

# FOX SCIOC

UNDERSTANDING TODAY  
FOCUSING ON THE FUTURE

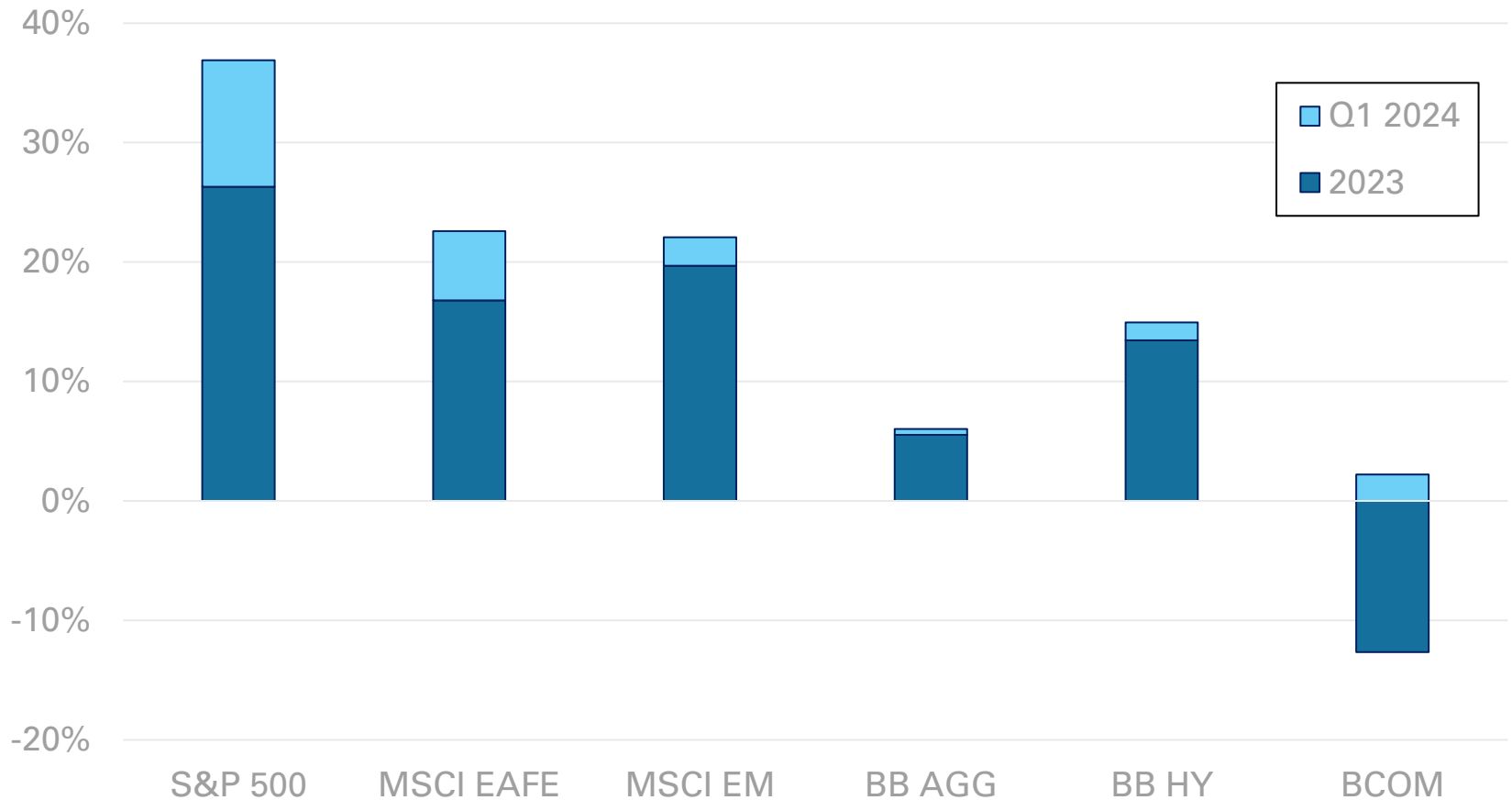
MAY 2024

Timothy F. McCusker, FSA, CFA, CAIA,  
Chief Investment Officer



# RECENT MARKET RESULTS

STRONG 2023 RETURNS (EXCEPT COMMODITIES) CONTINUE IN 2024



Source: FactSet



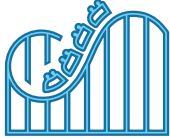


# MAGNIFICENT SEVEN




DOMINANT PERFORMANCE IN 2023 CONTINUES INTO 2024



Source: FactSet

# MARKET BACKDROP

	YE 2022	April 2024
 S&P 500	4,766	5,030
 IG OAS	0.92	0.90
 HY OAS	2.93	2.99
 Gold	1,895	2,345
 Oil	75	81

	2022	2024
 Fed Funds	0.25	5.50
 US 10 Year	1.51	4.63
 CPI	7.19	3.48

# MAGNIFICENT SEVEN

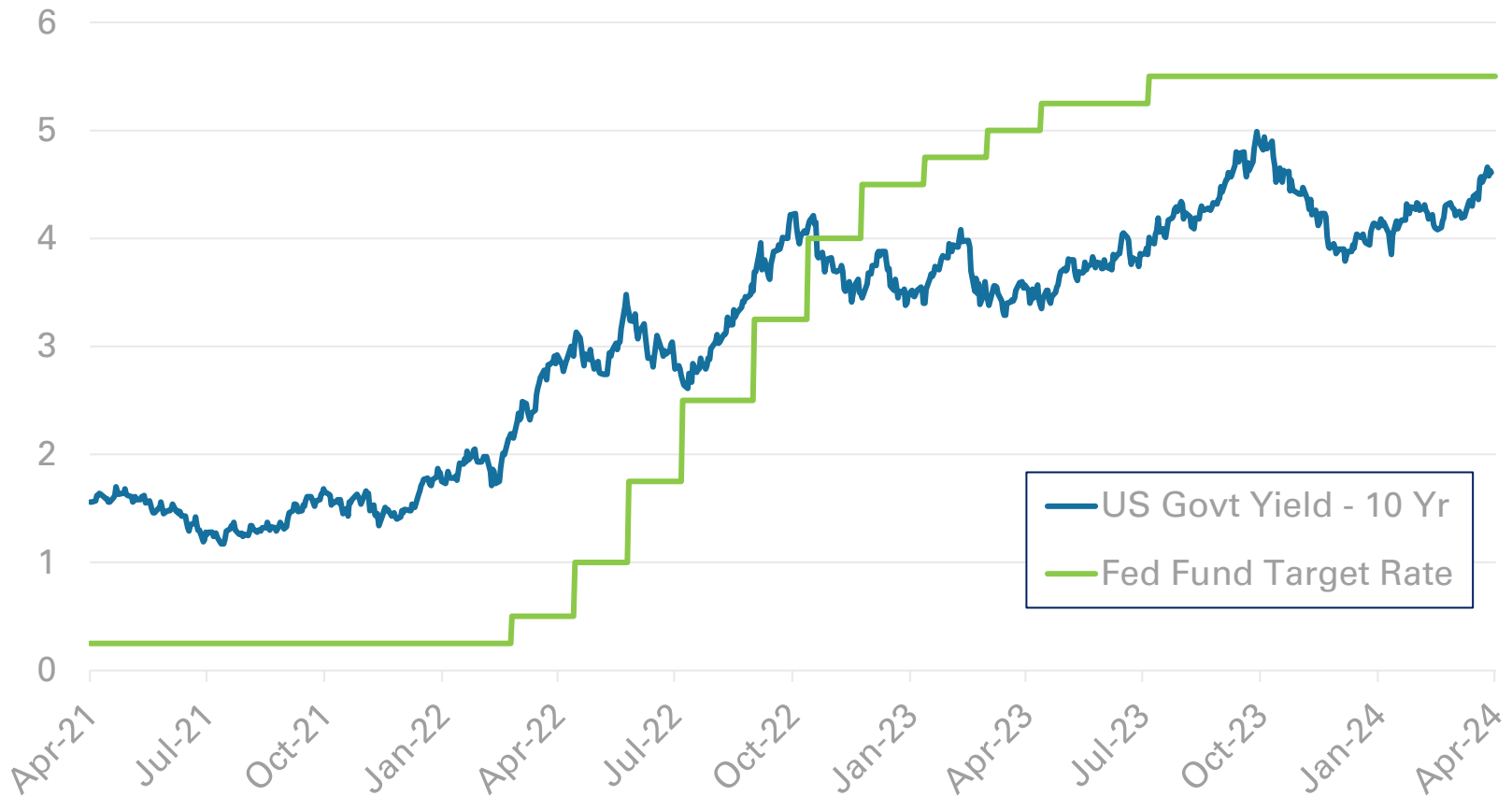
## ANOTHER ROUNDTRIP



Source: FactSet

# US INTEREST RATES

## STRUCTURAL CHANGE FOR RATE ENVIRONMENT

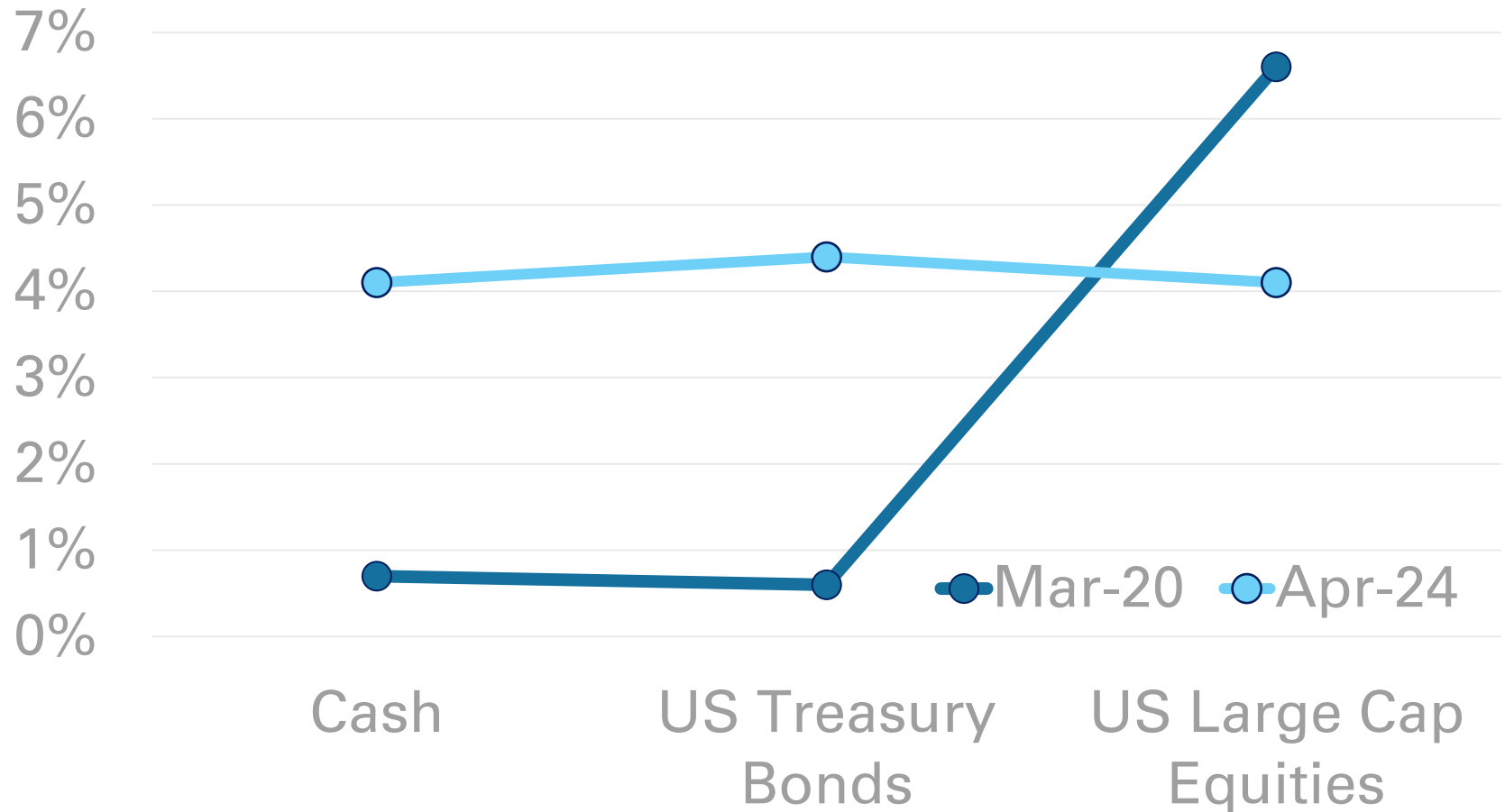


Source: FactSet



# WHY DOES THE ROUNDTRIP MATTER?

INVESTING GETS A LOT HARDER FROM HERE



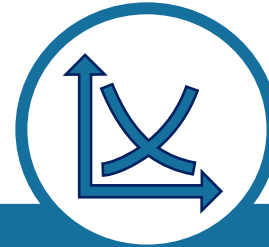
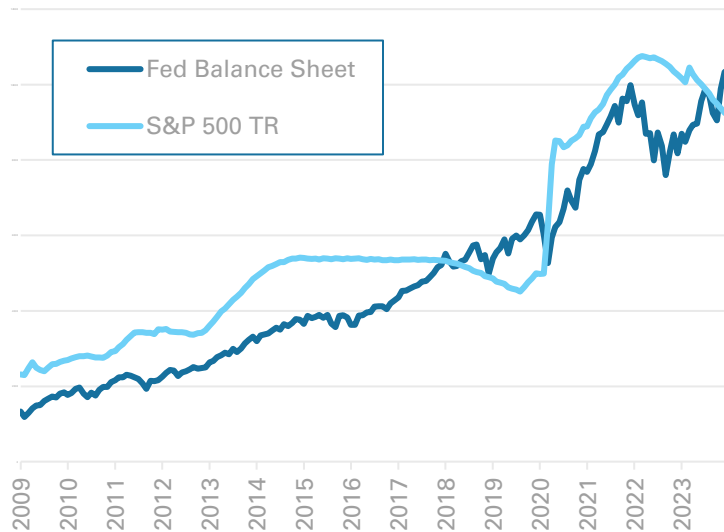
# TWO MAJOR UNDERLYING FORCES

DRIVERS OF SHORT-TERM PRICING AND VOLATILITY



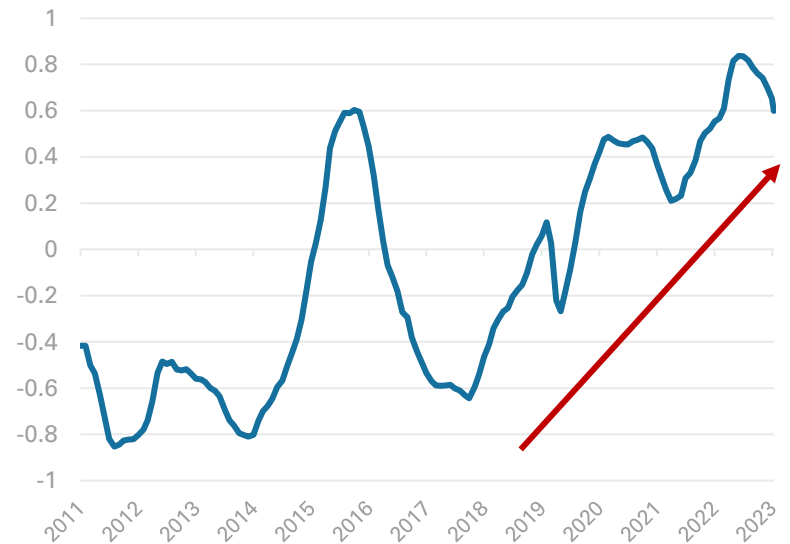
## LIQUIDITY

Fed Balance Sheet vs. S&P 500



## DURATION

S&P Earnings Yield vs. 10y Treas - 3y Correlation



Source: FactSet





# AREAS OF MARKET FOCUS

## SHORT-TERM



# AREAS OF SHORT-TERM MARKET FOCUS



**Fed Policy Path**

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**Inflation Re-Acceleration**

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**Global Election Cycle & Geopolitics**

# THE FED REMAINS BIASED TO POLICY EASING

**“Most FOMC participants see it as likely to be appropriate to begin lowering the policy rate at some point this year.”**

*- Jerome Powell March 20, 2024*

**“The recent data do not materially change the overall picture, which continues to be one of solid growth, a strong but rebalancing labor market, and inflation moving down toward 2 percent on a sometimes-bumpy path.”**

