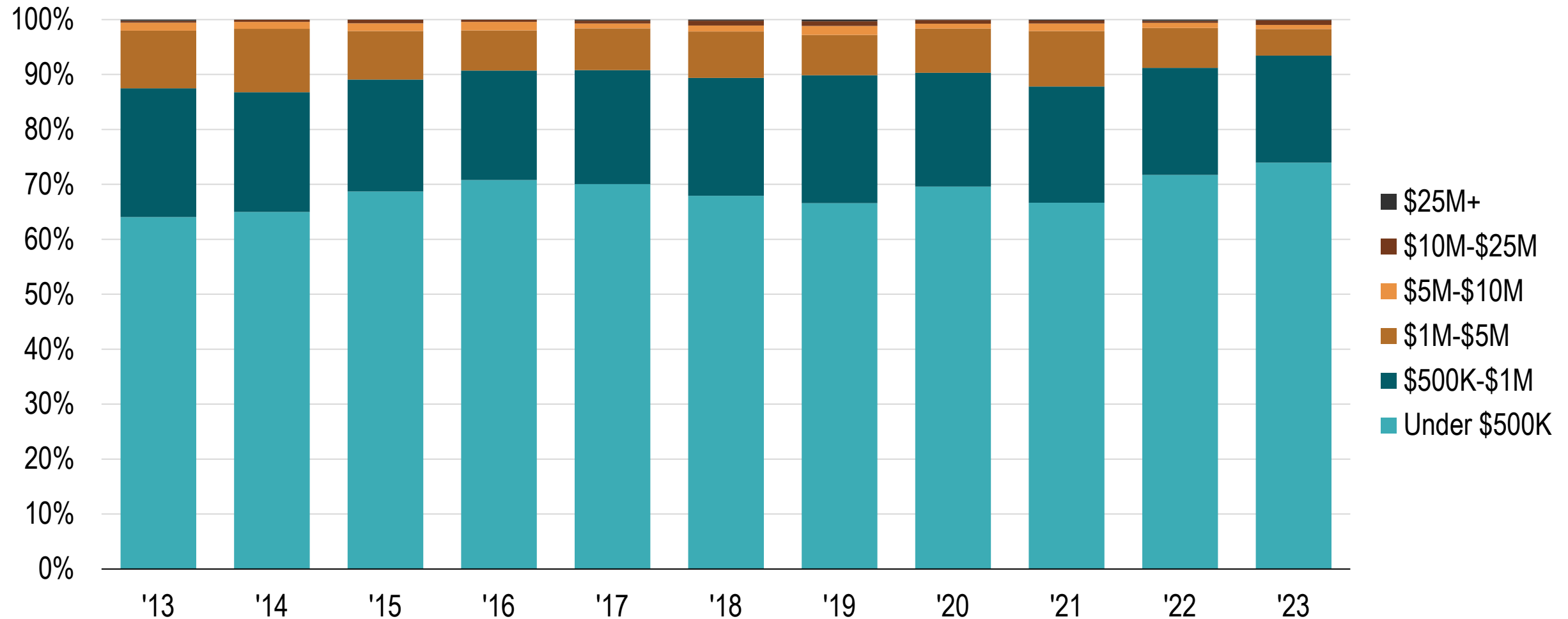
INFLATION IMPACTS

SPRING 2024



Venture Capital Investments

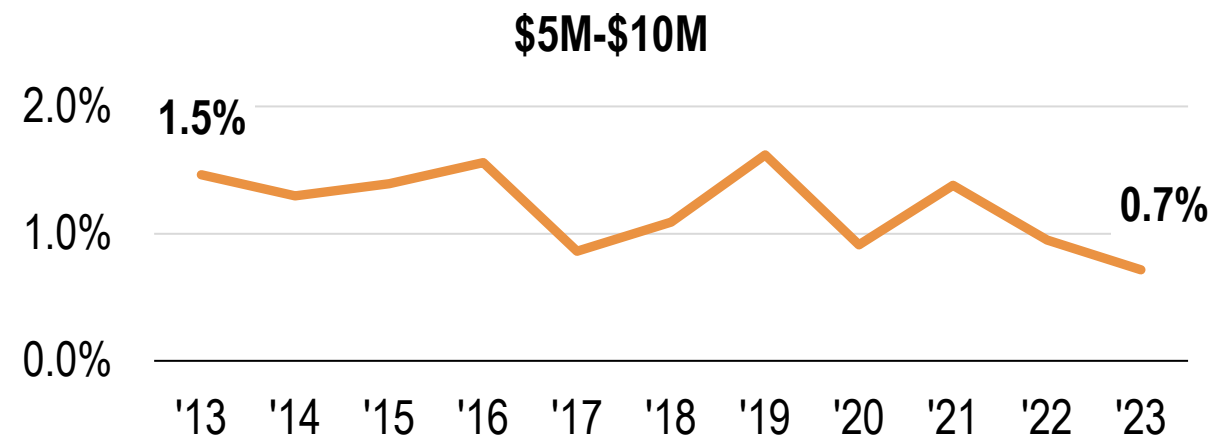