*- Jerome Powell April 3, 2024*

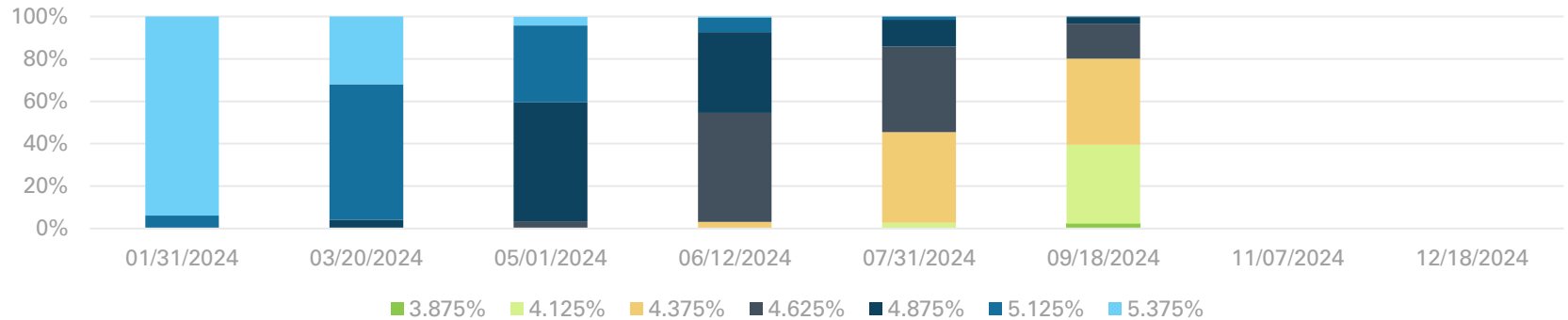
**“If higher inflation does persist, we can maintain the current level of restriction for as long as needed. At the same time, we have significant space to ease...”**