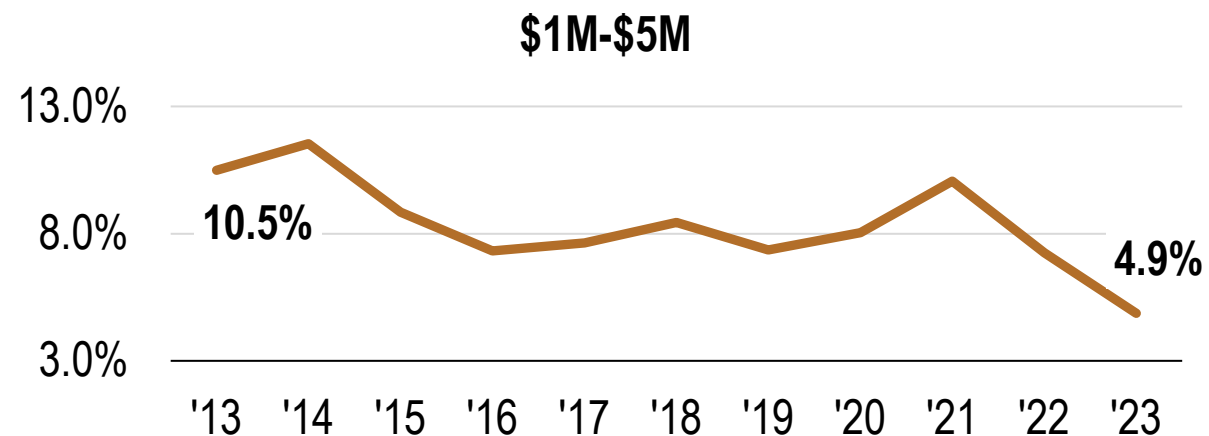
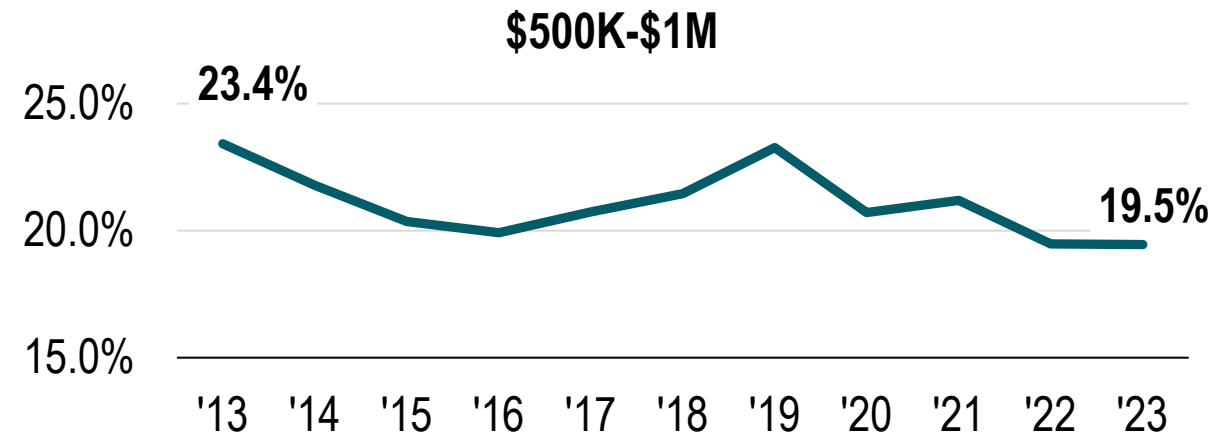
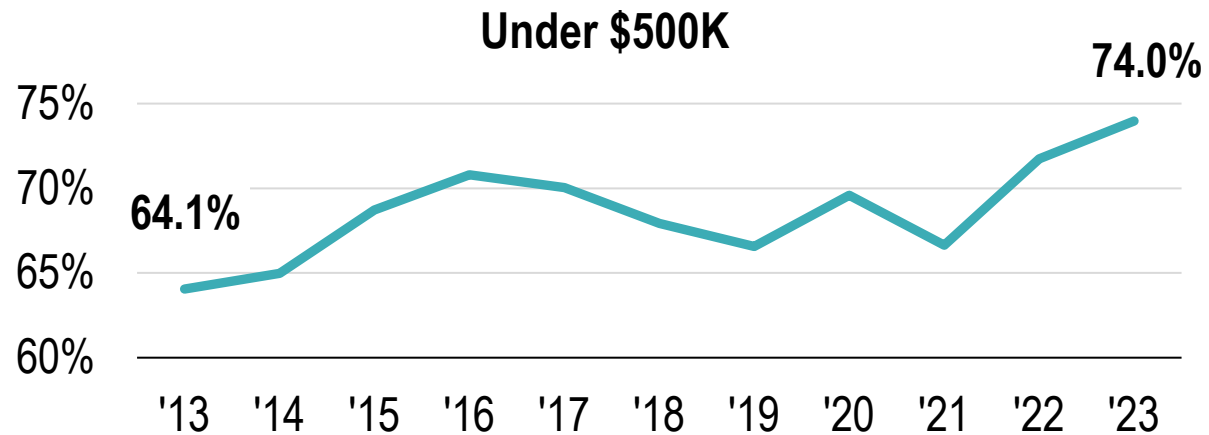
United States | Angel Investor Deals by Size Bucket