*- Jerome Powell April 16, 2024*

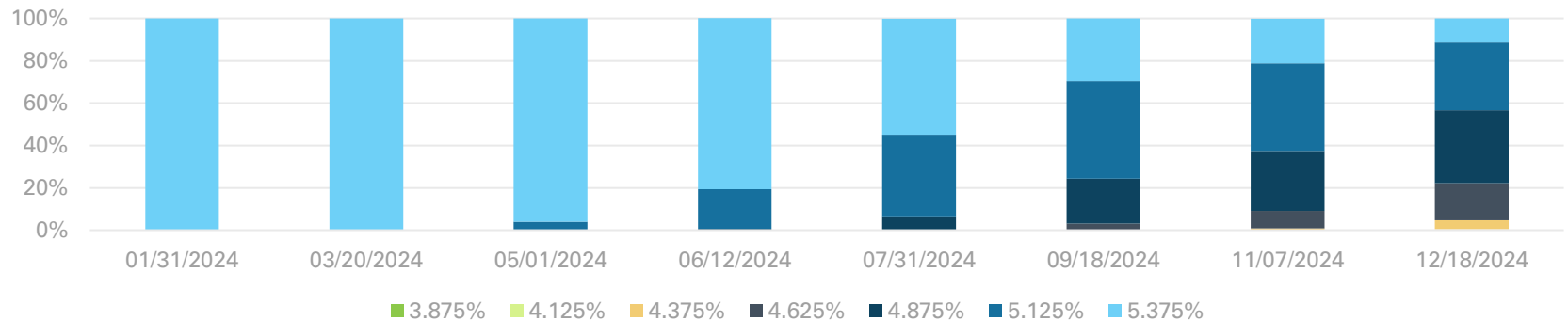
# MARKET EXPECTATIONS SHIFTING

HIGHER FOR LONGER PLAYING OUT IN REAL TIME

Market Probabilities - Fed Funds – January 2024



Market Probabilities - Fed Funds – April 2024

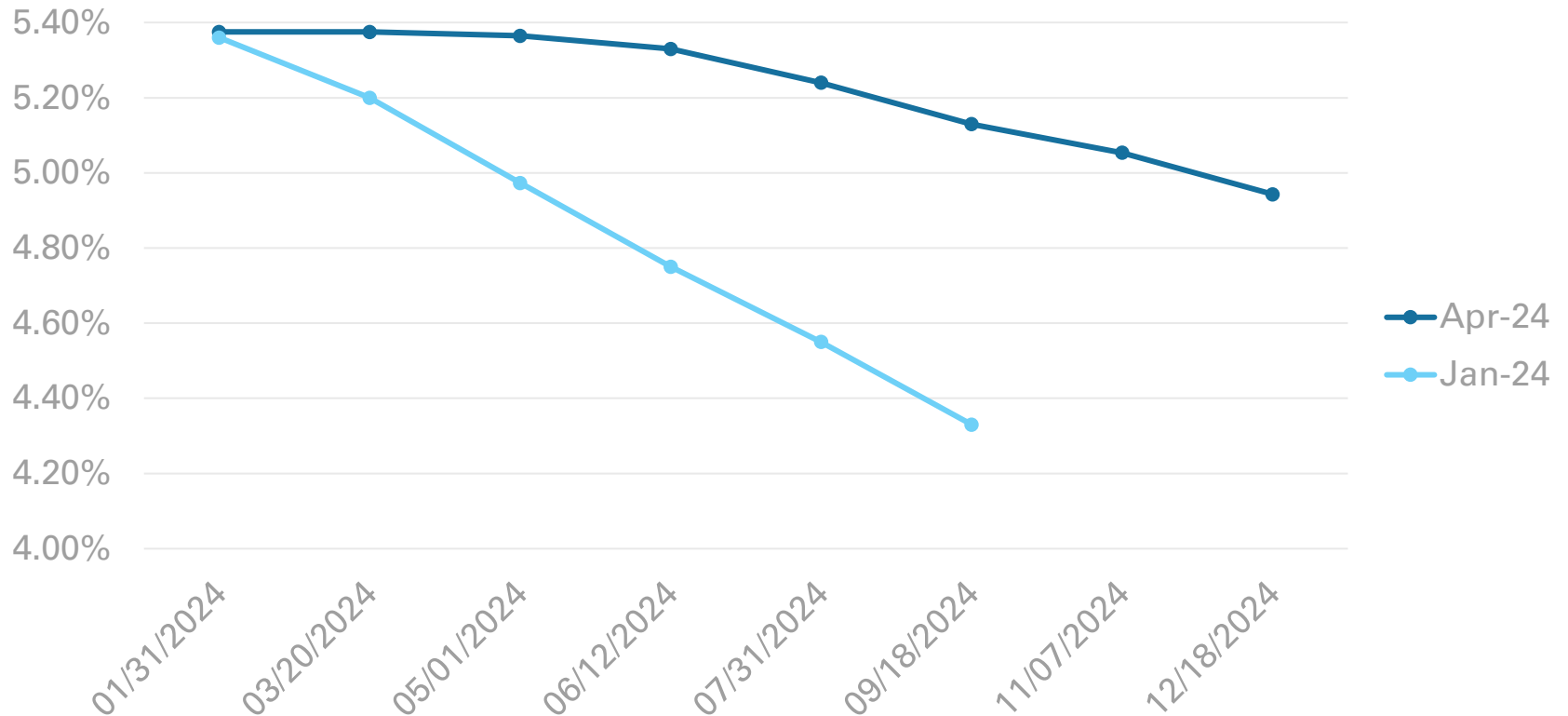


Source: FactSet

# MARKET RECOGNIZING FED APPREHENSION

EXPECTATION OF SIX CUTS AT BEGINNING OF THE YEAR NOW 2

Weighted Average FF Rate

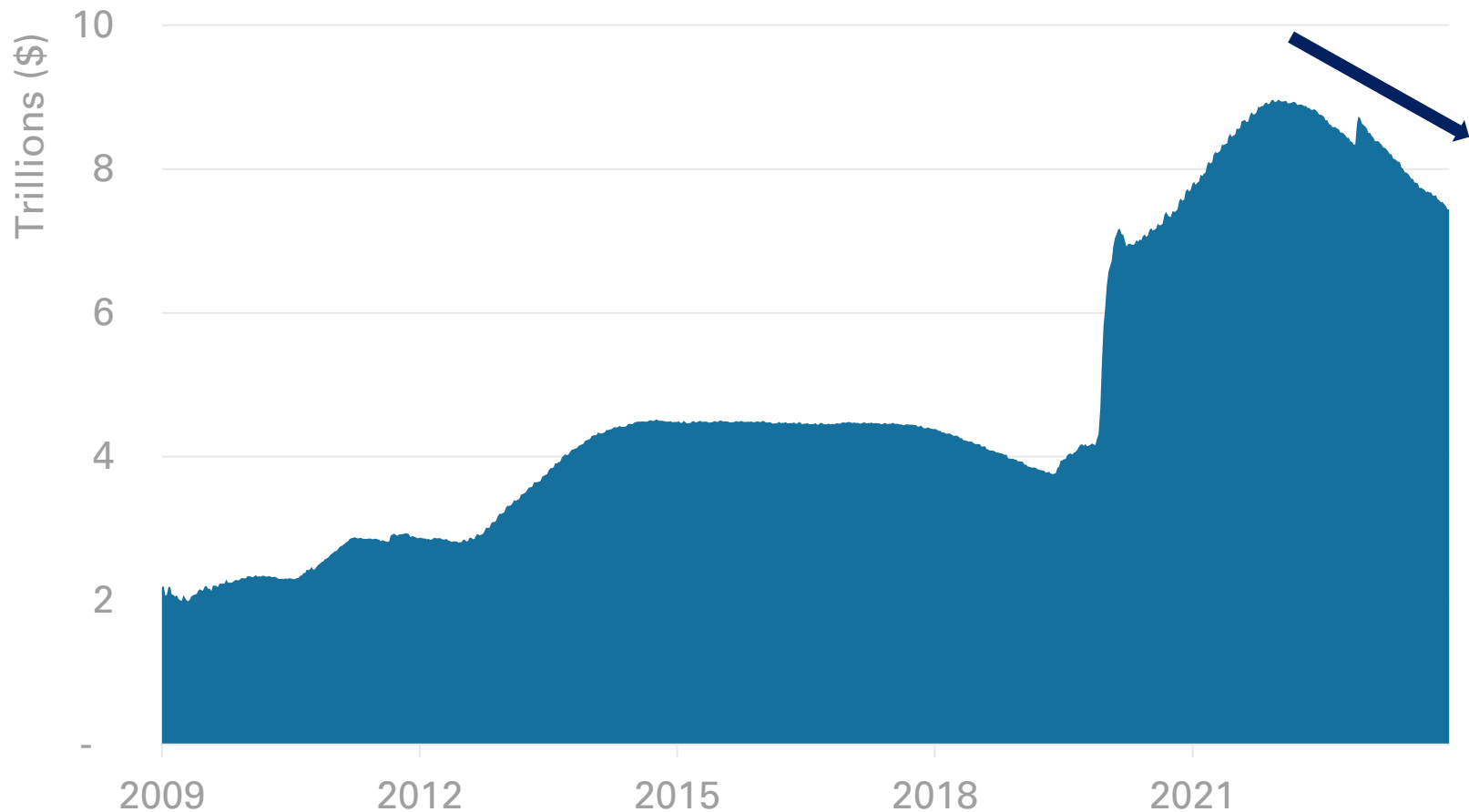


Source: FactSet



# QUANTITATIVE TIGHTENING CONTINUING...

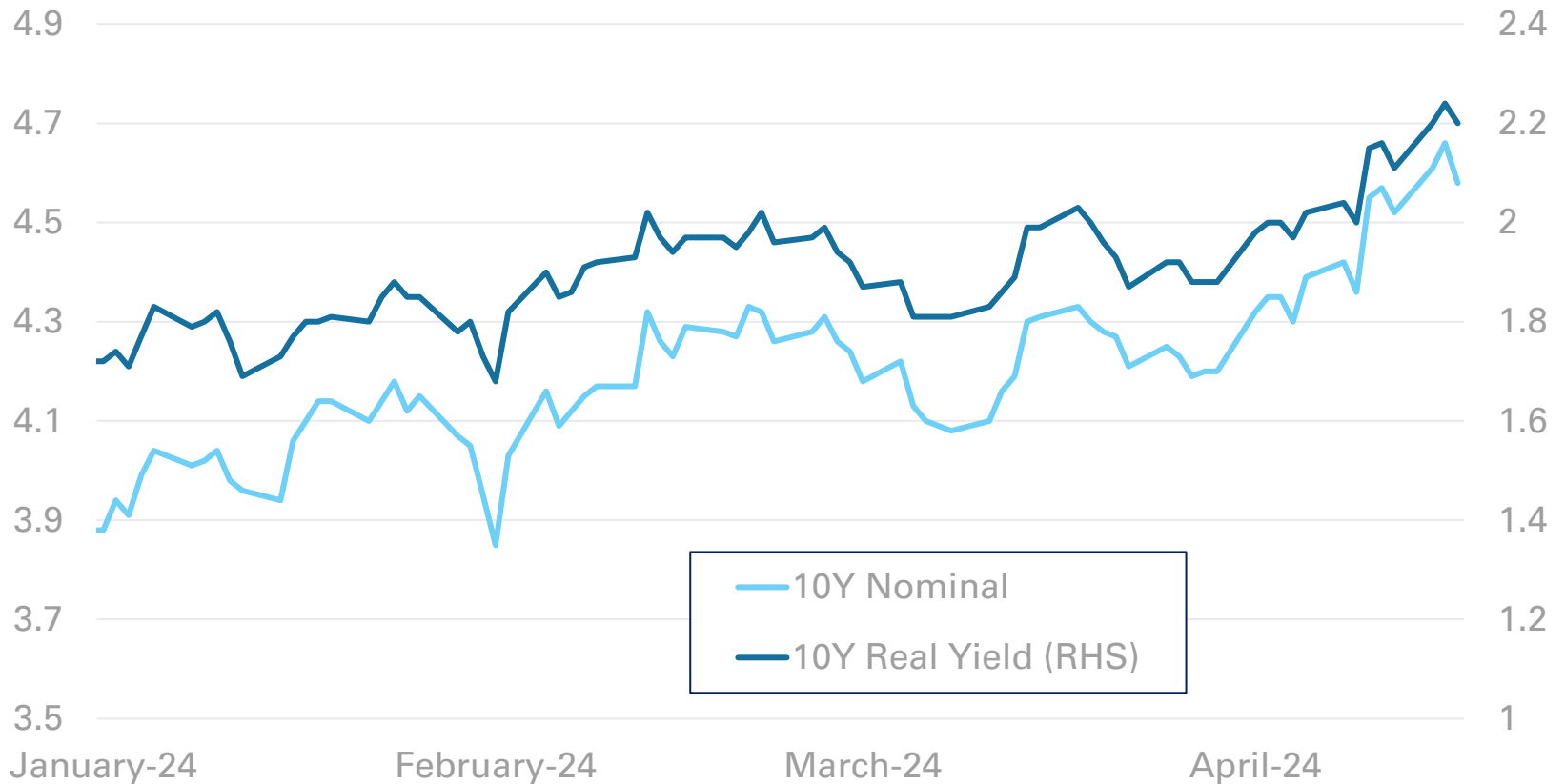
BALANCE SHEET HAS SHRUNK BY OVER \$1T SINCE MARCH 23



Source: FactSet

# COST OF CAPITAL ACCELERATING

SIGNIFICANT INCREASE IN RATES IN 2024

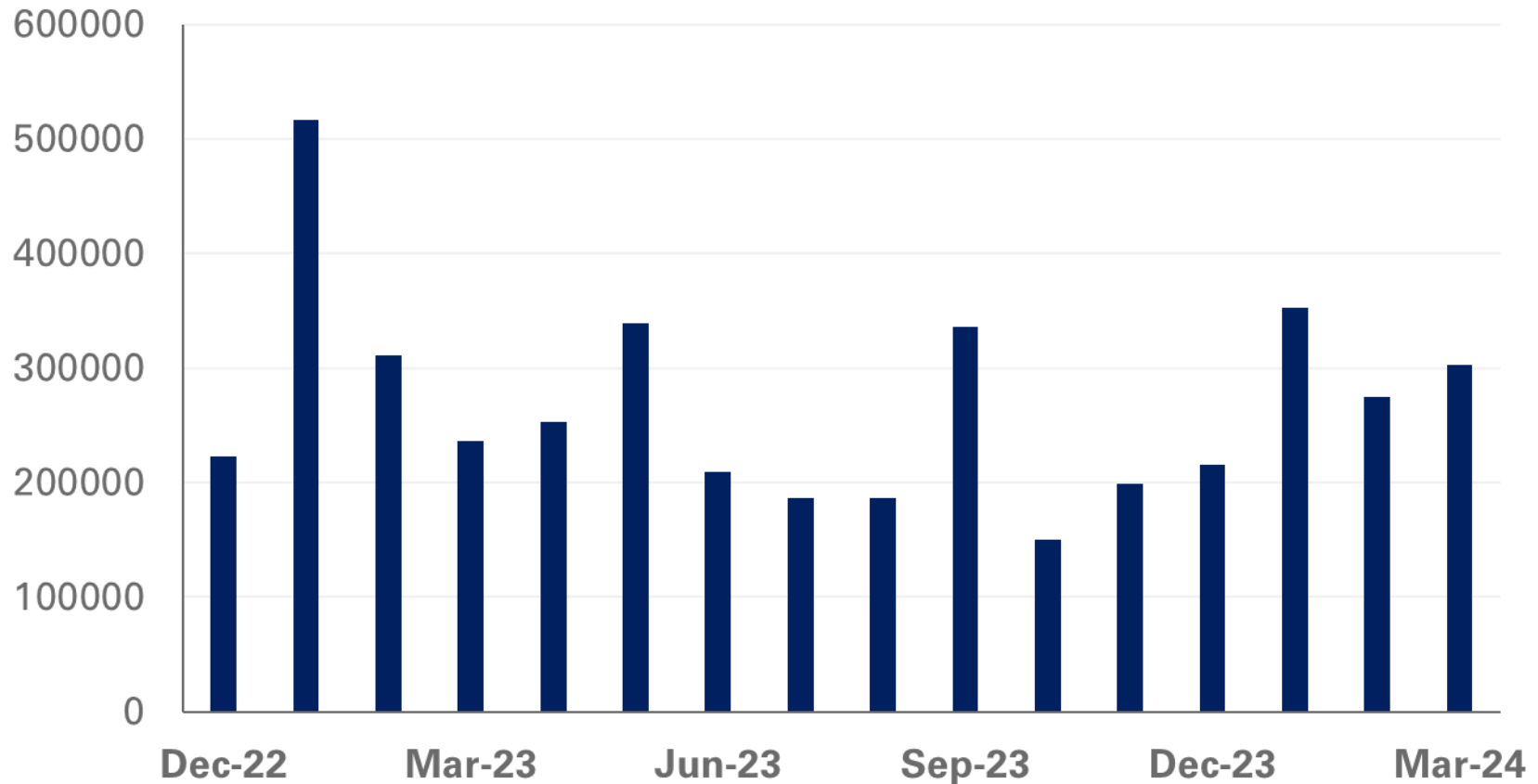


Source: FactSet



# LABOR MARKET DATA REMAINS ROBUST

## MONTHLY CHANGE IN TOTAL NONFARM PAYROLLS

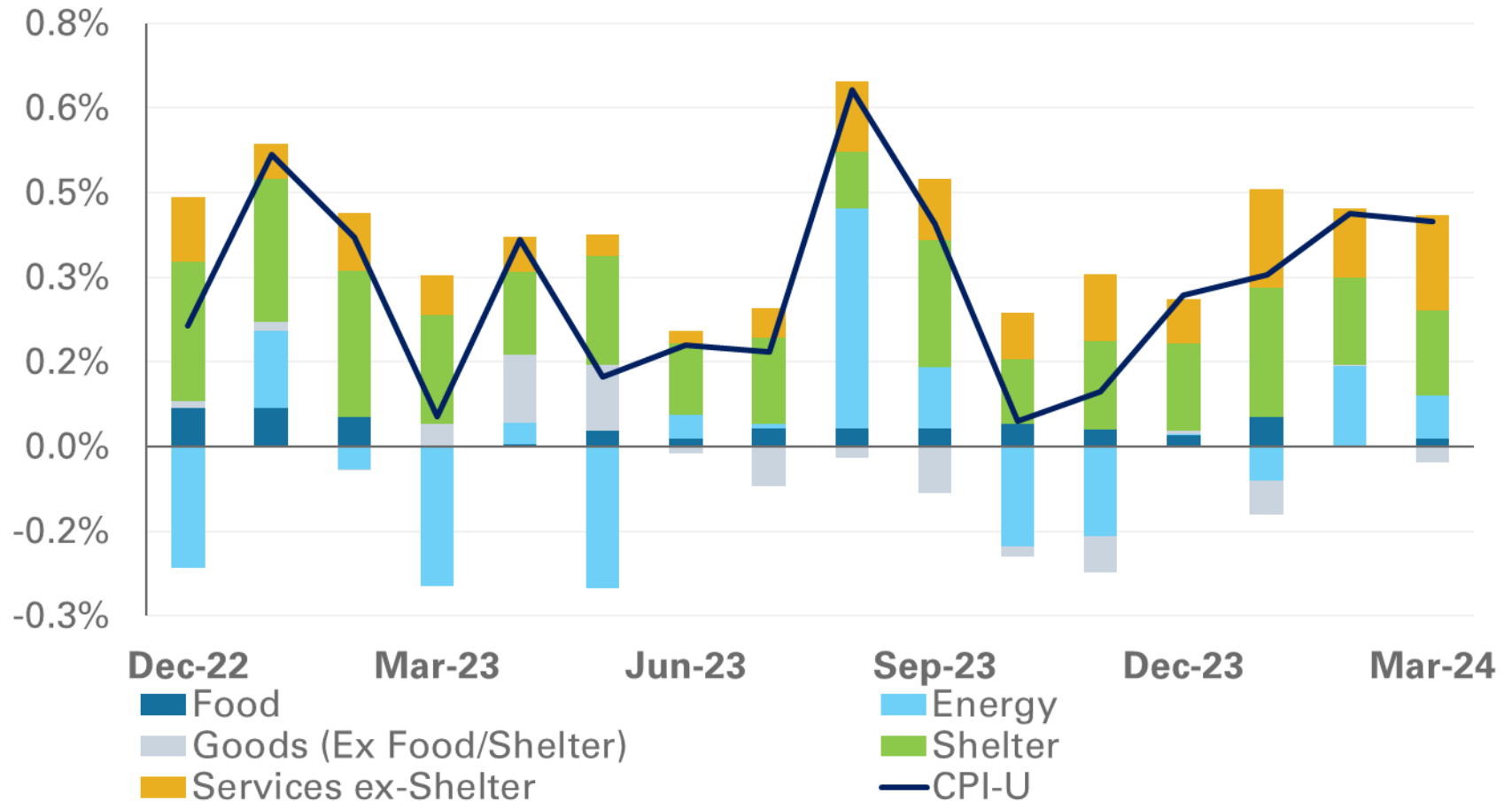


Sources: U.S. Department of Labor, FactSet



# U.S. INFLATION METRICS HAVE RE-ACCELERATED

## MONTHLY CHANGES IN CPI-U BY CATEGORY

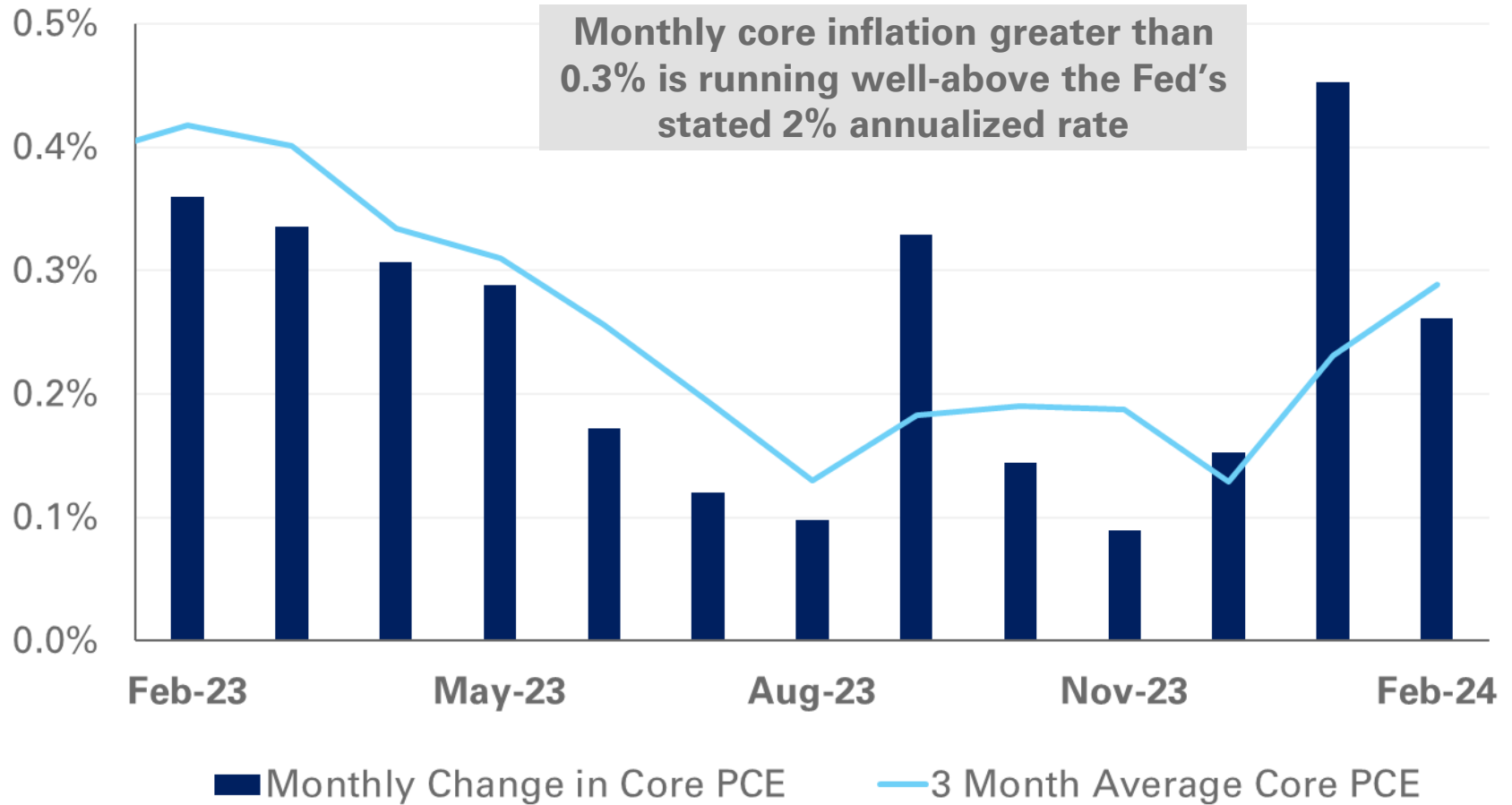


Sources: Department of Labor, FactSet



# CORE INFLATION IS RUNNING ABOVE FED TARGET

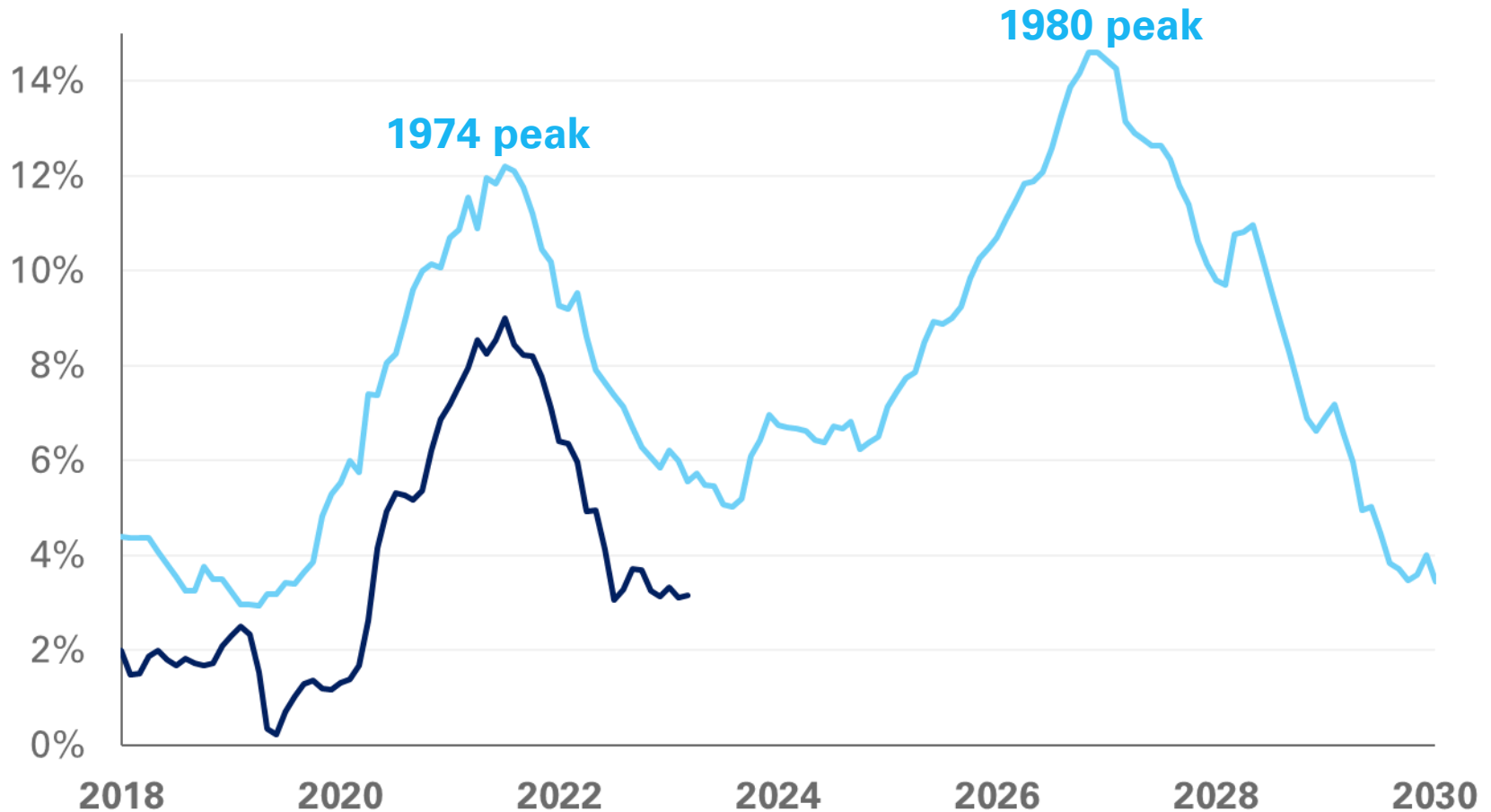
MONTHLY CHANGE IN CORE PCE (EX-FOOD AND ENERGY)



Sources: Department of Labor, FactSet

# INFLATION OFTEN COMES IN WAVES

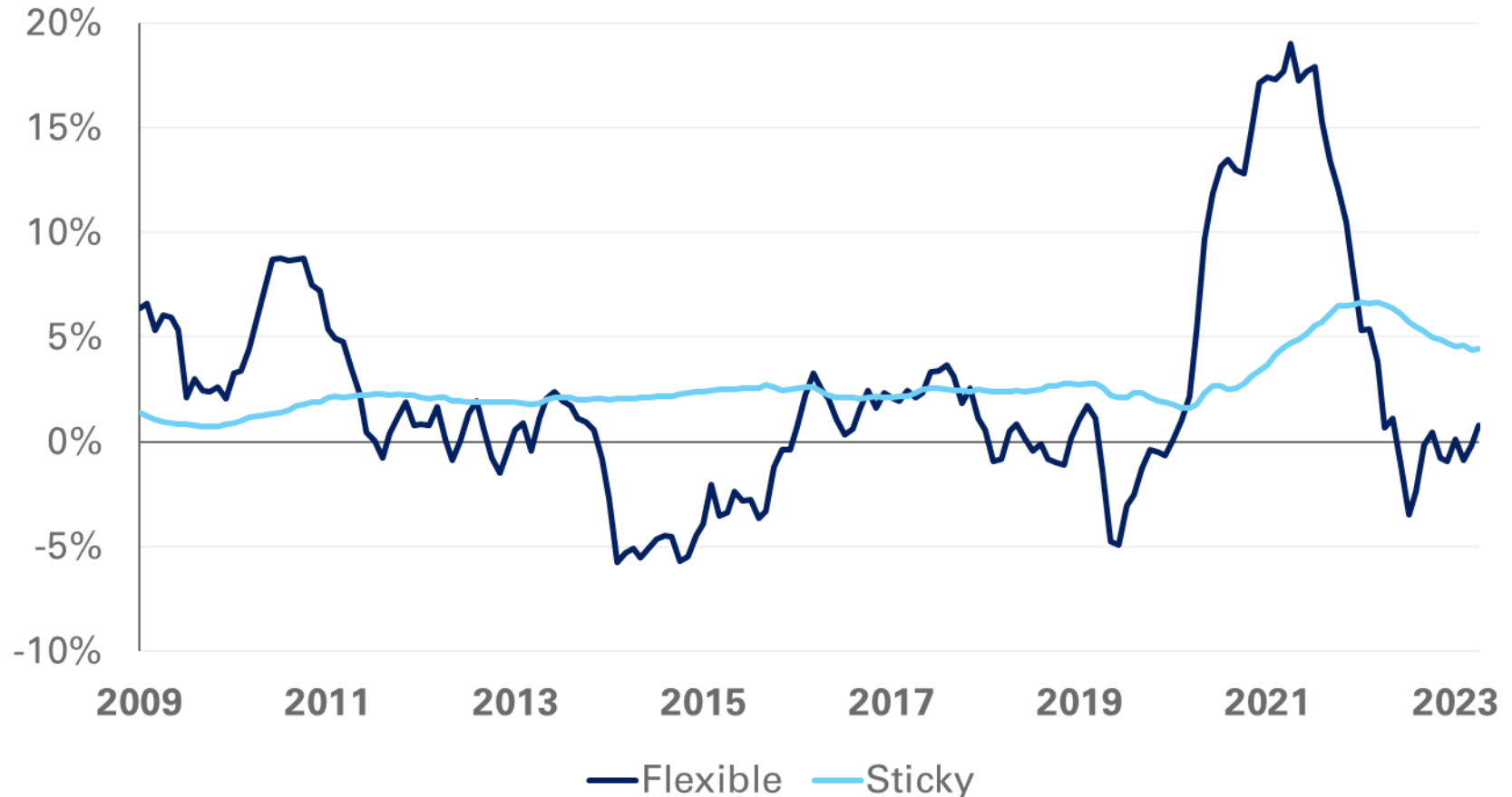
ANNUAL CHANGE IN U.S. CPI-U: 1970S VS. 2020S