Source: Pitchbook. Note: Share of deal counts by size bucket excludes undisclosed deals.

Venture Capital Investments

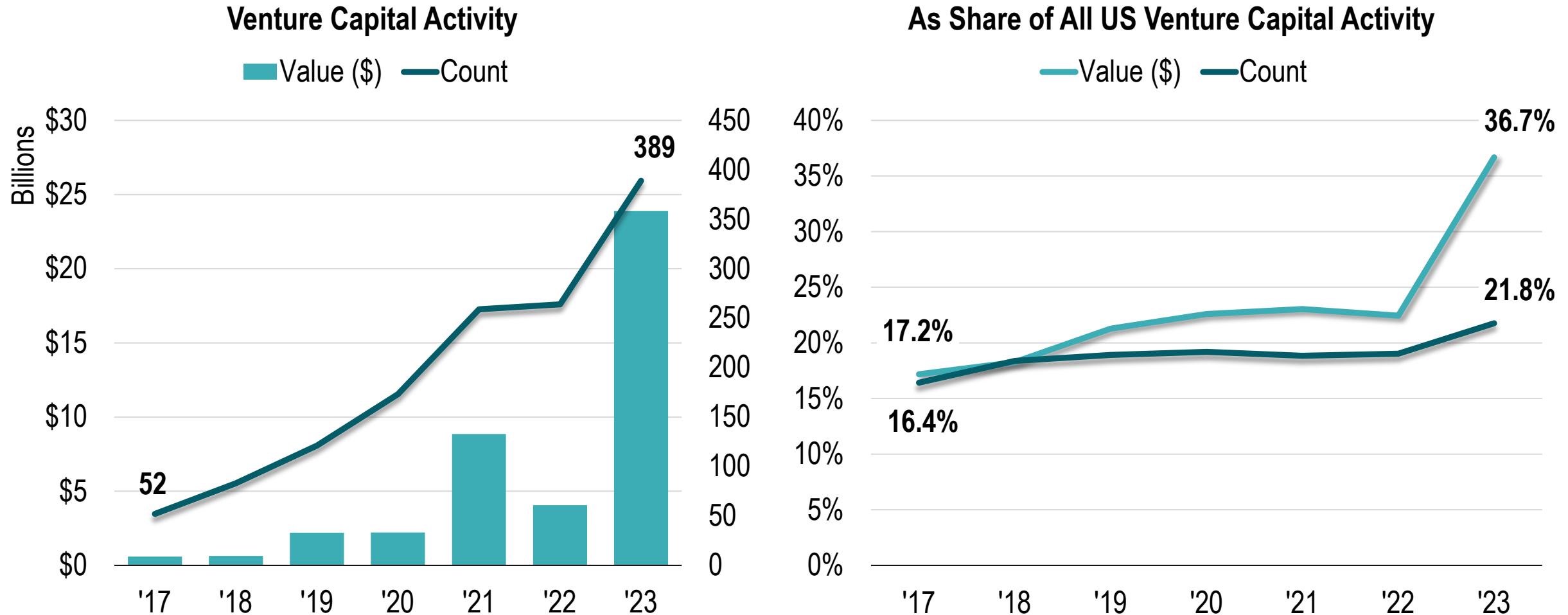
United States | Share of Angel Investor Deals by Size



Source: Pitchbook. Note: Share of deal counts by size bucket excludes undisclosed deals.

Venture Capital Investment

United States | Generative Artificial Intelligence (AI)



Source: PitchBook

Largest AI Venture Capital Deals

In 2023

 databricks	 metropolis	Inflection			
Databrick	Metropolis	Inflection AI	Anthropic	Anthropic	OpenAI
\$0.7B	\$1.1B	\$1.3B	\$2.0B	\$4.0B	\$10.0B

Source: Crunchbase

Largest AI Venture Capital Deals

In 2023

 databricks	 metropolis	Inflection			
Databrick	Metropolis	Inflection AI	Anthropic	Anthropic	OpenAI
\$0.7B	\$1.1B	\$1.3B	\$2.0B	\$4.0B	\$10.0B

Source: Crunchbase



ASU BECOMES THE FIRST HIGHER EDUCATION INSTITUTION TO COLLABORATE WITH OPENAI

“The collaboration between ASU and OpenAI brings the advanced capabilities of ChatGPT Enterprise into higher education, setting a new precedent for how universities enhance learning, creativity and student outcomes.”

January 18, 2024

Source: Arizona State University. Note: Image is sourced to (Mike Sanchez/ASU Enterprise Technology).



NATIONAL BANK OF ARIZONA

INFLATION IMPACTS

SPRING 2024





Inflation



Consumers



Shifts in Spending



Businesses



Looking Forward

Image Source: (Brent Coulter/shutterstock.com)