Sources: U.S. Department of Labor, FactSet

# INFLATION PRESSURES ARE BROADENING

## FLEXIBLE VERSUS STICKY INFLATION PRESSURES

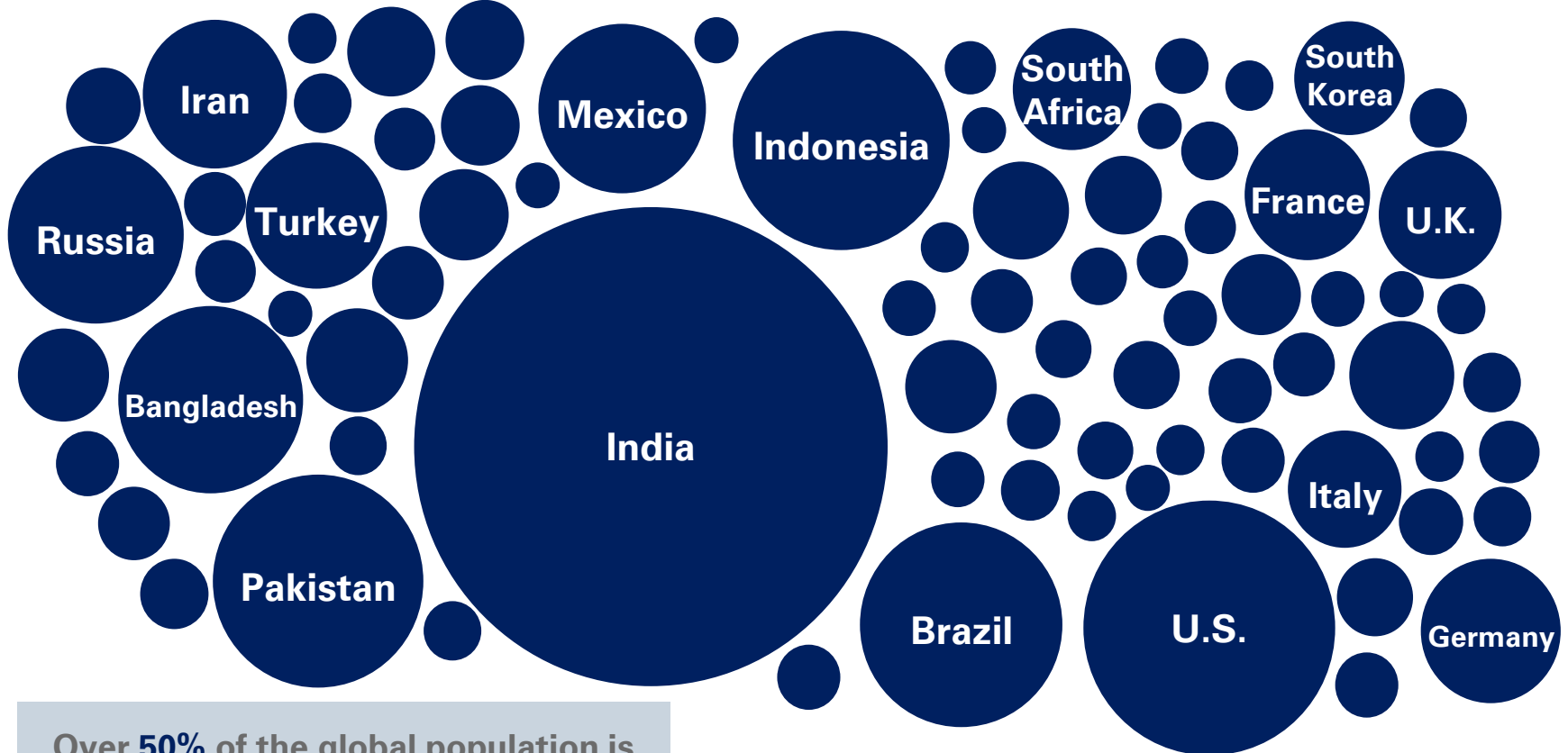


Notes: "Sticky" refers to a weighted basket of items that change price relatively slowly.  
Source: Federal Reserve Bank of Atlanta



# A GLOBAL ELECTION CYCLE COMPLICATES THINGS

- An election “supercycle” in 2024 widens the range of outcomes associated with foreign policy, trade policy, and domestic policy

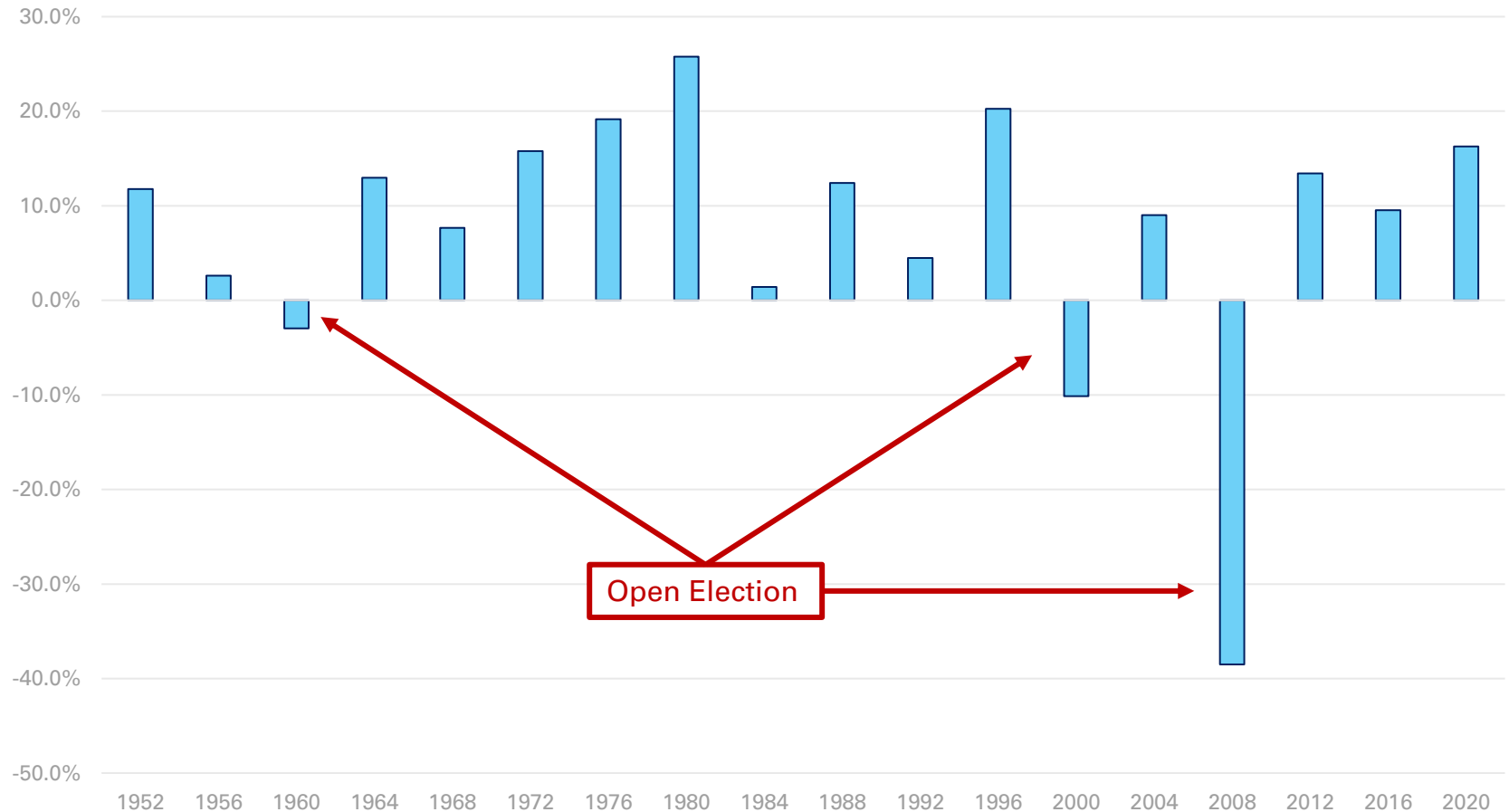


Over 50% of the global population is heading to the polls in 2024

Notes: Includes the European Union member states that will elect the next Parliament in June 2024. Size of bubble denotes size of population for voting country. Source: FactSet

# US PRESIDENTIAL ELECTION YEARS

USUALLY POSITIVE FOR S&P 500 (ESPECIALLY RE-ELECTIONS)



Source: Strategas, FactSet

# US PRESIDENTIAL POLICY TOOLS

Short-end debt  
borrowing

Fed/Treasury  
easing financial  
conditions

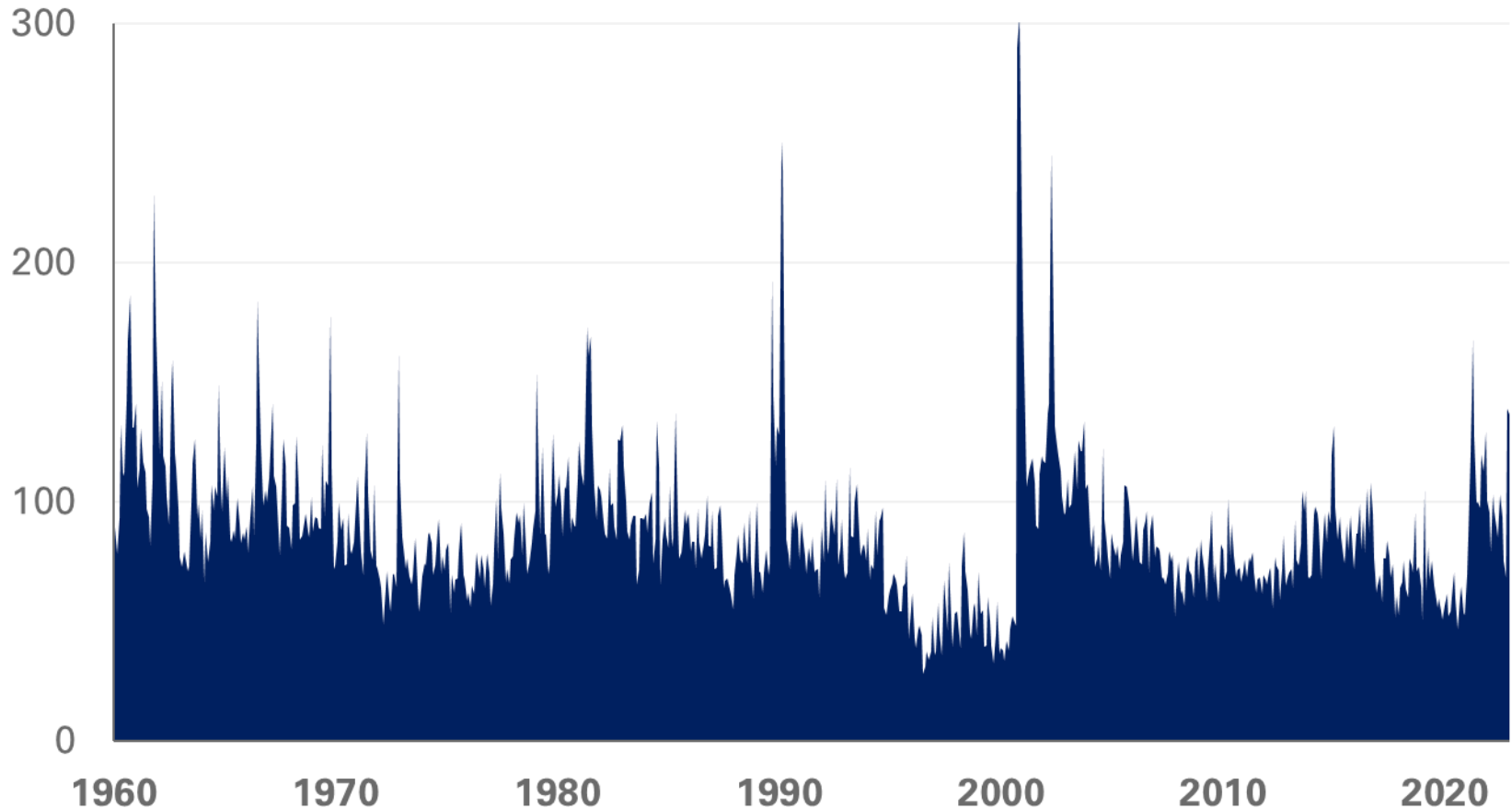
US-China  
relationship  
healing

Fiscal spending  
for Congressional  
approved  
Infrastructure

Student Loan  
Cuts for qualified  
borrowers

# A TRANSITION AWAY FROM RELATIVE STABILITY

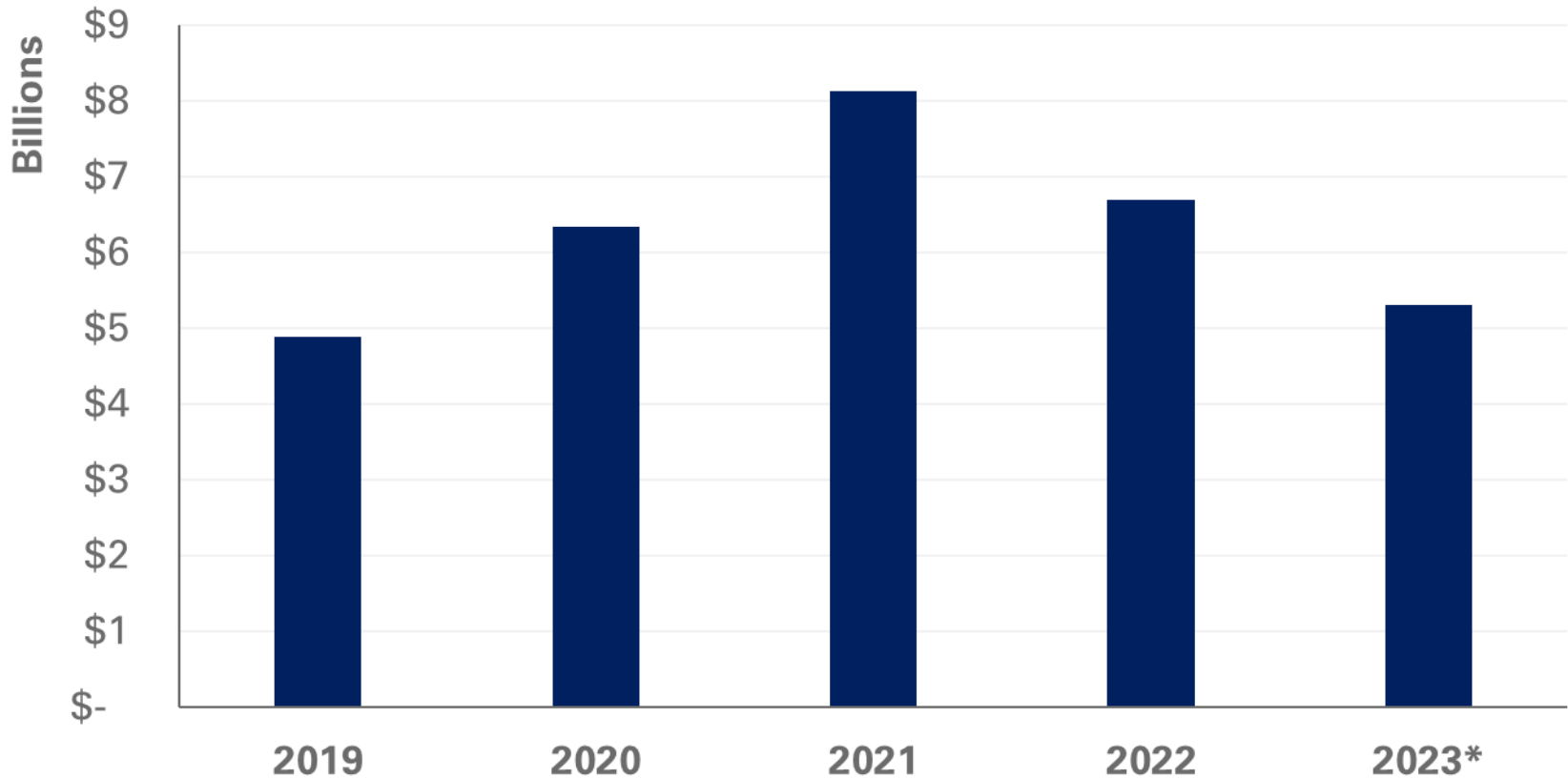
## HISTORICAL GEOPOLITICAL RISK INDEX





# U.S.-CHINA RELATIONS ARE EVER-PRESENT

## SEMICONDUCTOR-RELATED EXPORTS FROM THE U.S. TO CHINA



Notes: 2023 assumes fourth quarter exports is an average of the first three quarters of 2023

Semiconductor is based on FAS value for HTS Codes: 8541, 9030.92.00, 9031.41, 8480.71.40.00, and 8486