Inflation



Consumers



Shifts in Spending



Businesses

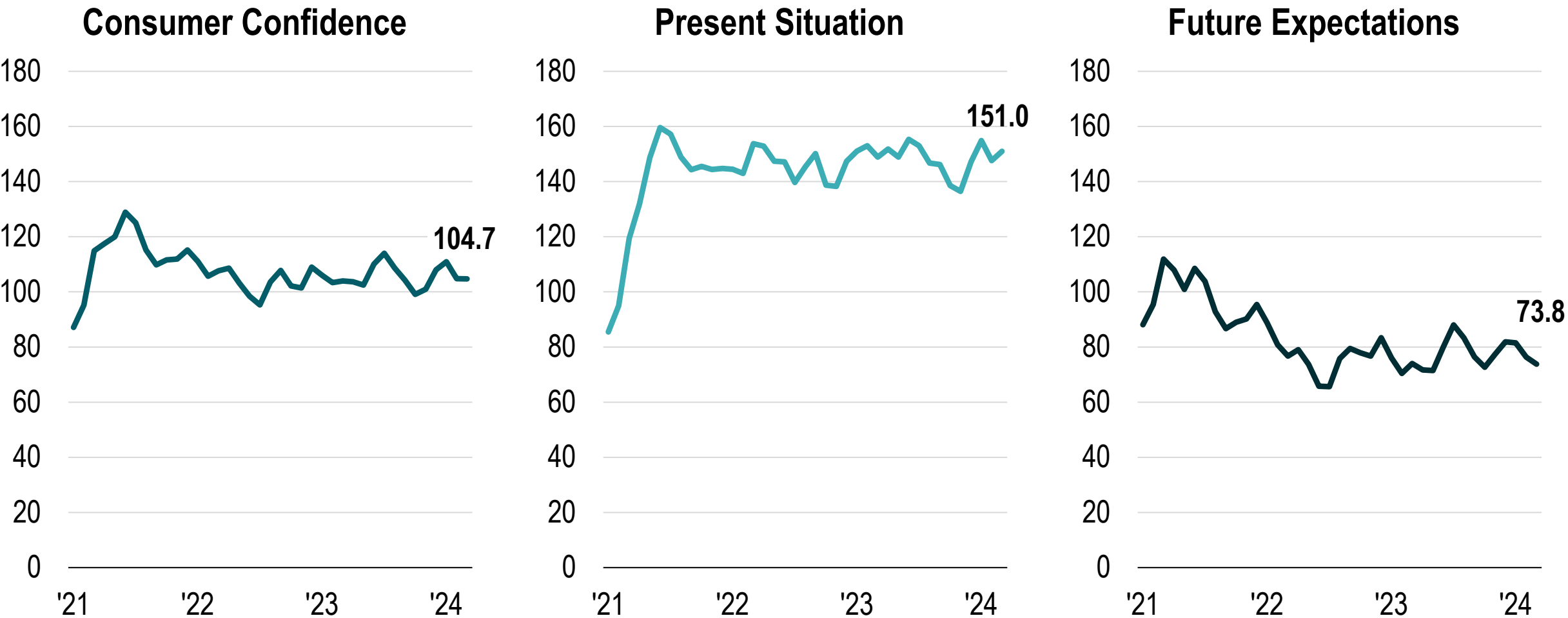


Looking Forward

Image Source: (Brent Coulter/shutterstock.com)

Consumer Confidence

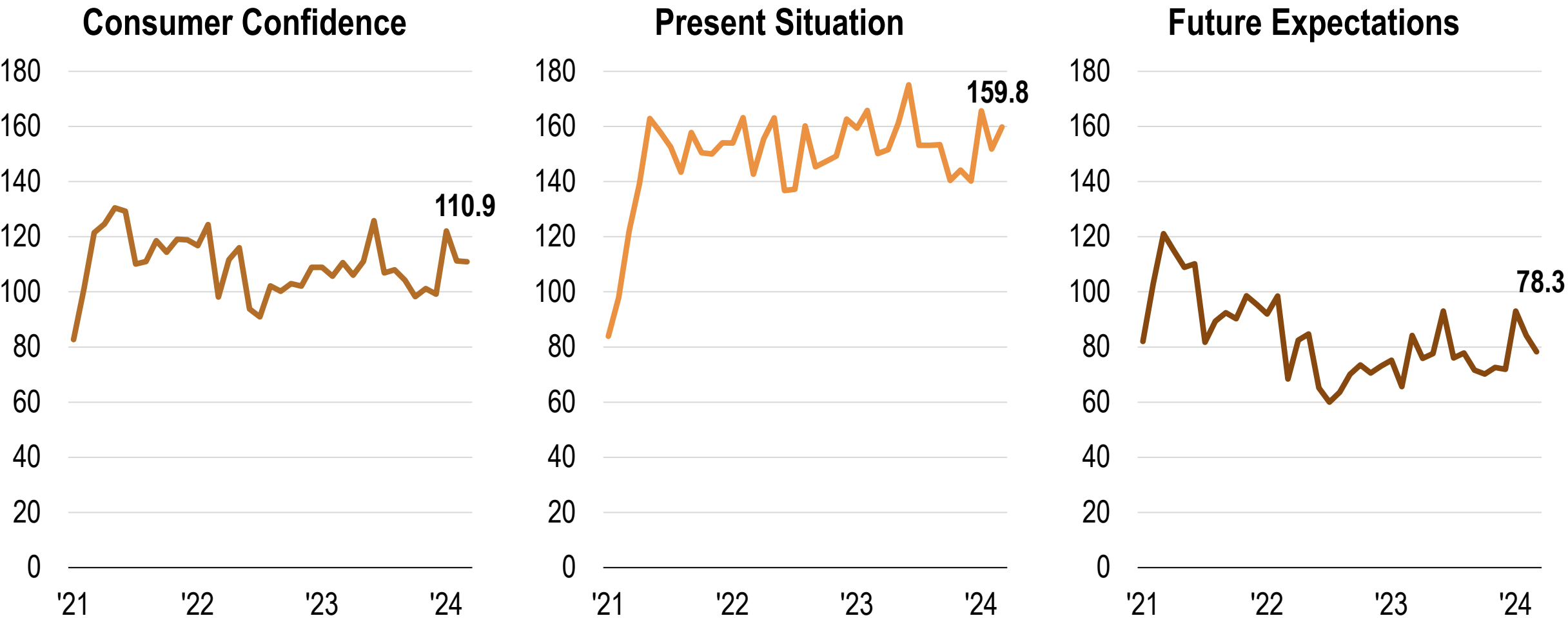
National



Source: The Conference Board

Consumer Confidence

Mountain Region



Source: The Conference Board

First Rate Cuts?

By Upcoming Meetings | Share of Economists' Expectations

APRIL 30 – MAY 1

31.4%

JUNE 11 – JUNE 12

34.3%

Source: Wall Street Journal Survey of Economists. Note: Image is sourced to (Tanarch/shutterstock.com).