Source: U.S. International Trade Commission





# LONG TERM THEMES

SHORT-TERM



# LONG-TERM INVESTING THEMES



**Cost of Capital**

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**Debt Sustainability**

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**Artificial Intelligence**

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**Regime Change**

# ADJUSTING TO A “COST OF CAPITAL”

## 2024 MARKET THEMES



**Normalizing Higher Interest Rates**

**Economy is not acclimated to long-term interest rate environment of 4% or higher**



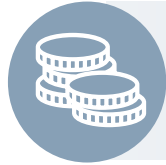
**Tighter Bank Lending Standards**

**Access to capital for entities needing to refinance will be a 2024 focus point**



**Benefits Accrue for Fixed Rate Borrowers**

**Fixed rate borrowers have time to adjust capital structure to the rate environment**



**Interest Income**

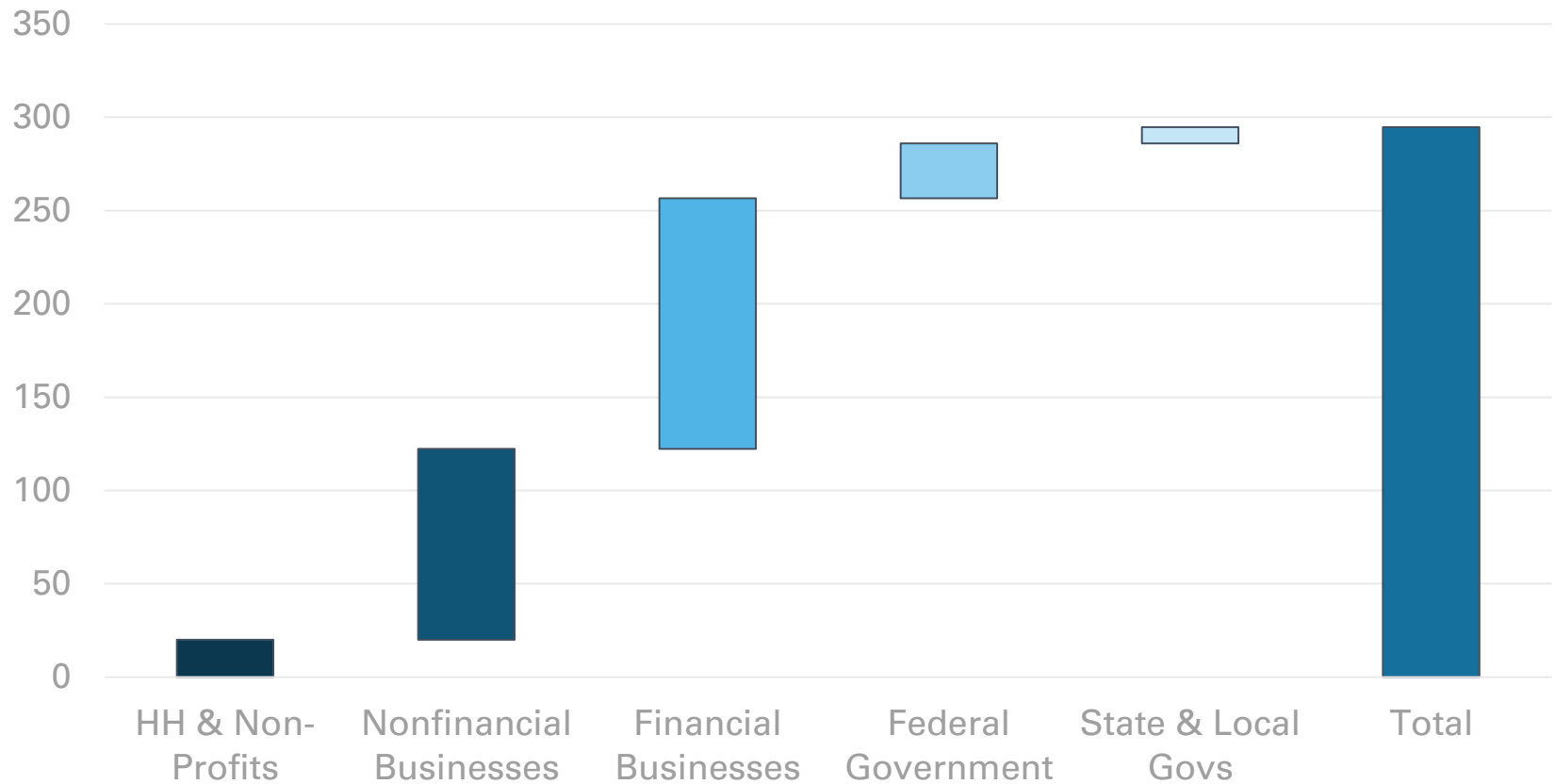
**Income flows to savers but drains availability of capital for the economy**



**M&A Dealmaking Complexity**

**Deal volume is more limited and pathway to finalize transactions are tighter**

# TOTAL DEBT ACROSS UNITED STATES

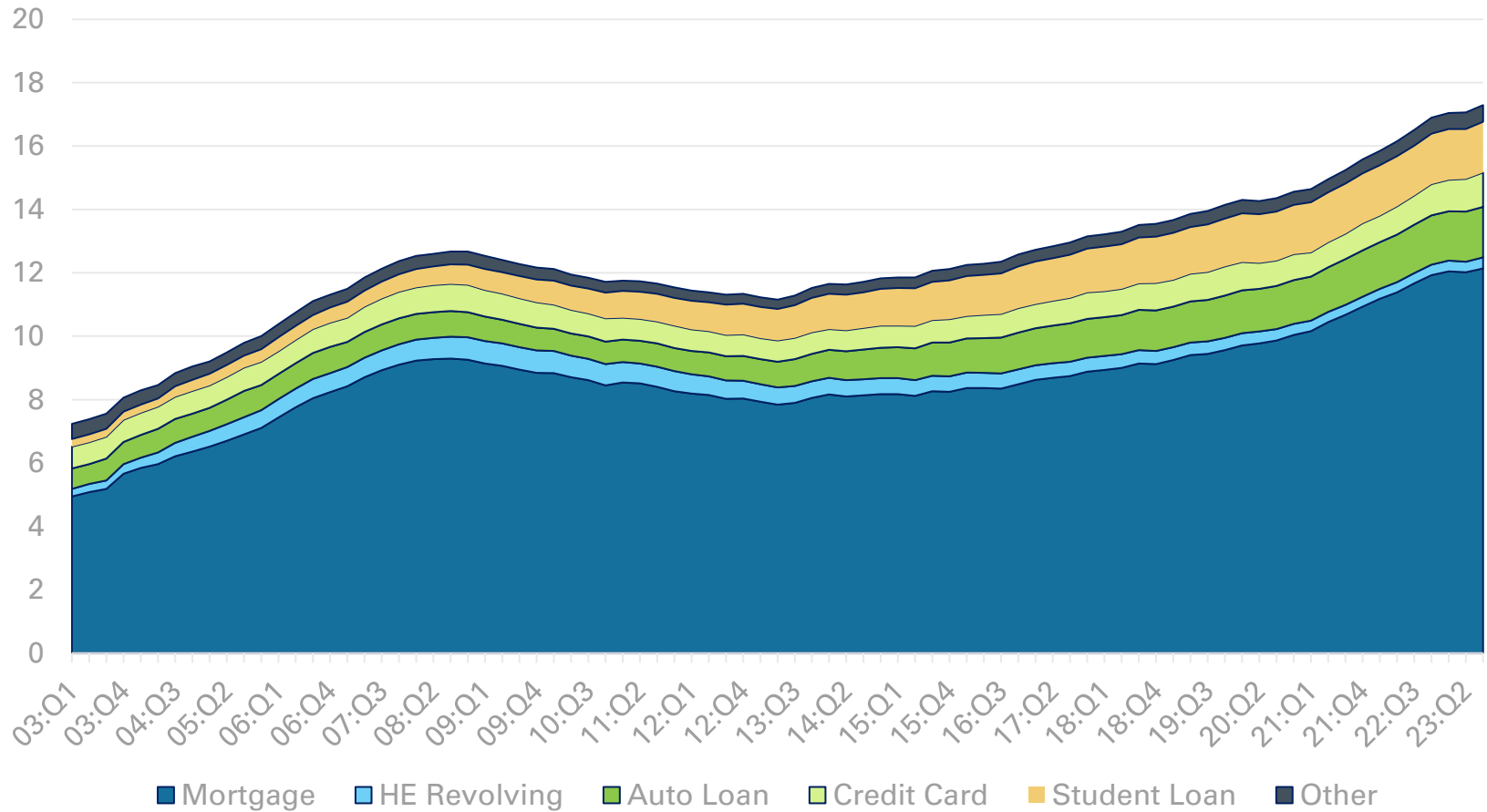


Source: Federal Reserve



# HOUSEHOLD DEBT COMPOSITION

70% MORTGAGES

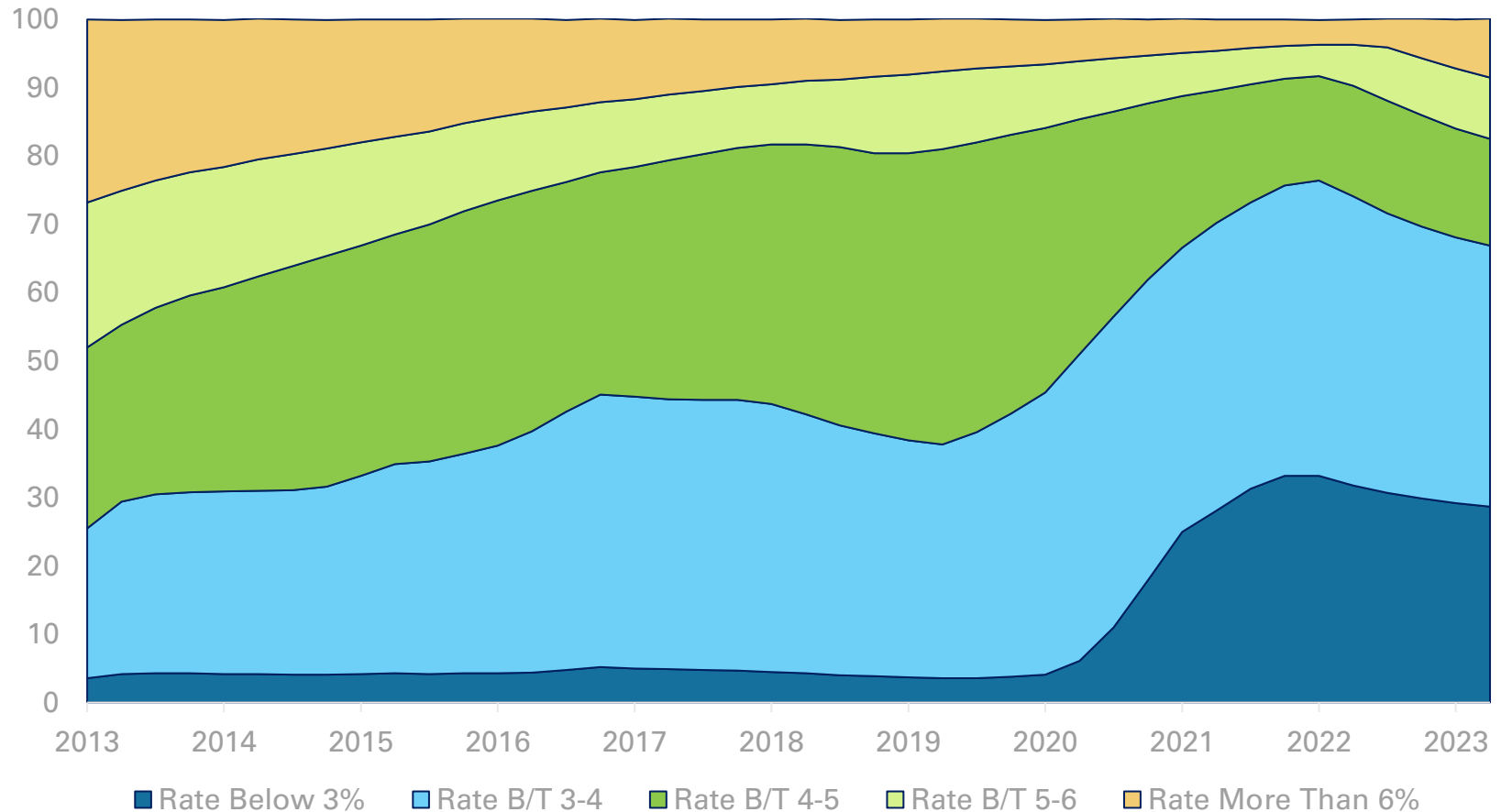


Source: New York Federal Reserve Bank



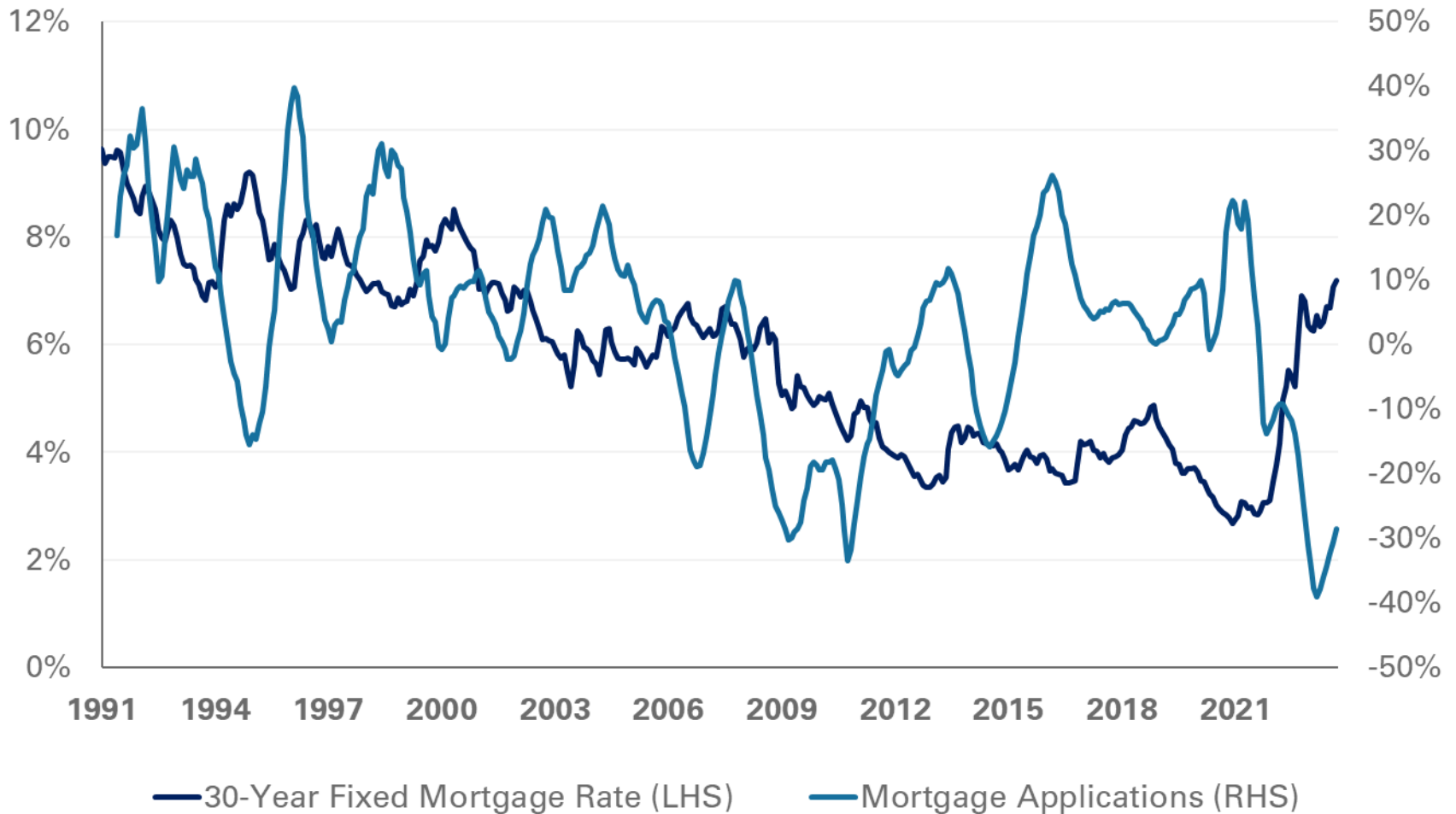
# VALUE OF US MORTGAGES BY RATE

90% OF MORTGAGES LESS THAN 6%



Source: National Mortgage Database

# INTEREST RATES WEIGH ON MORTGAGE VOLUMES



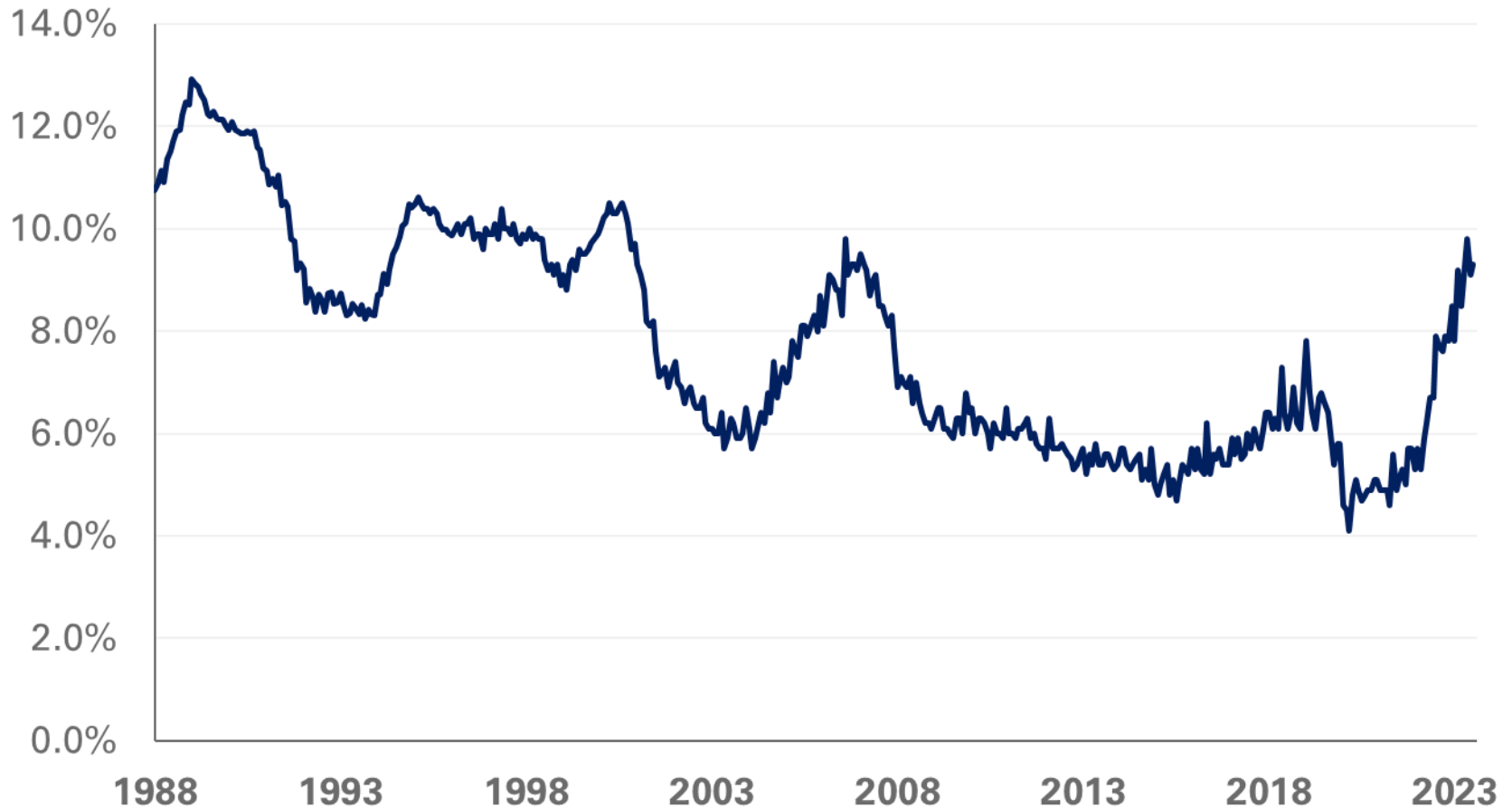
Notes: Mortgage applications data series reflects a six-month moving average of annual changes in application volumes  
Sources: Freddie Mac, FactSet





# SMALL BUSINESSES FEELING RATES PRESSURE

ACTUAL INT. RATE PAID ON SHORT-TERM LOANS

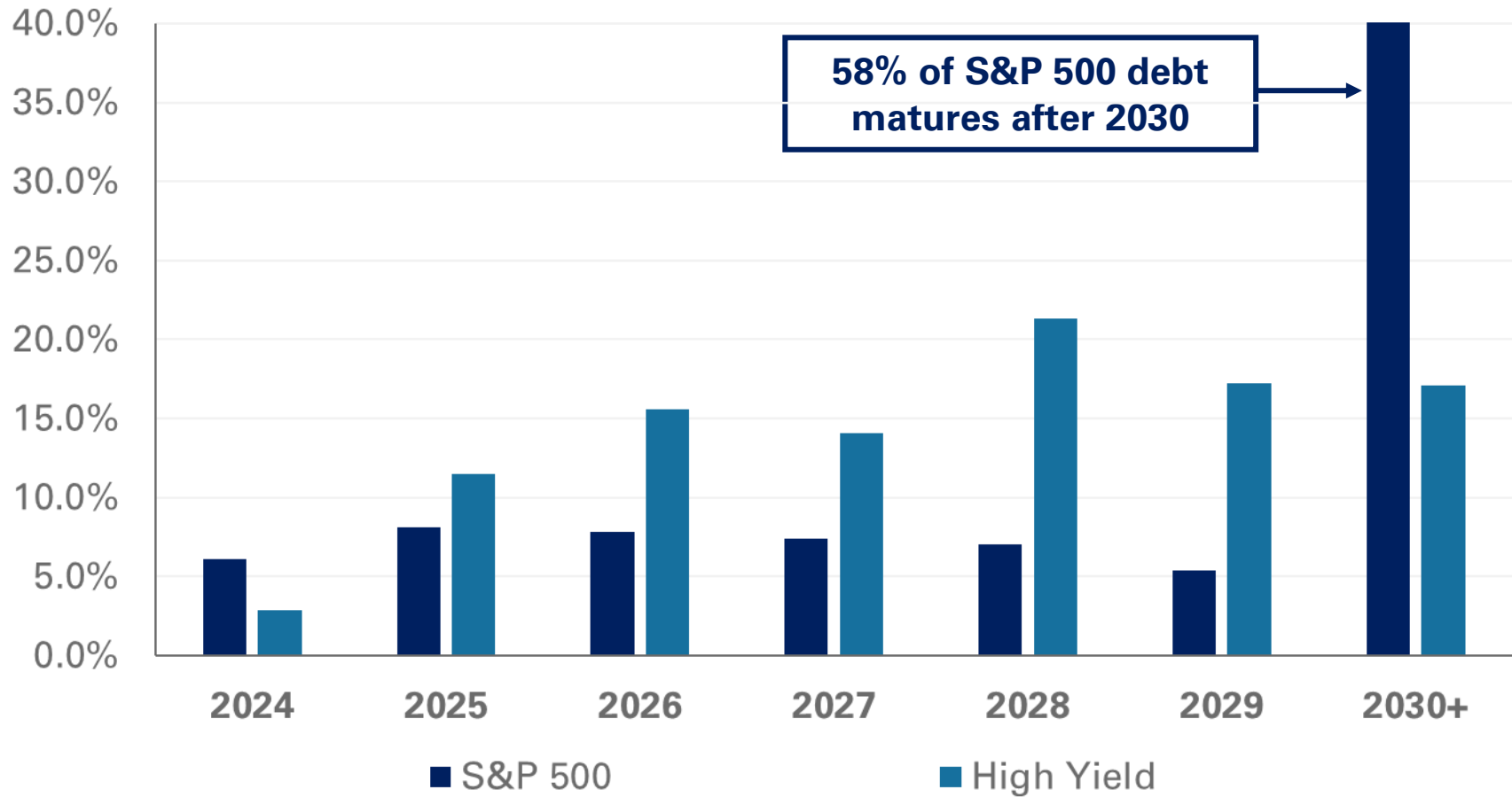


Source: National Federation of Independent Business, FactSet



# FIXED RATE DEBT REFLECTS QUALITY PROFILE

## DEBT MATURITIES OF HIGH YIELD AND S&P 500 EX-FINANCIALS



# INTEREST INCOME CAN SUPPORT CONSUMPTION

## PERSONAL INTEREST INCOME FROM ASSETS

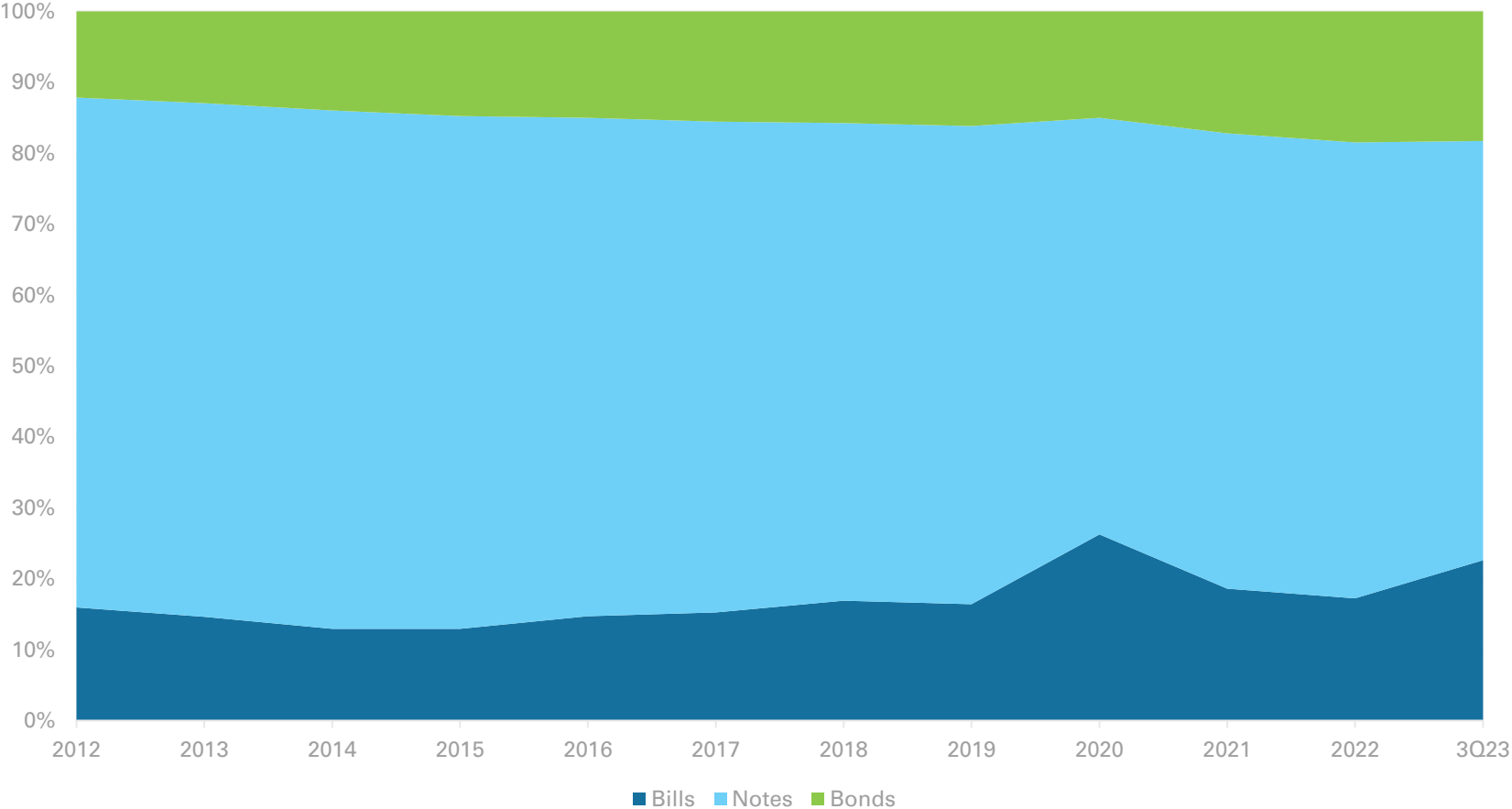


Sources: Bureau of Economic Analysis



# US NATIONAL DEBT

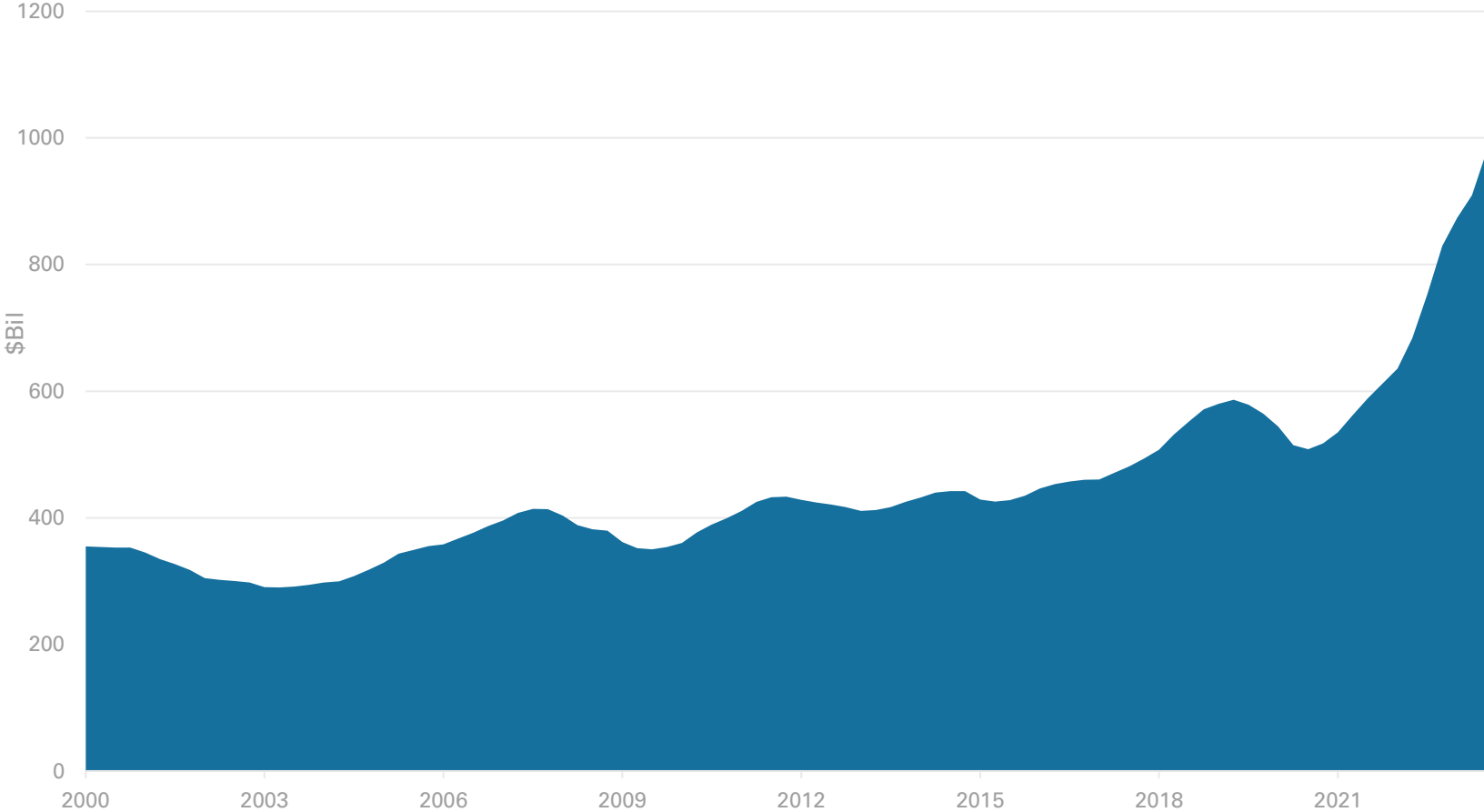
## COMPOSITION BY MATURITY



Source: US Treasury

# US GOVERNMENT – NET INTEREST PAID

ACCELERATING SINCE 2021

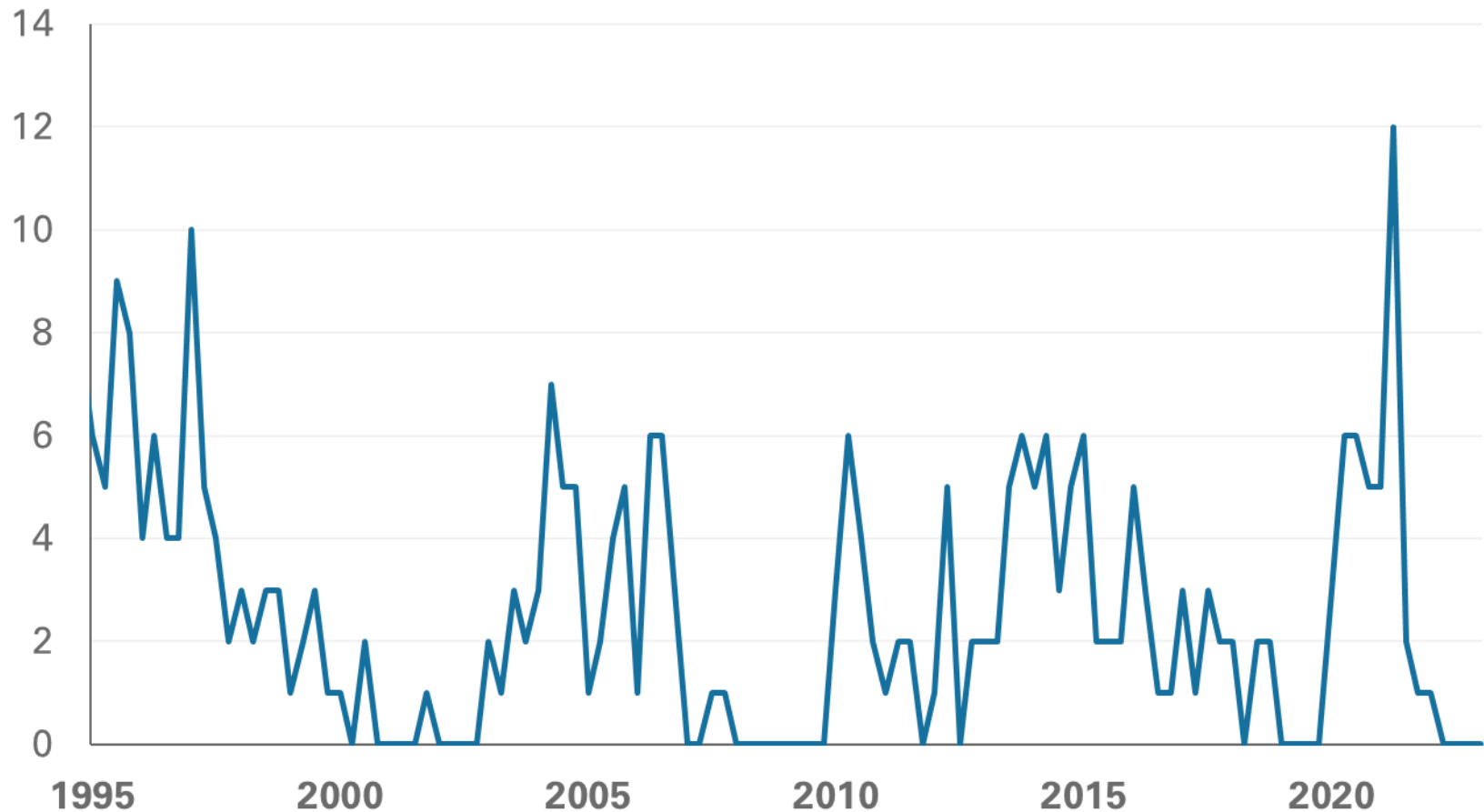


Source: St. Louis Federal Reserve



# INTEREST RATES SUPPRESSING M&A ACTIVITY

## BANKS REPORTING LOAN DEMAND DUE TO M&A FINANCING



Notes: Gray shading reflects recessions as defined by the NBER  
Sources: Federal Reserve System, FactSet