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INFLATION IMPACTS

SPRING 2024



Fed Rate Projections

Federal Open Market Committee

2024

4.6%

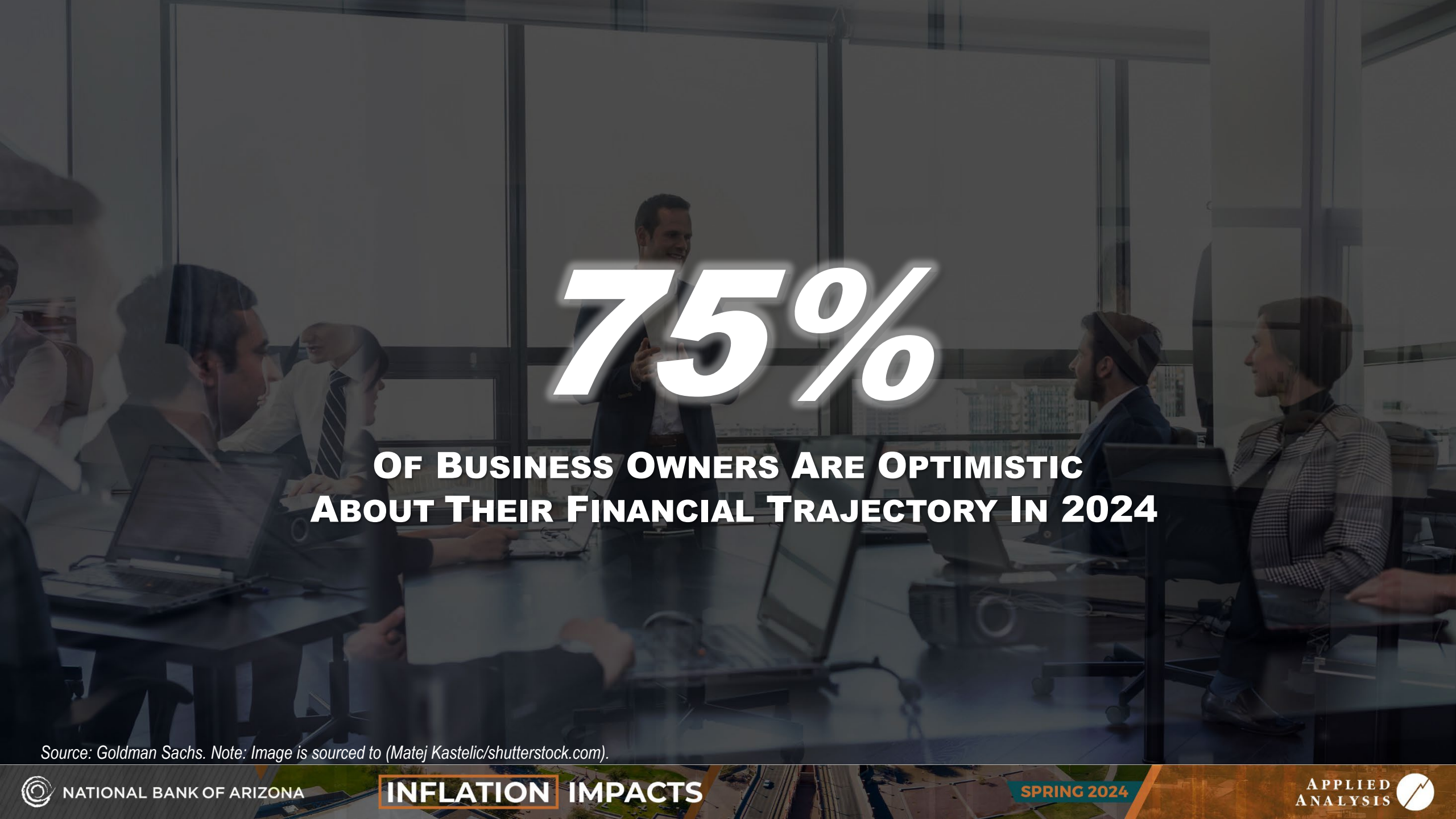
2025

3.9%

2026

3.1%

Source: Wall Street Journal Survey of Economists. Note: Image is sourced to (Tanarch/shutterstock.com).



75%

**OF BUSINESS OWNERS ARE OPTIMISTIC
ABOUT THEIR FINANCIAL TRAJECTORY IN 2024**

Source: Goldman Sachs. Note: Image is sourced to (Matej Kastelic/shutterstock.com).



INFLATION IMPACTS

SPRING 2024