# DEBT SUSTAINABILITY

## 2024 MARKET THEMES



### Interest Rate Implications

Fundamentals suggest perpetual deficit cycle requires higher interest rates



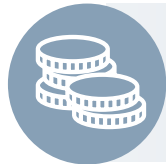
### Inflation Pressure

Money supply can absorb the debt but stoke demand and inflation



### Dollar Impact

The dollar still has no competitor for global reserve currency status



### Crowding Out Effect

Increasing supply of Treasuries will compete for credit vs. other investments



### Nominal Growth Needed

To maintain a healthy debt-to-GDP ratio, higher nominal GDP growth is needed

# AN UNSUSTAINABLE PATH

## FEDERAL DEBT HELD BY THE PUBLIC AS PERCENTAGE OF GDP



Source: Congressional Budget Office, NEPC

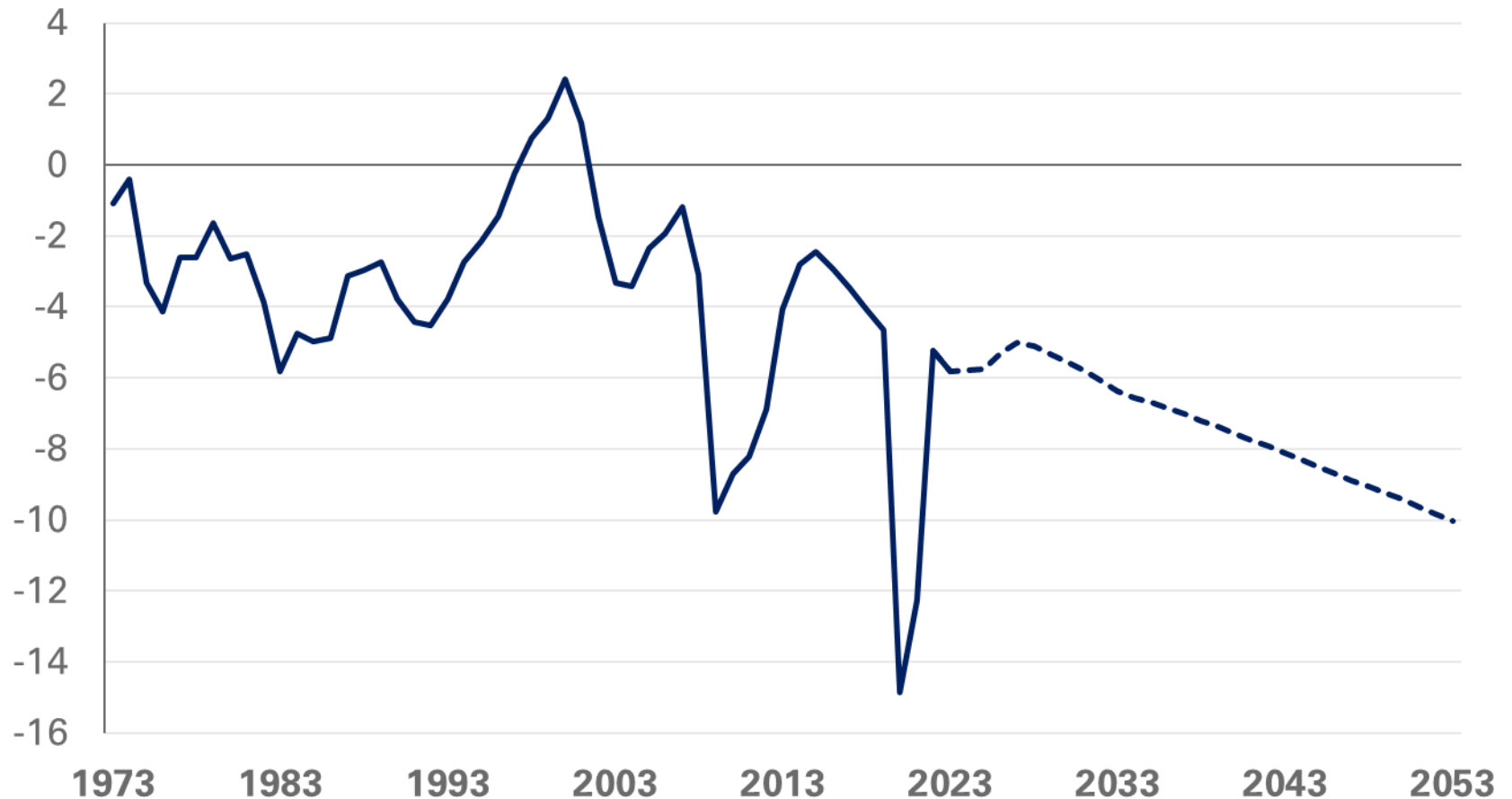
Interest rate paths are relative to CBO Baseline and based on an effective interest rate paid on debt





# DEFICITS HAVE TO BE FINANCED

TOTAL DEFICITS AS PERCENTAGE OF GDP

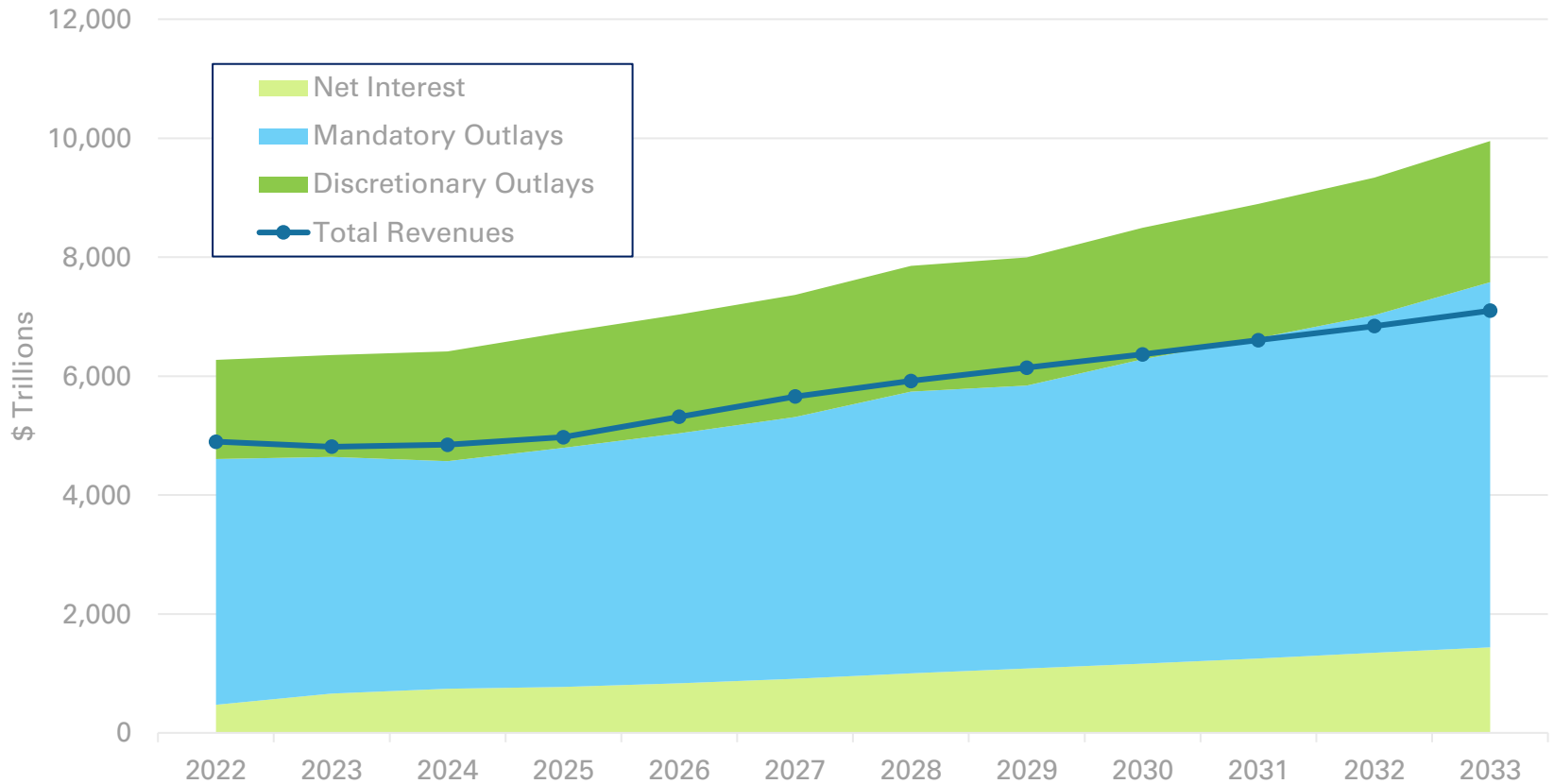


Source: Congressional Budget Office



# TOTAL US GOV BUDGET VS. REVENUE

NOT A LOT OF WIGGLE ROOM ON DISCRETIONARY SPEND

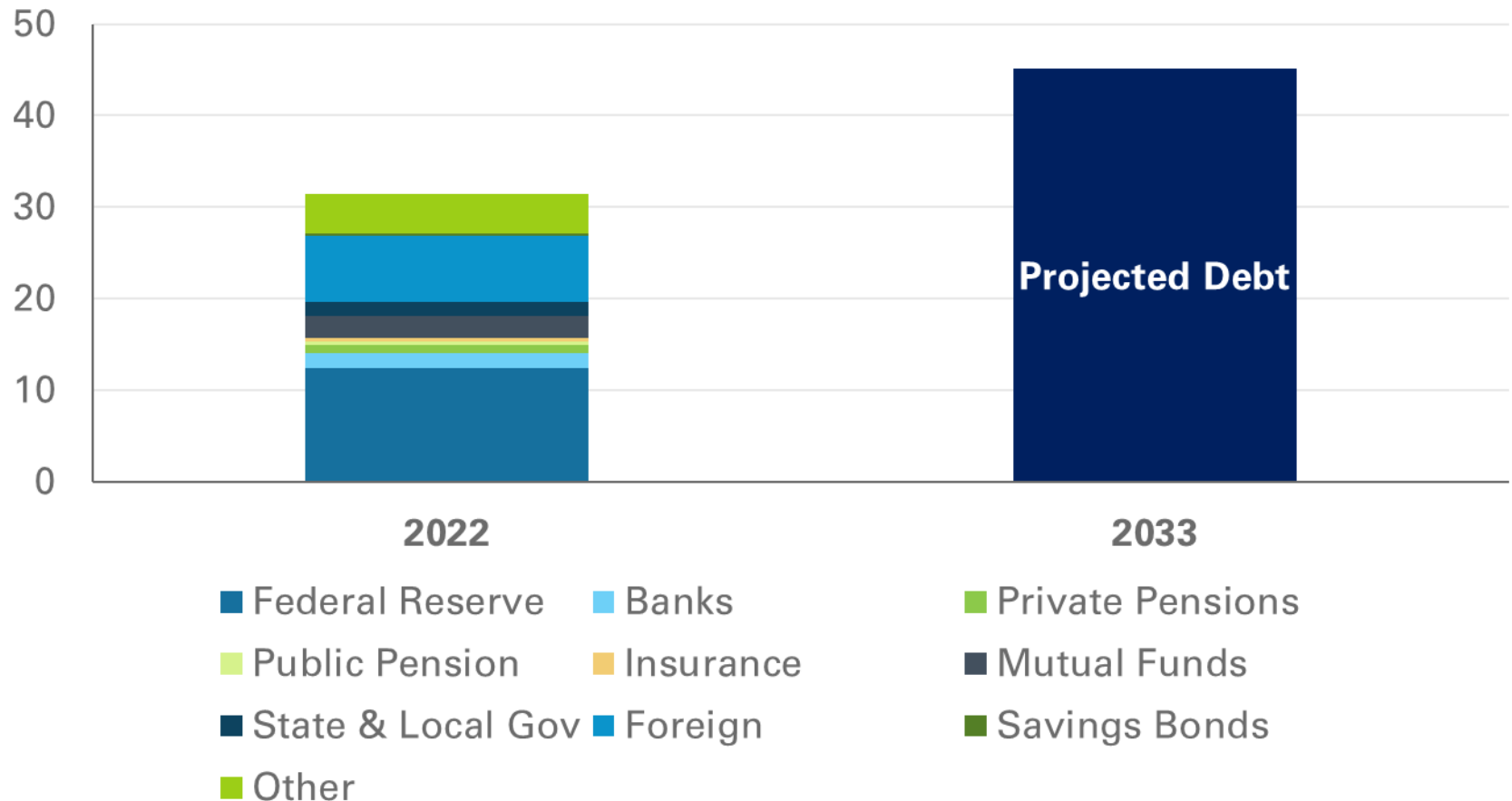


Source: Congressional Budget Office



# WHO'S GOING TO BUY ALL THIS DEBT?

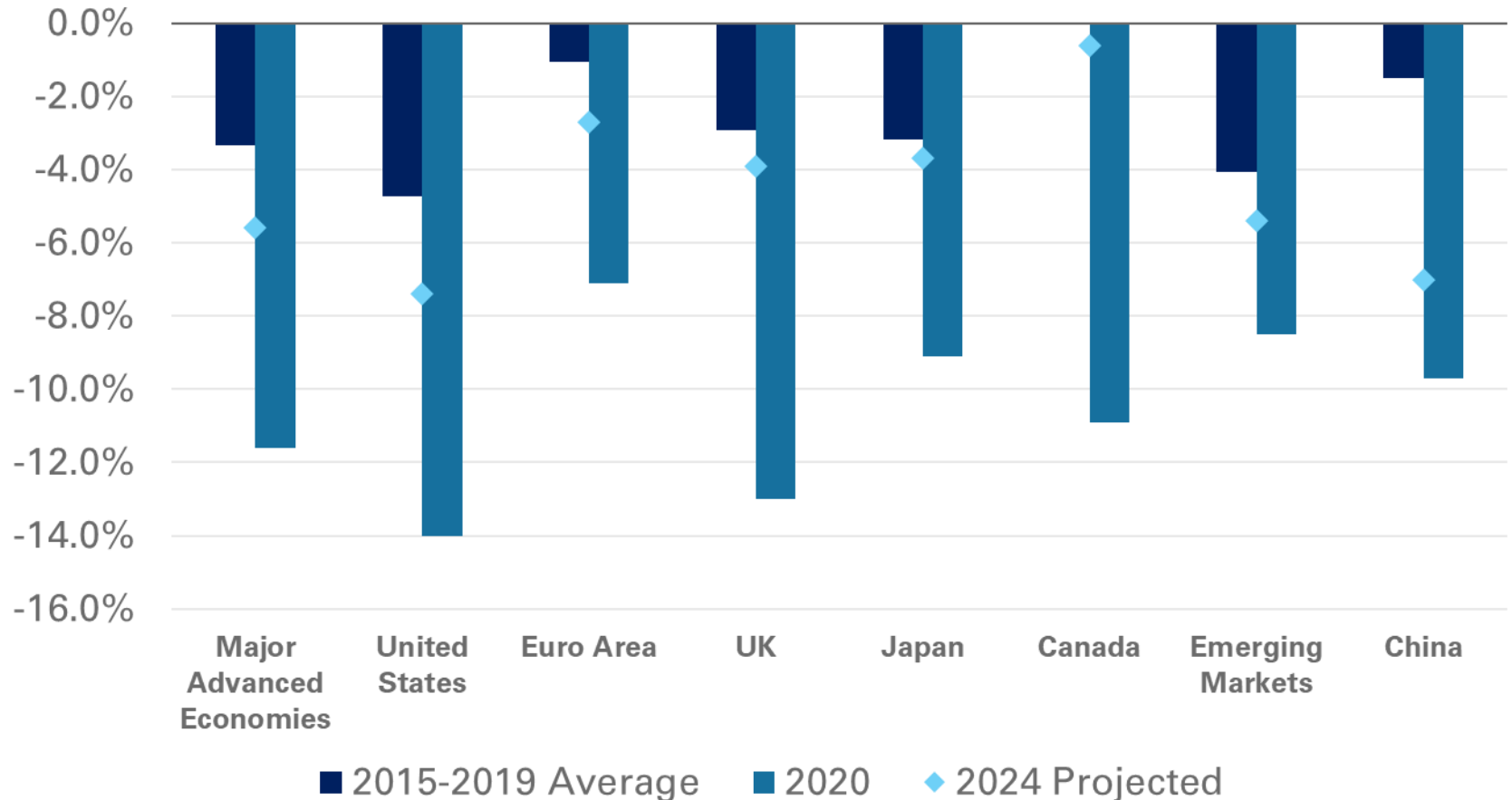
OWNERSHIP OF U.S. TREASURY SECURITIES IN TRILLIONS



Source: U.S. Treasury, Congressional Budget Office  
As of December 31

# THE U.S. IS NOT ALONE

## GENERAL GOVERNMENT NET BORROWING AS PERCENT OF GDP



# ARTIFICIAL INTELLIGENCE

## 2024 MARKET THEMES



### AI as a Tool

Artificial Intelligence will be used with humans rather than replace humans



### Productivity Gains

Adoption of AI may boost real economic growth and enhance productivity



### Impact is Beyond Tech Sector

Current market has favored tech sector, broader industry effects remain unknown



### AI Proof Statement

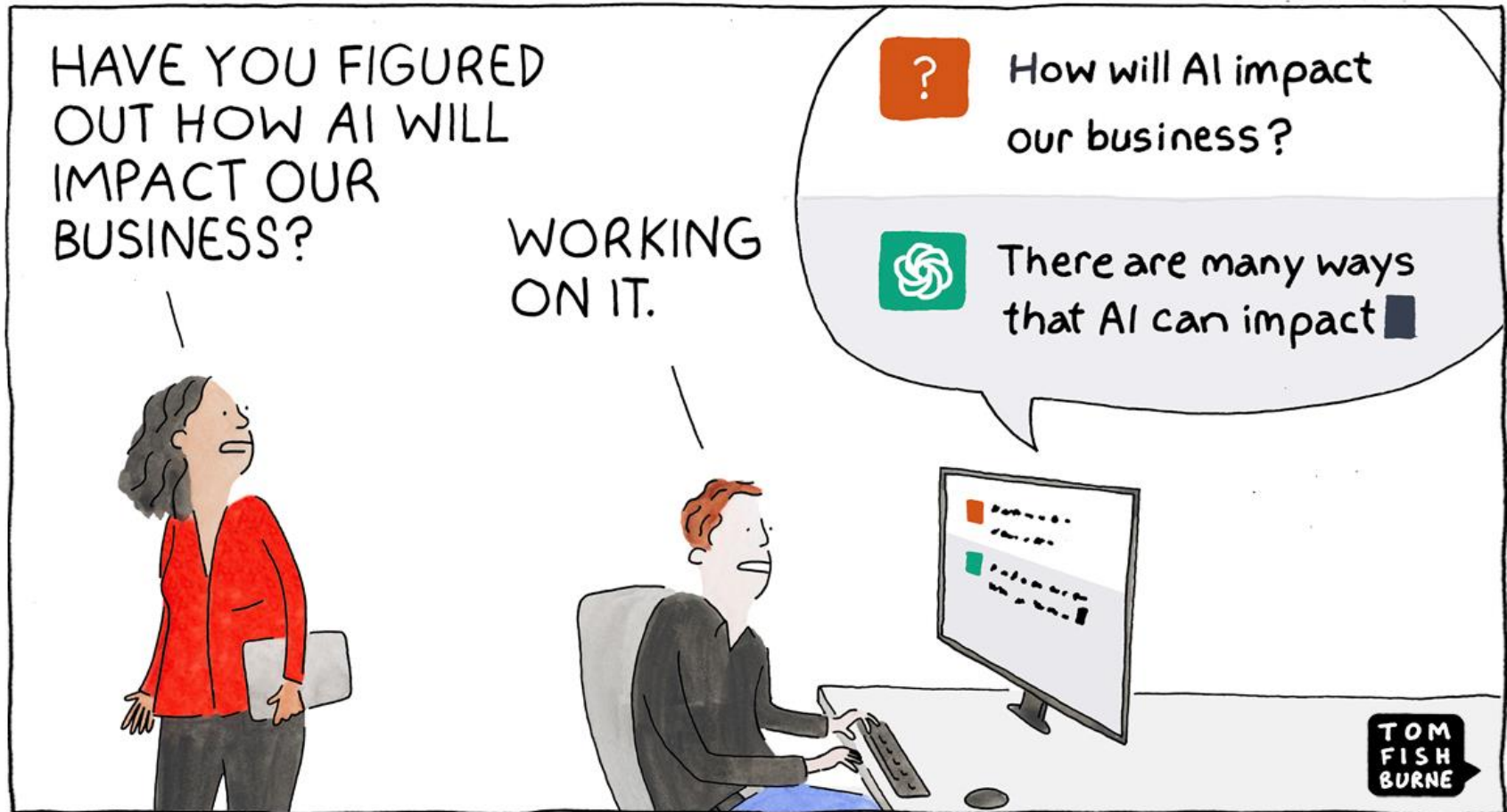
Novel products and successful AI adoption will test valuations in 2024



### Geopolitics May Alter Adoption

Costs for semiconductors, data, regulation could slow adoption

# ARTIFICIAL INTELLIGENCE IS IMPACTING BUSINESS



# ARTIFICIAL INTELLIGENCE: A DEFINITION

CHATGPT: CAN YOU GIVE ME A SIMPLE DEFINITION OF ARTIFICIAL INTELLIGENCE IN 3-4 BULLET POINTS?



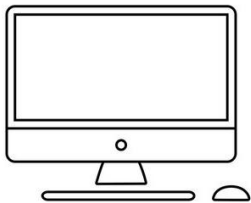
Sure! Here's a simple definition of artificial intelligence (AI) in a few bullet points:

- **Mimicking Human Intelligence:** Artificial Intelligence refers to the creation of computer systems that can perform tasks that typically require human intelligence.
- **Learning and Adaptation:** AI systems are designed to learn from data and improve their performance over time without explicit programming, adapting to new information and experiences.
- **Problem Solving:** AI involves using algorithms and models to analyze complex problems, make decisions, and generate solutions, often at a speed and scale beyond human capability.
- **Various Applications:** AI is used in a wide range of applications, from voice assistants like Siri to self-driving cars, medical diagnoses, recommendation systems, and more.

# PLATFORM SHIFTS HAPPEN ONCE A DECADE

1980s

PCs



DELL

1990s

Internet



Google

2000s

Cloud



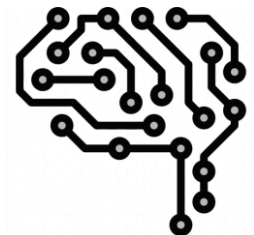
2010s

Mobile



2020s

AI

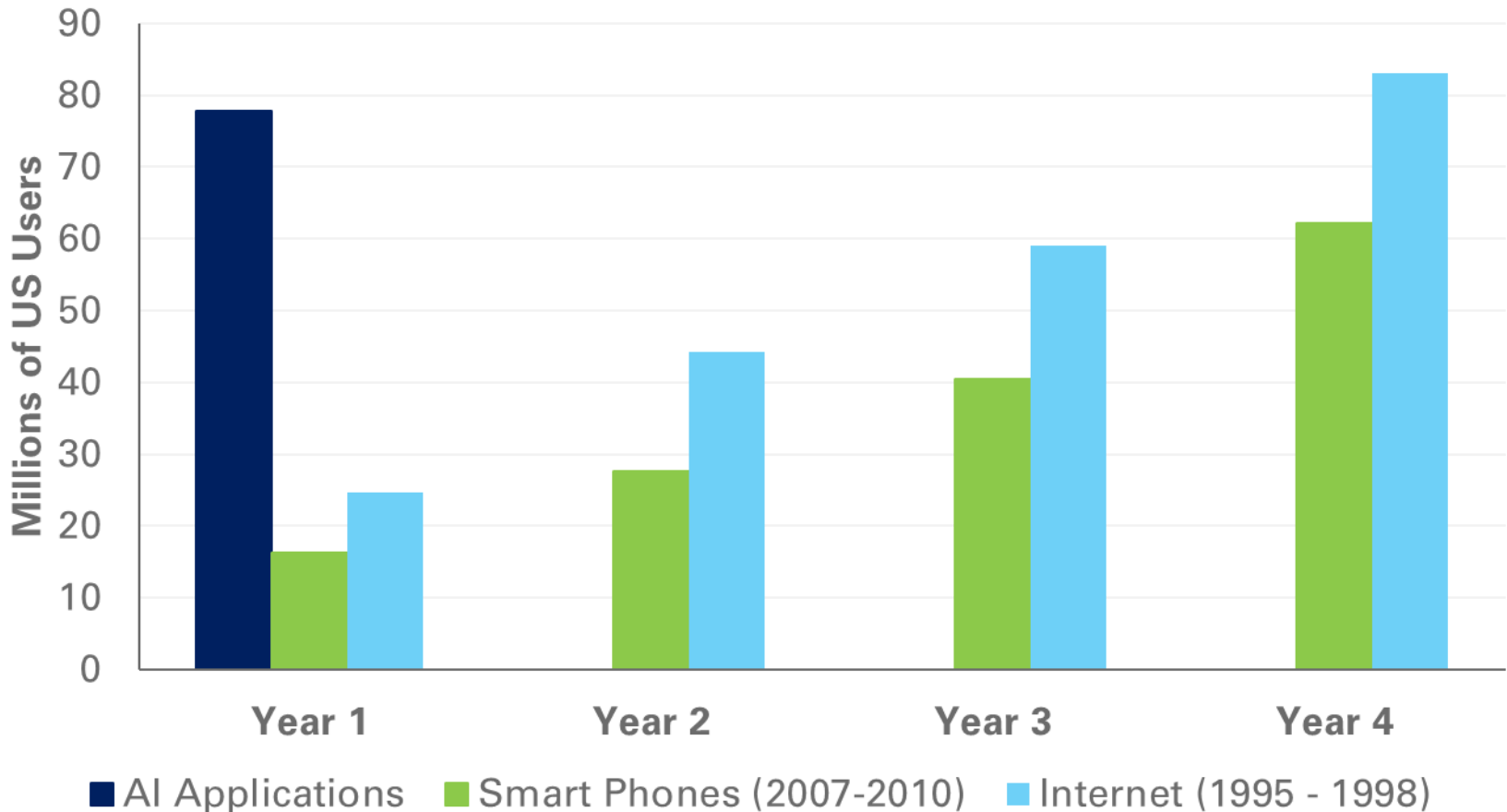


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# AI ADOPTION RATES HAVE BEEN FAST

## TECHNOLOGY ADOPTION RATES



AI Applications represents users who enter a prompt to ChatGPT or another Generative AI system at least once per month and if as of June 2023  
Source: Insider Intelligence, World Bank, US Bureau of Economic Analysis FactSet,



# MACROECONOMIC IMPACTS FROM AI ADOPTION

## 5-YEAR ROLLING AVERAGE OF LABOR PRODUCTIVITY



Source: U.S. Department of Labor, FactSet



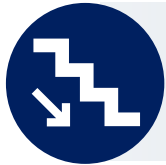
# INTEREST IN AI EXTENDS PAST TECH COMPANIES

AI MENTIONED ON EARNINGS REPORT IN RUSSELL 3000



# REGIME CHANGE

## 2024 MARKET THEMES



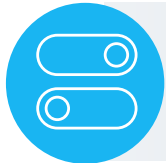
**Era of Falling Rates  
has Concluded**

**Policy path likely to be very different  
than prior 40 years**



**Structurally Higher  
Inflation**

**Fiscal policies offsetting restrictive  
monetary stance, altered labor dynamics**



**Drivers of Market  
Performance Shifting**

**Falling rates and rising growth benefitted  
equities for 40 plus years**



**Globalization  
Momentum Stalled**

**Era of global cooperation shifting to  
multi-polar world**



**Destiny of  
Demographics**

**Slowing global population growth shifts  
characteristics of economic growth**

# INTEREST RATES

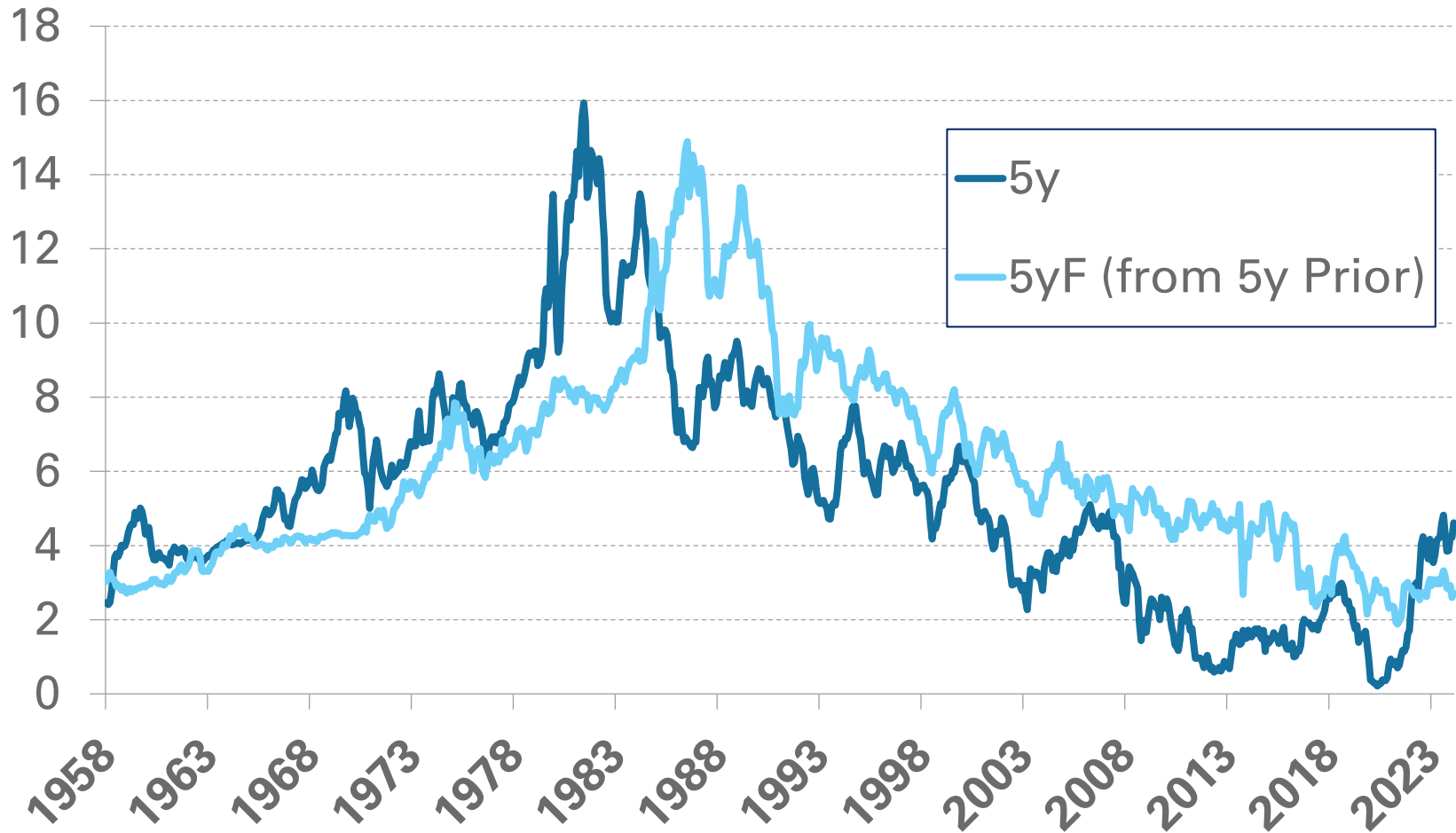
## US 10 YEAR TREASURY



Source: FactSet



# MARKETS ARE ALMOST ALWAYS WRONG



# CONCLUDING THOUGHTS



**Fed Policy, path of inflation and economic growth and a global election cycle will drive markets in the near-term**

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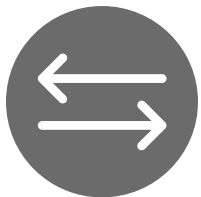
**Long-term trends should be a primary focus for investors**

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**Higher Cost of Capital, Debt/Deficit Issues and AI combine to create a new investing regime**

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**Investors must look forward in a new regime and consider different solutions for portfolio success**

# INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for substantiating asset allocation recommendations. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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